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Περιεχόμενα

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Motivation in L2 Learning

Abstract

This paper examines the main ideas that have been researched in the field of motivation, the current views of motivational factors that contribute to learning a L2 and how these ideas were used and applied in various researches that studied the influence of motivation in L2 learning. The findings of the researches confirm the significance of motivation and indicate how and to what extent different motivation types influence the learning process each time. Finally, this article presents an analysis of different motivational strategies that can be implemented by the language teachers in order to enhance motivation in their classes. The main aim of the article is to raise awareness about the importance of motivation in the L2 learning process and to stress the fundamental role of the teacher in enhancing and sustaining it in a L2 class.

Keywords: Motivation, L2, Self-confidence, Self-determination, Appraisal, Learner autonomy.

Περίληψη

Το παρόν άρθρο εξετάζει τις κύριες ιδέες που έχουν ερευνηθεί στον τομέα των κινήτρων μάθησης, τις τρέχουσες απόψεις των παραγόντων παρακίνησης που συμβάλλουν στην εκμάθηση μιας ξένης γλώσσας (L2) και τον τρόπο με τον οποίο οι ιδέες αυτές χρησιμοποιήθηκαν και εφαρμόστηκαν σε διάφορες έρευνες που μελέτησαν την επίδραση του κινήτρου στην εκμάθηση μιας ξένης γλώσσας. Τα ευρήματα των ερευνών επιβεβαίωσαν τη σημασία του κινήτρου και έδειξαν πώς και σε ποιο βαθμό διαφορετικοί τύποι κινήτρων επηρέασαν τη μαθησιακή διαδικασία κάθε φορά. Τέλος, το άρθρο αυτό παρουσιάζει μια ανάλυση διαφορετικών στρατηγικών κινητοποίησης που μπορούν να εφαρμοστούν από τους καθηγητές γλωσσών προκειμένου να ενισχυθεί το κίνητρο στις τάξεις τους. Ο κύριος στόχος του άρθρου είναι να αυξηθεί η ευαισθητοποίηση σχετικά με τη σημασία του κινήτρου στη διαδικασία μάθησης μιας ξένης γλώσσας και να τονιστεί ο θεμελιώδης ρόλος του εκπαιδευτικού στην ενίσχυση και τη διατήρησή του στην τάξη.

1. Introduction

In the field of second language acquisition (SLA), motivation has been identified as one of the most important factors that determine the rate and success of L2 achievement. In the last decades, there has been considerable amount of research done that explored the nature and role of motivation in the L2 learning process. The Canadian psychologists Gardner and Lambert initiated the motivation research in 1960s and grounded it in a social psychological framework, while a couple of decades later, there was a shift of attention to an education-centered approach, which promoted cognitive aspects of motivation, especially those related to the learner's "self" (e.g. self-determination, self-confidence/efficacy) and to a situation-specific motivation type, closely related to the classroom reality. This paper examines the numerous studies that have been conducted throughout the years in the field of motivation in an L2 class, analyzing the motivational factors and the motivation types that influence the learning process, with the aim to define the extent of the motivational influence on the learners' performance and their perceived competence. These studies have come up to the same conclusion; all motivational types play a significant role in the L2 learning, while the coexistence of different motivation types of students should be taken into account by the teachers, who need to promote and sustain all types of motivation among FL learners.

2.Theoretical framework and relevant studies

Motivation is undoubtedly a key factor in SLA and it has been a thriving field of L2 studies since 1960. It is often viewed as the internal process that gives behavior

strength, purpose, effort and desire in achieving the goals of learning a language, whereas there are differences in the way the researchers have conceptualized the term. The definition given by Brown presents motivation as "an inner drive, impulse, emotion or desire that moves one to a particular action"[1]. Ortega defines motivation in L2 learning as the desire to learn a second language followed by the effort to sustain the initiation[2], while for Dörnyei, "Motivation has been widely accepted by both teachers and researchers as one of the key factors that influences the rate and success of foreign language learning."[3].

It would be useful to refer to the three distinct phases of L2 motivation history as they have been defined by the researchers throughout the years. During the **social psychological period**[4] Gardner and Lambert developed the **socio-educational model**[5] suggesting that it is important to consider not only one's aptitude in learning an L2 but also the cultural contexts and other social contextual and pragmatic reasons that urge someone to learn a foreign language. They make a clear distinction between integrative and instrumental motivation. According to Dornyei "language achievement is influenced by integrative motivation, language aptitude as well as a number of other sociocultural factors"[6]. The so-called integrative motivation refers to the students' integrative orientation, interest in foreign languages and attitudes towards the L2 community (integrativeness) and "it occurs when the learner wishes to identify with the culture of the L2 group"[7]. It comes in contrast with the instrumental type of motivation, in that it assumes a more functional attitude, so it is directed to passing exams, facilitating study, gaining a scholarship or enhancing career opportunities.

Undoubtedly, both instrumental and integrative motivations are constituents of success in L2 learning. Numerous studies and experiments examining the relationship between the performance in L2 learning and motivation of both types have been carried out worldwide by different researchers. The EFL context determines the dominance of either type of motivation, or even their coexistence at an equal degree. In Gardner and Lambert's case of the unique Canadian social situation, the need for integration in the L2 community prevailed since, as Gardner himself pinpointed, "students' attitudes towards the specific language group were bound to influence how successful they will be in incorporating aspects of that language"[8].

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1 Brown, H. D. (2000). Principles of language learning and teaching (4th Ed.). New York: Longman, p.152.
2 Ortega, L. (2009). Understanding second language acquisition. London: Hodder Education.
3 Dornyei, Z. (1998). Motivation in second and foreign language learning. Journal of Cambridge: Language Teaching, 31(3), p. 117.
4 Al-Hoorie, A. H. (2017). Sixty years of language motivation research: Looking back and looking forward. SAGE Open, 7(1), 1–11. doi:10.1177/2158244017701976.
5 Al-Hoorie, A. H. (2017). Sixty years of language motivation research: Looking back and looking forward. SAGE Open, 7(1), 1–11. doi:10.1177/2158244017701976.
6 Dörnyei, Z. (2005). The psychology of the language learner. Mahwah, NJ: Lawrence Erlbaum Associates, p. 68.
7 Ellis, R. (1985). Understanding second language acquisition. Oxford: Oxford University Press, p.117.
8 Gardner, F.P., Pearce, R.B., Mitchell, R.I., (1985). Physiology of Crop Plant. Iowa State University Press, Ames, p. 6.

However, in other researches, as in the cases of Gholami, Allahyar, & Rafik-Galea study of 95 Iranian EFL students at the 3rd grade of high school[9] and Won, Y.M.'s study of 50 Chinese students[10], the analysis of the results revealed that the dominant motivation type among students was the instrumental motivation. In a context like Iran and China, where students have slight chances to use the target language in an authentic environment or to interact with native speakers of the target community, instrumental motivation is promoted. They learn the language primarily for purposes like enhancing and promoting career prospects or fulfilling an academic requirement. Though to our knowledge, no relevant research has been conducted in Greece so far, we expect that, for the same reasons, the results would be quite similar. In the former research, high achievement entails higher instrumental motivation, revealing the students' desire to integrate themselves within a culture and to become a part of that society, as they gradually achieve higher proficiency levels. Thus, the coexistence of different motivation types of students should be taken into account by the teachers, who need to promote and sustain both types of motivation among EFL learners.

Another important socio-psychological approach to L2 motivation research is Clement's **Linguistic self-confidence theory[11].** He studied further the role and significance of contextual factors of L2 acquisition concluding that most important of all is self-confidence, that is, a person's belief about his "ability to produce results, accomplish goals or perform tasks completely"[12] the so-called self-efficacy. For Clement, attitudinal factors were an important motivational basis for L2 acquisition and behavior[13].

Recent studies have proved that high levels of self-efficacy entail better achievement in L2 learning. In Hsieh, P.-H. P.'s study of 249 students learning Spanish, German and French the results suggested that self-efficacy, as well as positive attitude and anxiety were good predictors of performance in L2[14]. More specifically, students with high self-efficacy, that is, with strong belief in one's capabilities to complete a task successfully displayed a greater interest in learning L2 and had a more positive attitude towards it[15]. They had a higher integrative

9 Gholami, R., Allahyar, N., & Rafik-Galea, S. (2012). Integrative motivation as an essential determinant of achievement: A case of EFL high school students. World Applied Sciences Journal, 17(11), pp. 1416–1424.
10 Won, Y.M. (2011). A study of instrumental and integrative motivations as factors influencing UTAR third-year Chinese undergraduates in learning ESL. Doctoral dissertation. Tunku Abdul Rahman University, China.
11 Clément, R. (1980). Ethnicity, contact and communicative competence in a second language. In eds. H.M. Giles, W.P. Robinson, and P.M. Smith, 147–154.
12 Dörnyei, Z. (2005). *The psychology of the language learner*. Mahwah, NJ: Lawrence Erlbaum Associates, p. 73.
13 Clément, R., Dörnyei, Z., & Noels, K. (1994). Motivation, self-confidence and group cohesion in the foreign language classroom. Language Learning, 44, pp. 417-448.
14 Hsieh, P.-H. P. (2008). Why are college foreign language students' self-efficacy, attitude, and motivation so different? International Education, 38(1), pp. 76-94.
15 Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84, pp. 191-215.

motivation and were willing to learn more about the L2 and communicate with speakers of the target culture. On the other hand, those of low self-efficacy had grater anxiety in learning a L2 and displayed a negative attitude towards it. Similar results have emerged from Mills, Pajares, & Herron's study of 303 intermediate French students in U.S.A, where self-efficacy for self-regulation was a strong predictor of language achievement[16]. That is, all those students who found themselves capable of using their work time effectively applying appropriate language learning strategies were more successful in their L2 performance. They were feeling more confident and succeeded in planning, monitoring and completing their tasks effectively.

In the **cognitive-situated period**[17] we have a shift of study towards a cognitive perspective, focusing on the motivational impact of the classroom learning situation, the curriculum, the teacher, the course or the learner group[18]. Contextual factors are now related to motivation, and the classroom is viewed more as a dynamic than a static construct. In the **self-determination theory** developed at this phase by Deci and Ryan[19], the types of motivation are defined as either intrinsic or extrinsic. The former is related to the pleasure the learner experiences while learning a language, without any external destructors or pressure, while the latter to the external pressure he feels to attain his goals or the reward he receives in achieving them[20]. Noels, Clement, Vallerand and Pelletier explored this theory in the L2 context and developed the Language Learning Orientations Scale which categorizes a person's motivational orientation as intrinsic, extrinsic, or amotivated. For Noels the more autonomy-supporting and non-controlling the teachers are, the more intrinsically motivated the students[21].

The great importance of both the intrinsic and extrinsic types of motivation has been studied by several researchers over the past decades worldwide. Wu, X.'s study of 72 beginners of English aged from 4 to 6 in a spare-time English school in China revealed that L2 intrinsic motivation is of great significance for young foreign language learners since it stimulates interest in L2 learning and develops proficiency level as well[22]. More specifically, the results showed that classroom interventions in the teaching procedure, teaching and learning activities,

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16 Mills, N., Pajares, F., & Herron, C. (2007). Self-efficacy of college intermediate French students: Relation to achievement and motivation. Language Learning, 57(3), p. 417.
17 Al-Hoorie, A. H. (2017). Sixty years of language motivation research: Looking back and looking forward. SAGE Open, 7(1), 1–11. doi:10.1177/2158244017701976.
18 Williams, M. & Burden, R. (1997). Psychology for language teachers. Cambridge: Cambridge University Press.
19 Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.
20 Dörnyei, Z. (2005). The psychology of the language learner. Mahwah, NJ: Lawrence Erlbaum Associates.
21 Noels, K. A. (2001). New orientations in language learning motivation: towards a model of intrinsic, extrinsic and integrative orientations. In Z. Dornyei, & € R. Schmidt (Eds.). ΠΛΗΡΗΣ ΠΑΡΑΠΟΜΠΗ
22 Wu, X. (2003). Intrinsic motivation and young language learners: The impact of the classroom environment. System, 31, pp. 501–517.

teacher roles, and evaluation practice are interventions that promote the intrinsic motivation of the young English learners and they proved to be positive predictors of perceived competence and perceived autonomy. When young L2 learners are provided with a predictable learning environment, moderately challenging tasks, necessary instructional support, and evaluation that emphasizes self-improvement, they display enhanced perceived competence. Besides, giving them freedom in choosing the content, methods and performance outcomes of learning, as well as providing integrative strategy training entails enhanced perceived autonomy.

The great importance of the role of the intrinsic motivation in the L2 learning process was also evident in the results of another study conducted to 240 freshman college students from different colleges and universities in Manila, Philippines by Lucas, Pulido, Miraflores, Ignacio, Tacay and Lao[23]. The reality in Philippines, where there is a positive attitude towards English (considered a prestigious language that brings only benefits to a fluent speaker) may, according to the researchers, account for the students' enhanced intrinsic motivation in L2 learning. The overabundance of foreign media, computer mediated activities and reading materials in the country as well as the students' desire to interact with their peers in L2 lead to their exceptional achievements mainly in reading and listening skills. Besides, students place emphasis on learning the L2, as this would be their key for their success for possible future employment.

For the **Attribution theory[24],** proposed by Weiner, the introduction of casual attributions refers to the relation between students' past experiences and their future achievement endeavors[25]. For Weiner, learners' attributions can influence their expectancy for future success, their beliefs about their own competence, the amount of effort they invest, their motivation, and, ultimately, their level of achievement. Ushioda moves a step further defining 2 attributional patterns, associated with one's motivational outcomes: a) personal competency or other internal factors which entail positive L2 outcomes and b) temporary forces which account for negative L2 outcomes.

Extensive research has been carried out on attributions and achievement, revealing that students attribute their success mostly to internal factors such as ability and effort, and that ability attribution is a strong predictor of achievement. Hsieh, P. & Kang, H. in their study of 192 ninth-grade English learners in Korea (2010)[26], combined Bandura's self-efficacy theory[27] and Weiner's attribution theory[28], (two

23 Lucas R. I., Pulido DE., Miraflores E., Ignacio A., Tacay M. and Lao J. (2010). A Study on the Intrinsic Motivation Factors in Second Language Learning Among Selected Freshman Students. Philippine ESL Journal, 4, pp. 3-22.
24 Weiner, B. (1974). *Achievement motivation and attribution theory.* Morristown, N.J.: General Learning Press.
25 Weiner, B. (1992). Human motivation: Metaphors, theories, and research (2 ed.). London: Sage.
26 Hsieh, P. & Kang, H. (2010). Attribution and self-efficacy and their interrelationship in the Korean EFL context. Language Learning, 60(3), pp. 606–27.
27 Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84, pp. 191-215.
28 Weiner, B., Nierenberg, R., & Goldstein, M. (1976). Social learning (locus of control) versus attributional

theories that have contributed substantially to an understanding of students' beliefs and explanations of their achievement). They wanted to investigate how Korean EFL learners attribute successes and failures in their language classes, and how well self-efficacy and attributions would predict learners' achievement levels in authentic EFL classes. The results indicated that successful English language learners tend to attribute their success to internal and personal factors. As Horwitz has stated, learners' presumptions and beliefs of success in language learning, based on their previous learning experiences and cultural backgrounds, can influence their ultimate performance[29]. In a relevant study conducted by Erten, İ. H., & Burden, R. L. to 267 6th year Turkish primary students from six different cities in Turkey, the results indicated close connection between the learner attributions and the language learning outcomes[30]. According to the results, ability, interest and teacher attributions predicted achievement in L2 learning, showing thus, that they play a significant role in young Turkish students' success in learning English.

The most indicative research on attributions however, is the one conducted by Williams and Burden, to 10-15 year old students, who were learning French in the Southwest of England[31]. The results revealed the important role of external factors like the teacher's approval, the marks and the grades, since they influenced the students' judgment and attribution of personal success. The role of the teacher is thus fundamental in the development of students' attributions, since the external influences are formed by the way teachers teach as well as their beliefs and attitudes[32] about teaching, learning and the nature of education. That is, if the teachers focus on students' attaining high marks or passing exams rather than their efficient use of learning strategies and development of skills and competences, then, the students will judge success and failure in terms of marks. If, however, emphasis is placed on developing learners' ability to learn effectivity, then, more internal attributions are likely to develop. Thus, the messages a teacher conveys in class, explicitly or implicitly, can affect learners' attitudes of themselves as learners, and can help them construct notions of success and failure accordingly.

The **task motivation theory,** also developed at the cognitive-situated period, focuses on tasks which are viewed as "the basic building blocks of instructed SLA"[33]. L2 motivation is now defined in a more situated manner. According to Dornyei, the task processing system consists of three interrelated

(causal stability) interpretations of expectancy of success. Journal of Personality, 44, pp.52-68.

29   Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language learners. Modern Language Journal, 72, pp. 283–294.

30   Erten, İ. H., & Burden, R. L. (2014). The relationship between academic self-concept, attributions, and L2 achievement. System, 42, pp. 391-401.

31   Williams and Burden, (1999). Students' developing conceptions of themselves as language learners. Modern Language Journal, 83 (1999), pp. 193–201.

32   Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), *Handbook of research on teacher education* (2nd ed., pp. 102-119). New York: Macmillan.

33   Dörnyei, Z. (2005). The psychology of the language learner. Mahwah, NJ: Lawrence Erlbaum Associates, p. 80.

mechanisms, the **task execution**, that is, the learners' engagement in task supportive learning behaviors, **appraisal**, that is, the learners' processing of progress made by comparing actual performance with predicted one, and **action control**, that is, the self-regulatory mechanism retrieved in order to scaffold and protect learning action[34].

Soon, the need to adopt a **process-oriented approach** emerged in a period named accordingly. Motivation is now viewed as a dynamic factor in the process of continuous fluctuation over a school year or even a lifetime. Dornyei and Otto[35] developed a pattern of three chronological stages to make up the L2 motivation process. The **pre-actional stage** is associated to the selection of the goal or task that the individual will launch. The **actional stage** refers to the so-called executive motivation related to learning a L2 in classroom settings with students' exposures to various destructors and influences from others, as well as the anxiety to complete the tasks. **Post-actional stage** involves learners' retrospective evaluation using past experiences to determine the most motivating tasks to be selected in the future.

Hiromori, T.[36], in his study of 148 intermediate learners of English, investigated the learners' motivational process, that is, the manner in which the pre-decisional phase of motivation functions in terms of affecting the post-decisional phase of motivation, from the perspectives of general tendency and individual differences. He wanted to identify the relationship between intention formation to decide specific goal-attainment in the pre-decisional phase of motivation, and intention implementation to take concrete actions in the post-decisional phase of motivation. The results indicated that learners approached the learning activity assigned to them in various ways, because of their individual differences (different levels of value, intention or expectancy). Besides, intention formation, based on learners' positive estimates of value and expectancy (as it is made evident from the pre-actional stage) has a crucial role in fostering their actual engagement in learning and in maintaining motivation in the following stages of action. Thus, once the intention to attempt an activity has been formed, the teacher should provide support, so that the intention is maintained and developed.

Finally, Dornyei[37] designed the **motivational self-system of L2 learning** to bring Noels' and Ushioda's theories of L2 motivation in correlation with Gardner's model. This system is made up of three dimensions. a) The **ideal L2 self** refers to the individual's ideal future self and the motivation that urges the present self to

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34 Dörnyei, Z. (2005). The psychology of the language learner. Mahwah, NJ: Lawrence Erlbaum Associates.
35 Dornyei, Z. and Otto, I. (1998). Motivation in action: a process model of L2 motivation. Working Papers in Applied Linguistics (Thames Valley University, London), 4, pp. 43-69.
36 Hiromori, T. (2009). A Process Model of L2 Learners Motivation From the Perspectives of General Tendency and Individual Differences. System: An International Journal of Educational Technology and Applied Linguistics, 37, pp. 313-321.
37 Dörnyei, Z. (2001). Motivational strategies in the language classroom. Cambridge: Cambridge University Press.

become the ideal self, b**)** the **ought-to L2 self,** related to more extrinsic types of instrumental motives; all those attributes (obligations, duties, responsibilities) that a person considers indispensable in order to meet expectations and avoid potential negative outcomes, c) **L2 learning experience** which refers to motives related to situational and environmental aspects as well as the learning experience[38].

One of the several studies on student motivation and L2 selves was conducted by Papi and Abdollahzadeh in Iran[39], involving 741 learners of English from 26 secondary school classes. The results indicated that the ought-to L2 self-driven learners were mainly the low-motivated learners; it can easily be explained by the theoretical assertion that the ought-to self involves attributes like perceived duties, obligations, or responsibilities which are related to increased anxiety and thus entail diminished motivation in taking part in class activities. The results also indicated that the learners' ideal image of their future self does not influence their motivated behavior in English language classrooms. That is, the students' behavior in classroom activities did not change, no matter how well-developed their ideal L2 selves were. These findings are strongly associated with the educational psychology claim that the possible future selves do not necessarily result in motivation if they remain at the level of imagination and are not supported by specific learning channels and appropriate behavioral strategies[40]. Unfortunately, the educational reality in Iran does not provide the appropriate conditions for the motivational dispositions to be developed and maintained in actual classroom environments. Therefore, the students' ideal L2 selves have remained essentially at the level of imagination and are thus far from being realized. However, in the Greek reality, it could be seen as a challenge by L2 teachers, institutions and the educational system in general to emphasize on instilling motivational practices and equipping the students with the appropriate behavioral strategies, in order to facilitate goal attainment.

3. Application of motivation theories in L2 classroom

Motivation plays an exquisite role in the L2 learning process. Different theories that emerged over the last fifty years have some aspects in common and are in fact just other ways of looking at the same underlying phenomenon. Granted that the students have individual differences, there are different factors that may trigger their motivation for learning. Whatever the terms used by the theorists to describe the motivation that influences a student's performance (instrumental, integrative,

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38 Dörnyei, Z. (2005). The psychology of the language learner. Mahwah, NJ: Lawrence Erlbaum Associates.
39 Papi, M., & Abdollahzadeh, E. (2012). Teacher motivational practice, student motivation, and possible L2 selves: an examination in the Iranian EFL context. Language Learning, 62(2), pp. 571e594.
40 Norman, C. C., & Aron, A. (2003). Aspects of possible self that predict motivation to achieve or avoid it. Journal of Experimental Social Psychology, 39, pp. 500–507.

self-confidence, ideal self etc.) it should always be the teachers' priority to implement strategies, in order to enhance and maintain it in the learning process. By analyzing the traits of motivation in different theories, as well as the results of relevant studies on the influence of motivation in L2 learning, we could agree on some teaching strategies that should guide the teachers in designing a course, emphasizing on motivation enhancement and maintenance.

Fostering **enjoyment in learning** and creating **successful learning experiences** in general, are practices that can keep the students motivated and nurture their self-efficacy beliefs. A pleasant and relaxed atmosphere should be created in class. To avoid anxiety, the classroom setting pattern should be predictable while the learners could be encouraged to decorate the classroom in any way, so as to fit for their taste. This will give them authority over the creation of a pleasant atmosphere. Furthermore, the tasks assigned to the students should be challenging, raising their curiosity and their desire to get involved, as well as interesting, offering a variety of material to fit for their age, their tastes and interests, respecting thus, their individual differences. That is, keeping Gardner's multiple intelligences theory in mind can help teachers see a student's potential instead of just their weaknesses. Besides, including regular group work in class, which will help the students interact and familiarize with one another, can make the course an interesting experience, offering an extra motive for the students to involve in the learning process. Games and fun in class do not disorientate but rather add to this direction. Bringing in class humor, laughter and smile as well as developing a good relationship with the students, are means that should be deployed by the teacher in order to foster successful learning experiences and thus, enhance the students' motivation. Offering chances for entertainment and socialization and organizing events that promote active participation, like educational trips or charity bazaars, are exciting experiences that will be embedded in memory for years.

Promoting learner **autonomy** can also contribute to L2 motivation enhancement. According to Ushioda, L2 motivation and learning autonomy go hand in hand and autonomous language learners are by definition motivated learners[41].Thus, students should be given the freedom to choose the content, the methods, the types of the task to be assigned and even the performance outcomes of learning in order to enhance perceived autonomy. Autonomy can also be achieved by encouraging the students to contribute to the learning process with creative and imaginative ideas by giving them the responsibility to organize parts of the process themselves. The learners need to take responsibilities for their own learning and attribute their failures and successes to their own effort rather than to external factors beyond their control.

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41 Ushioda, Ema (1996) *Developing a dynamic concept of L2 motivation*. In: Hickey, T. and Williams, J., (eds.) Language, education and society in a changing world. Dublin, Ireland: IRAAL/Multilingual Matters, pp. 239-245.

Besides, making the course personally relevant to the students, by conducting a needs analysis and adjusting the syllabus accordingly, would help the teacher identify the students' unhealthy **attributions.** Then, focus should be placed on developing the students' skills and strategies in order to help them make alterations into healthier attributions. If the students manage to view failure and success on the outcomes that can be controlled, they will have higher expectancy for success and finally achieve actual success in future endeavors. Thus, the students should be encouraged to build a sense of competent self and realize that it is mainly the effort that is needed in success. To achieve this, a teacher should focus on the learners' cognitive beliefs rather than their performance; conveying implicitly or explicitly messages about what is successful in the learning process, that is, the students' skills rather than their grades, is of vital importance. Besides, support and encouragement with specific positive feedback, confirming the learners' adequate abilities and emphasizing on effort and perseverance, can help them change negative or unhelpful attributions, realize the importance of effort and persistence, maintaining thus, their motivation in learning.

Closely related to the previous practices is the teacher's endeavor to eliminate any **external pressure** that may contribute to the students' demotivation. Such pressure might be caused when emphasis is placed on the performance and the grades rather than the skills to be acquired. Thus, to avoid increased stress, fear and anxiety the teacher should focus on promoting strategies to develop skills, rather than on tests, exams and grades, as the main energizers for learning. Besides, in assigning tasks, the teacher should give clear instructions and provide guidance about how to complete them, so as to avoid the students' stress and sense of incapability. The selected tasks should be challenging, but never exceed the learners' competence. Offering encouragement by providing positive feedback, appraisal, and demystifying mistakes can also contribute to reducing anxiety and enhancing motivation. Besides the grades, the role of which should never be overestimated, a practical tip to increase motivation, especially to younger students, is by giving alternative rewards (stickers, a performance certificate etc). The students' evaluation should also emphasize on self-improvement, while comparison of students with one another should be avoided. What is more, "the students should be involved in the self-assessment procedure, since they learn more when the teachers take the time to involve them in it",[42] while, at the same time the latter establish confidence, motivation, and learning potential.[43] Sometimes the students may get stressed by the strict rules posed by their teachers. Thus, teachers and students can co-create the classroom

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42 Davis, A. J. (2011). *Building comprehension strategies*. Melbourne, Australia: Eleanor Curtain Publishing.
43 Kearney, S. (2013). Improving engagement: The use of 'authentic self- and peer-assessment for learning' to enhance the student learning experience. *Assessment & Evaluation In Higher Education*, 38(7), 875-891. DOI: 10.1080.

rules, which should be equally respected by both sides. Involving the students in creating and regularly reviewing the rules can make them feel more relaxed and more responsible for complying with them. By getting students involved, learning becomes a team work as teachers and students become partners reaching for the same learning goals. After all, "students can assess themselves only when they have a sufficiently clear picture of the targets their learning is meant to attain."[44]

The need to have **goal oriented** students is closely related to Dornyei's motivational approach that has already been explained and analyzed. As Dornyei and Csizér state, it is one of the 'hottest' issues in current motivation research, and it is disappointing that so little time and energy are spent in the L2 classroom on goal-setting[45]. The students should be encouraged to develop specific goals, either instrumental (e.g. to broaden their career prospects and job opportunities or achieve academic success) or integrative ones (e.g. initiation into the target language culture). Granted the students' individual differences and via a needs analysis, the teacher can help students realize and develop realistic expectations about their learning and encourage them to design their individual study plans. Helping them to create and strengthen an image of their **Ideal L2 Self** is equally important. So, the teacher could organize workshops, where the participants could make lists of their goals for their future jobs, relationships and lifestyle, as well as their ideal selves, and guide the students, illustrating how to make their vision of their Ideal L2 Self plausible. The endeavor to attain their future self is a very strong motivation, and the gradual realization of this goal can increase their self-confidence and self-esteem substantially.

Integrative motivation can also be promoted if the students **get familiar with the cultural** background of the target language, since as Gardner states, "the students' attitudes towards the specific language group are bound to influence how successful they will be in incorporating aspects of that language"[46]. A practical way to achieve it, is with the use of authentic material in class such as videos, news articles, realia etc. It is also advisable that interaction with native speakers is promoted in various ways; exchange trips, invitations of a native speaker in class, participation in European inter-cultural programs, e-pal or key-pal communication of students with their native peers are some excellent ideas.

As we have seen so far, **the role of the teacher** is fundamental since the teacher's motivational practice is strongly related to the students' motivated behavior[47]. Role models are proved to be influential on student motivation, and

44 Davis, A. J. (2011). *Building comprehension strategies*. Melbourne, Australia: Eleanor Curtain Publishing.
45 Dörnyei, Z., & Csizér, K. (1998). Ten commandments for motivating language learners: Results of an empirical study. Language Teaching Research, 2, pp. 203-229.
46 Gardner, F.P., Pearce, R.B., Mitchell, R.I., 1985. Physiology of Crop Plant. Iowa State University Press, Ames, p. 6.
47 Guilloteaux, M. J., & Dornyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, 42, pp.55–77.

the most important model in the classroom is the teacher. He can always be a good example for students, by being committed and motivated himself. All in all, the teacher has the power to create students' attitudes and orientation, encourage their autonomy, develop their expectations and their healthy future self, and thus, contribute substantially to the enhancement and maintenance of motivation in L2 learning.

4. Conclusion

Motivation is undoubtedly a vital component in learning a foreign language. "Without sufficient motivation, even individuals with the most remarkable abilities cannot accomplish long-term goals"[48]. Instrumental or integrative, intrinsic or extrinsic, ought-to self or ideal self, as defined by the theorists, all motivational types play a significant role in the L2 learning. The motivational influence on the learners' performance and their perceived competence is revealed by numerous studies that have been conducted throughout the years. Ample teaching methods and learning strategies could be implemented in class with the aim to keep the students motivated. The role of the teacher is fundamental in applying them, according to the learning context and the students' individual differences. Cultivating, sustaining and developing motivation of foreign language learners are not only means to an end; they should be important goals pursued by all educators in the L2 field.

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48 Dörnyei, Z., & Csizér, K. (1998). Ten commandments for motivating language learners: Results of an empirical study. Language Teaching Research, 2, pp. 203-229.

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The need to teach children with learning disabilities in an ordinary school classroom. Ecosystem student evaluation. C´ Class of Primary School: "Case study"

Summary

In this paper an attempt is made to study a student who attends the class of ordinary school and has difficulty in writing skills. In this paper we will emphasize the ways that we will find the underperformance the particular student and the attempt to apply the teaching intervention that teaching problem of student marches to solve. Specifically, the work consists of two parts, the first and second part. The first part will describe the history of the student to have his clinical picture. Then we present the detailed program of the course the student has difficulty - the production of the written word, emphasizing the objectives, content, approach to teaching and evaluation. Then assess the prior knowledge of the student through systematic observation, the test pass / fail performance, the teaching priorities and the evaluation protocol.

In the second part of the work related to the teaching intervention that will apply in order to solve the problem of teaching. At this point, we will apply the remedial course by specifying the teaching goal, the teaching strategy formulating, implementing the evaluation protocol and find the student's mistakes. Finally, we compare the two assessment protocols stating the student's progress.

Keywords: Learning difficulties, ordinary school, underperformance, assessment protocols, didactic intervention.

1. Introduction

In a classroom a teacher can meet students without difficulties in the learning process, but can also meet students who have learning difficulties[1]. A teacher must know that each child has his own learning rhythm, his own composition of difficulties in terms of the degree and quality of difficulties[2]. In such a situation a teacher when faced with the certain feeling he will feel is panic and despair. He will wonder "What am I going to do now?" And this is explained because the curricula and teaching methods are mainly based on students without learning difficulties. These students show uniformity in the way they learn and develop their thinking.

In the case of children with learning difficulties, on the one hand the teacher should not exclude these students from the learning process and on the other hand implement individualized programs with appropriate methods, tools and techniques supporting their learning process[3].

In order for a teacher to succeed in an individualized program with an appropriate method, technique and means of teaching, systematic evaluation must precede to determine what the student's learning difficulties and needs really are.

In this way the teacher will individualize the goals, will organize his teaching with correct choices of techniques and program design in his teaching.

The evaluation that is considered a useful "tool" for the teacher is the ecosystem, because this is how the teacher identifies the student with underperformance. Evaluating the prerequisite knowledge, the learning potential and the learning motivations of the student but also the teaching environment, we focus and discover the point of difficulty of the student and proceed to the didactic intervention.

Following the method of didactic intervention with the remedial course and applying the assessment protocols and the appropriate techniques we find the improvement of the student. Therefore, a student who has a learning disability needs an organized and quality teaching approach so that he does not lag behind his other classmates.

Of course, this kind of teaching presupposes on the part of the teacher knowledge, disposition, organization of teaching time, utilization of methods, focus and concretization of the teaching goal in order to achieve the student's progress.

Based on the above, we tried to apply the appropriate didactics to identify and improve the progress of this student. This student had difficulty in producing

1 Σαλβαράς, Ιωάννης & Σαλβαρά Μαρίνα (2009). Διδακτικός σχεδιασμός. Αθήνα: Ατραπός.
2 Σαλβαράς, Ιωάννης (2013). Η διδασκαλία παιδιών με ειδικές ανάγκες στο συνηθισμένο σχολείο. Αθήνα: Γρηγόρης.
3 Χρηστάκης, Κών/νος (2002). Διδακτική προσέγγιση παιδιών και νέων με μέτριες και σοβαρές δυσκολίες μάθησης. Αθήνα: Ατραπός.

written speech and by applying the writing and post-writing strategy he was able to overcome this difficulty and improve in relation to the class average. What we will find is that the improvement will occur through the comparison of the two assessment protocols, the initial and the final, as well as the teacher's effort to improve the student and reach the average of the class.

The purpose of this study is to investigate the difficulties of the c´ class elementary school student in the production of written language and the application of writing and post-writing strategy to be able to overcome this difficulty and improve in relation to the class average.

The research question in this paper is:

A) How can by the method of didactic intervention with the remedial course and by applying the assessment protocols and the appropriate techniques to find the improvement of the student so that he reaches the average of the class?

2. Theory

2.1. Curriculum:

Through language teaching the teacher attempts to develop the student's ability to handle the written and spoken language satisfactorily with efficiency and responsibility. Thus the student will be an active member of the school and social context.

Language is a means of communication, description, expression, understanding and interaction of people. For this reason, the correct use of language makes it a subject of study. Language is a basic tool of thought, expression, learning. Language is the connecting link of knowledge and understanding with all other subjects - it is directly involved with the objectives of the other subjects as well.

The interest in the study of language, as presented in the syllabus, has led many sciences to deal with this subject. Specifically, Linguistics examines various special areas such as speech analysis, pragmatics, phonetics - phonology, morphology…[4].

2.2. Writing

Writing and production of written speech

C´- D´ Primary School

At this point we will refer specifically to the objectives, topics and indicative activities of the syllabus, which is the written word, which will occupy us in the

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4 Παιδαγωγικό Ινστιτούτο (2003). Διαθεματικό Ενιαίο Πλαίσιο Προγραμμάτων Σπουδών **της ελληνικής γλώσσας** (Δ.Ε.Π.Π.Σ.). Ιστοσελίδα Π.Ι. (pi-schools.gr).

present work concerning the case study of the child.

According with the detailed program the purpose of the written word is "The development of the child's ability to communicate in writing accurately and effectively, using the form and style that is appropriate for each communication situation. To enjoy the written communication itself"[5].

2.3. Teaching objective:

- Familiarize himself with the type of speech (eg referential) and the types of text (eg storytelling) that corresponds to each lesson of the school curriculum and compiles texts accordingly.
- Edits and structures text with coarse mental sections and paragraphs.
- Realizes the functional differences between oral and written speech.
- Records thoughts, the plan of a work, a speech, etc., in a way that he can develop them orally or in writing.
- Uses clear, complex periods, with submissive connection and mental coherence.

2.4. Teaching content

The content of the activities will be about writing a text - the production of written speech which will follow a specific process: we will read a text with the students first, we will ask a question, we will try to find "who says it" phrases in the text and "How he says it", we find ideas of the text, we check the versions that are correct to compose the answer. Along the way we give the students to write their own text on a topic that arises from the text we read. We will have the writing of the first text by the children which will be corrected and the evaluation protocol will be completed. But, also, with other activities such as arithmetic and grammar exercises we will help the student to improve the production of written speech.

2.5. Teaching method

The teaching of the language that concerns the understanding and the production of the spoken and the written word is done in a systematic, organized way, touching all the units of the lessons with an interdisciplinary approach[6]. According to the syllabus of the elementary school, the composition of the written text is dealt with through three stages: a) the draft that concerns the preparation of the teacher for the choices and the planning, b) the author related to the writing of the original

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5 Παιδαγωγικό Ινστιτούτο (2003). Διαθεματικό Ενιαίο Πλαίσιο Προγραμμάτων Σπουδών **της ελληνικής γλώσσας** (Δ.Ε.Π.Π.Σ.). Ιστοσελίδα Π.Ι. (pi-schools.gr).
6 Σαλβαράς, Ιωάννης (2013). Η διδασκαλία παιδιών με ειδικές ανάγκες στο συνηθισμένο σχολείο. Αθήνα: Γρηγόρης.

text and c) the post-author in which the original text is checked with possible improvements, additions and corrections.

2.6. Evaluation

The evaluation of the teaching helps the teacher to have defined from the beginning of the year the degree of achievement of the objectives of a unit that is to be covered, the language skills that the students have acquired in the previous school years[7]. It concerns the daily evaluation of the teaching which allows the teacher to identify the needs of the student and to see to what extent they have improved and what interventions he should plan in order to improve the student's progress.

The implementation of the assessment is carried out in the context of teaching with the help of "tools" which give us a picture of progress and needs for each student. Specifically, we apply the ecosystem assessment that concerns the student and the prerequisite knowledge, learning potential and motivation will be assessed. With the help of assessment protocols, systematic observation, with the criterion of success / failure performance, the list of learning hierarchy, study and learning strategies, mapping of concepts (cognitive and mental map). The second element of evaluation concerns the teaching environment. That is, we will evaluate the behavior of the teacher and the student during the teaching practice, the atmosphere of the classroom, but it also concerns the self-evaluation of the teacher.

3. Methology

3.1. Student history

D. is 8 years old and is studying in the 3rd grade of primary school. He is the second child in a row of his three little brothers. His older brother is in the 5th grade and his younger sister is in kindergarten.

The parents mention the difficulty of D. but also his refusal to deal with the written word. However, he makes a daily effort which has positive results and this little by little encourages him and builds his confidence and will. He adapts easily to school - he does not have difficulty in his relationships with his classmates and the teacher. His performance in the courses is not very satisfactory - mediocre. Has difficulty in producing written speech. This issue makes him feel uncomfortable in the classroom, however his effort is particularly satisfactory to overcome this issue.

This case is a case study. Reference has been made to KESY and diagnosis has been made with learning difficulties in the production of written

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7 Σαλβαράς, Ιωάννης (2013). Η διδασκαλία παιδιών με ειδικές ανάγκες στο συνηθισμένο σχολείο. Αθήνα: Γρηγόρης.

speech. Observation and intervention has taken place in the classroom, over a period of 8 weeks – 6 hours of week. We will achieve this through the use of appropriate methodology, observation and evaluation tools. Specifically, we evaluate the prerequisite knowledge of the student through systematic observation, the criterion of performance of success / failure, the learning hierarchy and the evaluation protocol. We continue with the evaluation of the learning potential with the study and learning strategies and the mapping of concepts, shaping the cognitive map. We evaluate learning motivations by learning motivation orientation, behavioral regulation, and the performance of success / failure determinants.

4. Student assessment

4.1. Assessment of requirements knowledge

4.1.1. Systematic observation

Aim: With systematic observation we seek to determine the speed of execution and the recording of words.
Organization: On a worksheet students are asked to write 20 words dictated by the teacher. These words are from the reading book my third grade language, the incredible pencils, second issue, section: "Vocabulary", page 53.

The words are: prepare, call, gift, birth, birthday, preparation, date, sugar, cook, confectioner, butter, surname, glass, cup, cook, spinach pie, ingredients, fridge, almond, letters.

After the children have finished the work, we gather the working sexes and correct them.
Student success: From the correction of the student's words we find that out of 20 words he has correctly 9. That is, the success rate is 9 X 100/20 = 900/20 = 45%
Average class success: The success rate of the average class is 16 X 100/20 = 1600/20 = 80%.
80% - 45% = 35%
Overview: The student success rate is 45% and the class average is 80%. The difference between them exceeds 22%, so there is a problem of underperformance.

4.1.2. Performance / success criterion

Aim: With the criterion of performance / success we specify the objectives - performance to determine the activity, the learning hierarchy and the criterion of performance / success.

Organization: In a worksheet students are asked to complete the following subtractions: 230 - 121 =, 459 - 240 =, 85 - 55 =, 366 - 203 =, 159 - 59 =.

The student completes the 2 subtractions out of the 5 correctly, while the average has the 4 subtractions correctly.

So: 2 X 100/5 = 200/5 = 40% ⎤ 8**0% - 40% = 40%** The difference between
4 X 100/5 = 400/5 = 80%   ⎦ student and the average is 40%.

Overview: The student success rate is 40% and the class average is 80%. The difference between them exceeds 22% so there is a problem of underperformance.

4.1.3. Learning Hierarchy

Aim: We seek to determine at what stage of the learning hierarchy the under-performing student is in order to facilitate and adapt the teaching intervention.
Organization: We give a worksheet to the students in which we have 4 sentences in which the students should fill in the blanks in parentheses the Instantaneous and Continuous Future:

Fill in the blanks using the verbs in parentheses in the correct future tense (will fill, fill, serve, sprinkle):

1) --------------- home gifts.
2) The house --------------- with gifts.
3) Melina --------------- the children at the party.
4) Melina --------------- the children during the celebration.

Overview: We find that the student is in learning, so there is a problem of underperformance.

4.1.4. Evaluation protocol

Aim: The production of written work by students, the analysis and grouping of their mistakes by compiling a list of criteria and completing it.
Organization: We give the students a text from the book of the Study of the DG class, page 38 on the subject "We are interested in the environment", which refers to the pollution of the environment. We read the text. Then we ask the question "What are the causes of environmental pollution". Students underline phrases in the text to answer the question. Then we try to find what it says in the text emphasizing the underlined phrases. We try to find how the author mentions them in the text and to find the correct answer. We point out meanings and phrases used by the author and then give students the opportunity to write their own text on "Why the environment is polluted".

Written evaluation protocol		
Evaluation criteria	**Yield Class** (Average)	**Yield of the D.**
1. Number of text words	91	37
2. Number of text paragraphs	2	1
3. Number of text ideas	4	1
4. Number of sub-sentences	4	1
5. Number of repetitions	3	7
6. Number of spelling mistakes	6	13
7. Number of syntax errors	5	9
8. Number of errors in the use of tenses.	3	7
9. Number of errors in the structure of paragraphs thematic proposal, analysis, conclusion proposal)	3	6
10. Number of errors in the structure of the text (eg for narrative texts: context, principle, reaction, effort, result, consequences)	2	5
11. Number of errors in the text type (function, template, content, grammatical structures)	3	7
12. Number of typographical errors (margin keeping, paragraph breaks, word spacing, smudges, etc.)	3	6

Source: Γ. Σαλβαράς (2009)

91-37 = 54

91 100 ⎤ 100 X 54/91 = 59% remaining
54   X   ⎦ 91 - 59% = 32%

So the deviation exceeds 22% and there is a problem of underperformance.

Overview: Comparing the performance of the student with the performance of the class average we find that the discrepancy between the errors in all the criteria of the class average and the student is large. We conclude that the deviation exceeds 22% and an underperformance problem arises.

4.2. Learning potential assessment

4.2.1. Strategy evaluation

A) Learning:

Aim: To learn how to produce a text (with the teaching strategy of the writing and post-writing process).

Organization: To teach students how to produce written speech. We give a questionnaire to students to answer 8 statements on a scale. We ask them the following question: When do I learn to produce written speech better? When:

STATEMENTS (student with underperformance):	Not at all	A little bit	Enough	Very	Very much
1. I read a text and find meanings and phrases to use, to use it as a template.		X		X	
2. I write my original text, with a theme that arises from text.		X		X	
3. Two or three students read their texts and we discuss «what they wrote» and «how they wrote».			X	X	
4. Make the writing tree in the discussion table, where each branch is a paragraph and the branches their analysis.		X	X		
5. I review my original text and find shortcomings.		X			X
6. I rewrite my original text, with the help of my classmates' texts and the writing tree.			X		X
7. I compare my texts and find «what changes» and «what remains the same».		X			
8. I see my progress, identifying the improvements I made from one text to another.		X		X	

Source: Γ. Σαλβαράς (2007)

* (With red **X** we indicate the average of the group to distinguish the statements from the student)

Overview: The assessment rate of the teaching activities that make up the student's activity is 45%, of the learning condition is 47%, the performance criterion is 40%. The assessment rate of the teaching activities that make up the activity of the average class is 85%, of the learning condition is 74%, the performance criterion is 80%. The difference between them exceeds 22% in each category of didactic actions, so a problem of underperformance.

B) Study:

Aim: To learn how to study a text I read, I ask and I answer, I summarize, I clarify, I predict, I give the meaning (with the study strategy of R.A.A.S.C.P.G.).

Organization: We give the students a questionnaire which contains 12 statements on a scale that show the description of the students' activity. This way they will learn how to study a text. We give the questionnaire to each student to complete by asking the question: When do I learn to study a text better, when:

STATEMENTS (student with underperformance):	Not at all	A little bit	Enough	Very	Very much
1. I read a text paragraph by paragraph.			X	X	
2. I ask and answer for the message of the paragraph.		X		X	
3. I summarize the paragraph by underlining it Thematic sentence.			X		X
4. I clarify the meaning of words with the help of contexts and the dictionary.	X			X	
5. I anticipate the topic of the next paragraph based on the characteristics of the structure of the text: context, principle, reaction, effort, results, consequences.		X	X		
6. I convey the meaning of the paragraph in my own words. and then...		X		X	
7. I gather all the questions and answers of the paragraphs.		X	X		
8. I join the thematic sentences of the paragraphs and make the summary of the text.		X	X		
9. I clarify the meaning of all the words in the paragraphs.			X	X	
10. I refer to the characteristics of the structure of the paragraphs and make the structure of the text.		X		X	
11. I convey the meaning of the text in my own words.				X	X
12. I find the description of the structure of the missing text and write a paragraph, to complete the text.		X			X

Source: Γ. Σαλβαράς (2007)

* (With red **X** we indicate the average of the group to distinguish the statements from the student)

Overview: The assessment rate of the didactic actions that make up the student's detailed study is 44% and the synthetic study is 50%. The assessment rate of the didactic actions, which make up the detailed study of the average class is 80% and the synthetic study is 83%. The difference between them exceeds 22% in each category of teaching activities, so there is a problem of underperformance.

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4.2.2. Concept mapping

A) Cognitive map:

Aim: We seek the formation of cognitive structures.

Organization: We read with the students a text from the history of the third grade of elementary school on the subject "The lion of Nemea" p. 26. Then we try to understand the text through questions. The questions are divided into two levels. At level 1 the questions relate to where the event happened, when - when, who - the people involved, what exactly these people did and what the results were. At level 2 the questions are about how the event happened, why it happened - for what purpose. We read the text and then try to answer the questions:

* Who were the characters in the story?
* When did this happen?
* Where exactly does the story take place?
* Why was Hercules found in Nemea?
* What exactly did Hercules do?
* How - how did he manage to kill the lion?

During the questions and answers we observe the performance of the students in the class and we record how they answered, who answered and how the lesson progressed. Also for the better understanding of the text, a relevant map is made in the table that shows the questions and the answers.

The questions of the first level are scored X 1 and the second level X2.
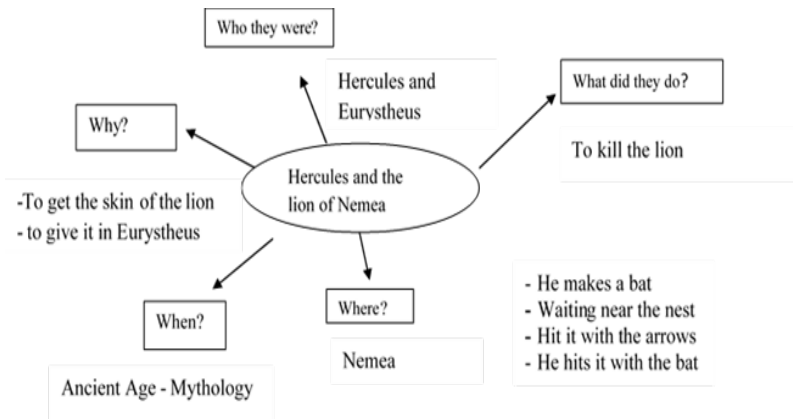
Overview: The student's performance rate for the first level questions is 25% and for the second level questions is 50%. The average grade point average for the first level questions is 75% and for the second level questions is 100%. The difference between them exceeds 22% in each category of teaching activities, so there is a problem of underperformance of the student.

B) Semantic map:

Aim: To classify the concepts from the most general to the smallest, connecting these concepts with connecting words to form sentences.

Organization: We give a text to the students which refers to food. Specifically refers to foods that come from nature - natural foods, and are milk, eggs, meat, wool, skin, fruits, vegetables, citrus fruits (lemons, oranges, tangerines…), but also foods that have been processed into fresh - frozen foods, such as vegetables (beans, peas…), meat, fish, and pasteurized foods such as milk, butter, jams…

Together with the students we try on the board where we have drawn a blueprint, which will help us to classify the products into groups according to the type and category of products. In pictures we have the products and we start with the students the classification. So we ask them in which categories the products that nature gives us are divided. Then we discuss how man intervenes in the products of nature and in what ways he processes them. That is, how the products reach the consumer and how they are processed. The following diagram shows the order of product classification based on the group - category to which they belong:
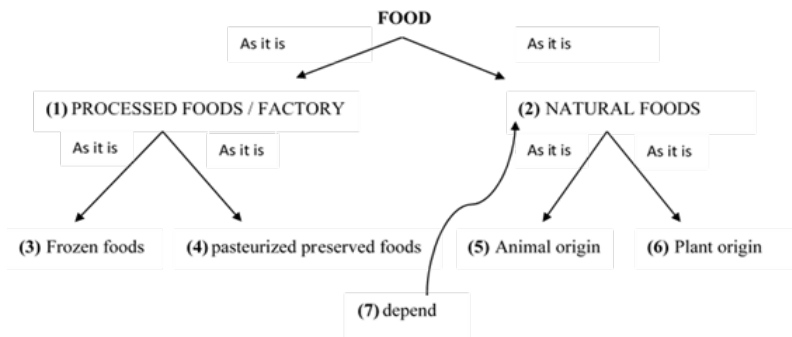
From the students' answers during the discussion on the subject of products, the under-performing student gave two answers concerning products belonging to the category of plant origin, such as oranges, beans, and one answer concerning the category of animal origin, such as the milk. So in the student connections we have 50% compared to the average which was 83%. In the interfaces the student could not give any answer, so we have a percentage of 0% and the average percentage is in the interfaces 100%.

Student connections: 3 X 1 = 3,

6 100 ⎤ 3 X 100/6 = 50%
3 X ⎦

Interfaces: 0%

Average connections: 5 X 1 = 5

6 100 ⎤ 5 X100 / 6 = 83%
5 X ⎦

Interfaces: 1 X 2 = 2, 100%

Overview: The student performance rate on links is 50% and on links is 0%.

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The average class performance of the links is 83% and the links are 100%. The difference between them exceeds 22% in each category of teaching activities, so there is a problem of underperformance of the student.

4.3. Assessment of learning motivations

4.3.1. Learning Motivation Orientation

Aim: To construct the profile of the student's orientation objectives with underperformance.
Organization: We give the children to fill in a questionnaire during the lesson by asking the question: "When do we motivate the most, when…":

Table

STATEMENTS					
During the course ...	Not at all	A little bit	Enough	Very	Very much
1. I try to improve the way I work.			X		X
2. I try to outdo others.	X				X
3. I do not hesitate to seek help from him teacher And my classmates.			X		X
4. I hesitate to seek advice and help by my teacher and classmates.			X	X	
5. I attribute to myself, who did not try as needed, the cause of my failure.			X	X	
6. I attribute to my ability the cause of my success.		X			X
7. If I show low performance, I do not give up and intensify my effort.		X			X
8. I am not interested in the activity that takes place, if I do not have performance.	X				X
9. I show interest in the activity that takes place regardless of performance.		X			X
10. If I have low performance, I want to give them up.	X			X	
11. When difficulties arise, I think again, take courage and do new things.		X			X
12. When difficulties arise, I am afraid and, Without thinking, I do what others do.		X		X	
13. I feel successful when I try to learn with the cooperation of my classmates.		X		X	
14. I feel successful when I do my homework better than my classmates.			X		X
15. I think about how I did the work and I evaluate it.		X		X	
16. I think about how well I did and I wait for the Teacher to evaluate me.		X			X

Source: Γ. Σαλβαράς (2009)

* (With red **X** we indicate the average of the group to distinguish the statements from the student)

Overview: The percentage of orientation of the student's motivations towards the project is 55% and towards the ego is 52%. The percentage of motivation of the middle class towards work is 85% and towards the ego is 78%. The difference between them exceeds 22%, so there is a problem in the orientation of the student's motivations.

4.3.2. Behavioral regulation

Aim: To enable students to achieve self-regulation of their behavior. Interacting with others transforms into interacting with oneself.

Organization: During the course of the study in the course "What problems we create in the environment and what we can do" (p. 36, chapter 4, Environmental Study). The behavior of the students is observed through a discussion on the specific topic, so that everyone can speak, be heard, suggest or change their mind. Finally, it is reported whether the team was able to highlight the views - contradictions and arguments, to formulate a plan, to implement it and to show its correctness. Specifically, students are asked to cite examples of pollution problems we create in the environment. An effort is made for all students to speak. In each of the students' proposals there is a discussion and we find more information. In the table there is the word problem in the center and we write below the problem that each student mentions. Then we find suggestions for tackling environmental pollution. Each student mentions a solution, what we can do, we discuss this solution giving more information. We record the proposals - solutions in the table to have a complete picture of the problems and solutions proposed.

Table

STATEMENTS :	Not at all	A little bit	Enough	Very	Very much
A. Each student was able to ...					
1. To speak					
• enough		X			X
• without exaggeration	X			X	
• regularly		X			X
2. To be heard					
• without interrupting him		X X			
• without being rejected	X		X		
3. To argue					
• proposing a different way			X	X	
• without being treated hostilely			X		X
4. To change his mind					
• from the arguments of others			X X		
• from discovering new ideas			X	X	

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STATEMENTS :	Not at all	A little bit	Enough	Very	Very much
B. The team was able to ...					
5. To highlight					
• all views		X			X
• all contrasts		X		X	
• all arguments	X				X
6. To compose					
• a plan (what to do, how)		X		X	
• putting this into practice		X	X		
• showing its correctness	X	X			

Source: Γ. Σαλβαράς (2009)

* (With red **X** we indicate the average of the group to distinguish the statements from the student)

Overview: The percentage of student behavior "Each student could" is 49% and "the team could" is 34%. The rate of behavior of the average behavior of the class "Each student could" is 73% and "the team could" is 77%. The difference between them exceeds 22%, so there is a problem of splicing the behavior.

4.3.3. Performance of success-failure causal determinations

Pursuit: To find out what he attributes the cause of his failure.
Organization: Students are given an exercise to complete in the following sentences the ι, η, υ, ει, the ones that are missing from the words, putting a tone where it is needed:

Ο κάτ....κος, η μετακίν.....ση, ο σιδ.....ρόδρομος, το ποτ....ρι, το λεωφορ...ο, το σ...δερο.

After completing the exercise and the correction is made, the students are given the questionnaire which states that they attribute the causes of failure and success.

Table
Success Return Questionnaire

The last time you managed to…

STATEMENTS :	Not at all	A little bit	Enough	Very	Very much
1. You are very good		X		X	
2. You tried hard.				X X	
3. The teacher gave you good instructions.			X		X
4. The task was easy.	X			X	
5. You were lucky.	X		X		

Failure Performance Questionnaire

The last time you failed to ...

STATEMENTS :	Not at all	A little bit	Enough	Very	Very much
1. You are always weak		X		X	
2. You did not try hard.		X		X	
3. The teacher was vague in the instructions.	X		X		
4. The task was difficult.			X		X
5. You were unlucky.	X			X	

Source: Γ. Σαλβαράς (2009)

* (With red X we indicate the average of the group to distinguish the statements from the student)

Overview: The student success rates are 44% and failure rates are 80%. The median success rates of the class average are 72% and failure rates are 36%. The deviation exceeds 22%, so there is a problem of causal determinations of success - failure.

5. Teaching environmental evaluation

5.1. Recording teacher and student behaviors

Aim: To record teacher behavior and underperformance behavior. Thus we compose the structure of the teaching, we comment on the functionality of the teaching in relation to the teaching needs of the student and we continue with the formulation of proposals for the improvement of the teaching.

Organization: During the teaching of the language lesson pp. 34-35 chapters "Unforgettable birthday" we record in the following table every two minutes the behavior of teacher and student with underperformance.

Behavior-teacher	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	Σύνολο	%
1. Presents			X	X	X		X		X	X	X													7	31%
2. Listens					X	X							X											3	13%
3. Guides																									
4. Ask				X	X										X	X								4	18%
5. Answer							X																	1	5%
6. Write																									
7. Praises												X						X	X					3	13%
8. Shows and explains							X	X		X														3	13%
9. Scolds																									
10. Feedback				X	X							X												3	13%
11. Combines																									
12. Declares				X										X										2	9%
13. Causes transformations																									
14. Agrees project, roles																									
15. Summarizes																							X	1	5%
16. Waiting									X	X														2	9%

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Behavior-student	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	Σύνολο	%
1. Wrote					X									X										2	9%
2. Ask			X									X								X				3	13%
3. Discusses																									
4. Listens / watches	X	X	X	X	X			X		X		X	X	X		X					X			12	52%
5. Read									X															1	5%
6. Discusses																									
7. Chatting						X				X														2	9%
8. Fooling around										X			X				X				X			4	17%
9. Mapped concepts																									
10. Ask																									
11. Gives instructions to himself																									
12. Repeats									X															1	5%
13. Recalls																									
14. Performs						X																		1	5%
15. Says										X			X											2	9%
16. Transforms																									

Source: Γ. Σαλβαράς (2009)

Overview:
Teacher Behavior: Shows 31%, listens 13%, asks 18%, answers 5%, praises, shows and explains, gives 13% feedback, states and expects 9%, summarizes 5%. The course is dominated by presentation, questioning and praise, pointing and explaining and feedback.
Student behavior: Writes, chats and says 9%, asks 13%, listens / watches 52%, reads, repeats and executes 5%, fools 17%. He deals little with the work, reads, repeats and performs and is more concerned with listening / watching.

5.2. Teacher self-evaluation for his teaching:

Aim: The self-assessment of the teacher for his teaching by completing the questionnaire.
Organization: At the end of the teaching the questionnaire is completed by underlining a statement in each of the four categories showing how to enter the teaching, the continuation of the teaching, the folding of the teaching and the exit from the teaching.

Statements:	Rare	Occasionally	Often
a. Introduction to teaching			
1. I review previous knowledge and state the learning goal.			
2. I agree with the students the project (what we will do) and them roles (what everyone will do, teacher and students).			
3. I write simple sentences on the board and the students say «What they will learn» and in «what order» (advance organizer).			X
4. I enter information that students also ask for an explanation identify the research question (How, Why, For what purpose).			
5. I present a generalization (rules, laws, mathematics formulas, etc.) and students identify «What it means», «How it came about», «Where it helps us».			
6. I restore previous knowledge and introduce transformation (an inversion, another way, an extension).			
7. I choose the topic and analyze the dimensions with the engagement of courses in Language, Mathematics, Natural Sciences, - Social Sciences and Arts.			
8. I distribute the roles, I introduce the topic and the students to make the design, implement it and evaluate it.			
b. Continuation of teaching			
9. I present step by step the new lesson by assembling the small steps. Students repeat, are fed and enhanced.			
10. I show and explain how I think. Students perform with My guidance, they say it out loud and give instructions to themselves «what to watch out for».			
11. I narrate by turning simple sentences into paragraphs. Students read and identify his simple sentences advance organizer.			X
12. I present a set of options for students to choose from underline which in their opinion give the answer to the research question.			
13. I introduce examples of application of generalization.			
14. I assist students with the scaling of matching one to one to reverse or find another way or to expand.			
15. I orient the students on the dimensions of the topic and I ask their participation to make a work plan.			
16. I help students ask themselves questions «See what you do and make your plan».			

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c. Wrapping up teaching			
17. I train students to perform similar exercises, one by one I give feedback after each run and amplify them.			
18. I train students through mutual work or choosing a level difficulty exercising or working with self-control.			
19. I ask students to look for answers to the questions: where, when, who, what they did, what the results were, how, why, for what purpose and make a knowledge map.			
20. I urge students to read the text of the book, underline phrases and check which versions are correct.		X	
21. I ask students to answer the questions "How emerged», «What is its meaning», «Where it serves us».			
22. I ask students to find «What changes» and «What stays the same» in transformations (inversion, other way, expansion).			
23. I encourage students to work according to the plan resorting to learning resources.			
24. I urge students to «Implement your plan».			
d. Exit from teaching			
25. I ask students to highlight what they learned from their previous lessons «where they differ».			
26. I ask students to refer to their role and to compare their current progress with previous ones.			
27. To convey the meaning with continuous speech with the help of cognitive map.	X		
28. I ask students to say «what did they do» to give answer to the question.			
29. I ask students to give examples of application of generalization.			
30. I ask students to cite examples of transformation.			
31. I ask students to present its results their work and how they work. 32. I urge every student to ask "Look what you did until now and tell me what else you will do «.			

Source: Γ. Σαλβαράς (2009)

Overview: The teacher highlights the statements that make up the advance organizer's teaching strategy. Highly evaluates statements 3, 11, occasionally statement 20 and low statement 27. The overall estimate of the frequency of use of the advance organizer's teaching strategy is 71%.

5.3. Climate evaluation of the class

Purpose: We seek to explore students' perceptions of their interest in lessons, tests - assessment, difficulty encountered, acceptance of their diversity and comparison with others, to express themselves.

Organization: The evaluation of the classroom climate will be done with a questionnaire, which consists of 18 statements on a scale and 12 incomplete sentences that students are asked to complete. They will express their perceptions of how they experience lessons, assessment tests and "feeling different". The questionnaire is distributed to students to complete in the first hour of the lesson and is returned to the teacher when everyone has completed it.

5.3. Classroom climate assessment:					
Statements:	**always**	**usually**	**in half cases**	**occasionally**	**never**
1. I like the lessons.	X			X	
2. I work a lot for classes.	X		X		
3. I follow the rest of the class in the lessons.	X	X		X	
4. I need help with lessons.		X		X	
5. I find it difficult to understand them.		X			X
6. The lessons are boring.			X	X	
We complete the sentences: THE STUDENT WITH UNDERFORMATION					
a. When I have a problem with lessons. .I ask for help from the teacher and the parents. . . . . … ...					
b. I like my favorite lesson because. . I learn about the usual and daily life of the ancient Greeks …………………… .					
c. I'm worried about the lessons, because . . when something is difficult and can make it difficult for me. . and have low grade.					
d. I have difficulty in some lessons, because… I have to study more carefully and be careful.					
Fill in the sentences: AVERAGE					
a. When I have a problem with lessons. . I ask for help from the teacher and my classmates or my parents.					
b. I like my favorite lesson because… to express thoughts - ideas, to change opinions and to discuss various things with my classmates					
c. I'm worried about the lessons, because. . I want to succeed and have high grades, when I read carefully I do not worry.					
d. I have difficulty with some lessons because. . . . when I do not read carefully and when I am in a hurry.					
B. We give our opinion on the evaluation tests					
Statements:	**always**	**usually**	**in half cases**	**occasionally**	**never**
1. I like the tests.		X			X
2. I like to get high test scores.	X	X			
3. Tests help me learn better.			X	X	
4. I get low scores on tests.		X		X	
5. The tests are boring.	X		X		
6. I do not perform when we have a test.		X			X
We complete the sentences: STUDENT WITH UNDERFORMATION					

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a. The tests are done because. *..the teacher must see what we know. . . . .*					
b. When I get the test scores. *. .I'm worried, I'm scared and I do not want to know the grades. . . . .*					
c. When the teacher asks me a question, I do. *. . I'm afraid he will ask me something I do not know ... .*					
d. When I write a test, I feel. *. . . anxiety, fear. . . . .*					

Fill in the sentences: AVERAGE

a. The tests are done because *. . .we must learn and improve in the lessons and the teacher sees our mistakes to help us. . . . .*					
b. When I get the test scores *. . .I'm anxious to know my grade, to see my mistakes,. . . . .*					
c. When the teacher asks me a question, I do *. . . I pay attention to listen to what he will ask me, I am focused, I answer with courage, I ask something if I did not understand. . . . .*					
d. When I write a test, I feel *. . .concern and I try to concentrate to answer correctly. . . . .*					

c. We say our opinion of ourselves «to feel different»

Statements:	always	usually	in half cases	occasionally	never
1. In my school they behave like to the others.		X		X	
2. I participate in what the rest of the class does.	X		X		
3. I can do different things the same well with the other kids in my class.			X	X	
4. The teacher assigns me to do various tasks in the classroom.		X	X		
5. At school I feel neglected.				X X	
6. I do different things from the others children.	X			X	

We complete the sentences: STUDENT WITH UNDERFORMATION

a. I would like to be in my class *. . .good at lessons and answer with courage. . . . .*					
b. When others do things that I can not do *. . . I'm upset. .and I feel bad. . . . .*					
c. I wish I could go to school *. . .do not have difficulty in lessons. . . . .*					
d. I like to *. . .I do different things with the other kids. . . . .*					

Fill in the sentences: AVERAGE

a. I would like to be in my class *. . .good at lessons, to talk boldly, to be smart, to talk about my ideas. . . . .*					
b. When others do things that I can not do *. . .I will try to do what I can do and my other classmates can help me do some things with them, I do not feel sad if I can not do something. . . . .*					
c. I wish I could go to school *. . . I knew more, not to make mistakes, to do more interesting things that I like. . . . .*					
d. I like to *. . .I do homework with my classmates,. . . . .*					

Source: Γ. Σαλβαράς (2009)

* (With red **X** we indicate the average of the group to distinguish the statements from the student)

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Overview: The interest of the students in the class for the lessons and the tests - evaluation is 65%, of the student with underperformance 60%, the difficulty they encounter is 45% and 80% of the student with underperformance, the acceptance of the difference is 72% and 44% of the student with underperformance, and the comparison with the others is 88% and 56% of the student with underperformance. Analysis proposals:

In the sentences "We say our opinion about the lessons" the student with underperformance refers to the help from the teacher or his parents, he likes the history lesson because he learns the habits and the way of life of the ancient Greeks, he expresses his concern for lessons when something is difficult and may have a low grade. He attributes the difficulty of the courses to the fact that he does not study properly and carefully.

In the sentences "We say our opinion about the assessment tests" he considers that the tests are done to see what the teacher knows the students, when he gets the grades he expresses concern, fear and does not want to know the grades, in case the teacher asks him something he feels afraid of not knowing, and expresses fear and anxiety the moment he writes a test.

In the sentences "We say our opinion about ourselves to feel different" the student answers that in class he would like to be good in lessons and to answer with courage, he is upset and feels bad when he can not do things that others can do, he would like at school not to have difficulty in lessons and he would like to do different things with his classmates.

The answers for the average children in the class to the sentences "We say our opinion about the lessons" in terms of the problems they face in the lessons ask for help from the teacher, their classmates, from the parents, the lessons they like are to express thoughts - ideas, to change opinions and to discuss various things with my classmates. They want to succeed and have high grades, when they read carefully they do not worry, when asked why they have difficulty in some lessons it is because they do not read carefully and when they are in a hurry.

In the sentences "we say our opinion about the evaluation tests" the students consider that the tests help to improve, to learn and see their mistakes to correct them, they express concern for their grade and they want to see their mistakes, in The teacher's questions are listened to and they are focused on listening to the question, they ask for clarifications if they do not understand something they answer with courage. When writing tests they feel anxious and try to be focused and careful to answer correctly.

In the sentences "We say our opinion about ourselves to feel different" the students answer that they want to be good in the lessons, to talk boldly, to be smart, to talk about their ideas. When asked when others do things I can not do, the students answered that they will try to do what they can do and help their other classmates do some things with them, they are not upset if they

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can not do something., at school they wish they could have known more and made no mistakes. When asked what they would like, they answered that they would like to do more interesting things that they like and do homework with their classmates.

6. Identification of a teaching problem

6.1. Student assessment

Assessment of prerequisite knowledge:
a. Systematic observation: The student success rate is 45% and the grade point average is 80%. The difference between them exceeds 22%, so there is a problem of underperformance.
b. Performance / success criterion: The student's success rate is 40% and the grade point average is 80%. The difference between them exceeds 22% so there is a problem of underperformance.
 We find that the student is in **learning**, so a problem of underperformance arises.
c. Learning Hierarchy: We find that the student is in **learning**, so there is a problem of underperformance.
d. Assessment protocol: The discrepancy between the errors in all the criteria of the class average and the student is large. We conclude that the deviation exceeds 22% and an underperformance problem arises.
Assessment of learning potential:
a. Learning strategies: The assessment rate of the teaching activities that make up the student activity is 45%, of the learning condition is 47%, the performance criterion is 40%. The assessment rate of the teaching activities that make up the activity of the average class is 85%, of the learning condition is 74%, the performance criterion is 80%. The difference between them exceeds 22% in each category of didactic actions, so a problem of underperformance.
b. Strategic study: The assessment rate of the didactic actions that make up the student's detailed study is 44% and the synthetic study is 50%. The assessment rate of the didactic actions that make up the detailed study of the average class is 80% and the synthetic study is 83%. The difference between them exceeds 22% in each category of teaching activities, so there is a problem of underperformance.

c. Concept mapping:
Cognitive map: The student's performance rate for the first level questions is 25% and for the second level questions is 50%. The average grade point average

for the first level questions is 75% and for the second level questions it is 100%. The difference between them exceeds 22% in each category of teaching activities, so there is a problem of underperformance of the student.

Sensitive map: The student's performance rate in the links is 50% and in the links is 0%. The average rate of return on connections is 83% and on interfaces it is 100%. The difference between them exceeds 22% in each category of teaching activities, so there is a problem of underperformance of the student.

Assessment of learning motivation:

a. Orientation of learning motivation: The percentage of orientation of the student's motivations towards the project is 55% and towards the ego is 52%. The percentage of motivation of the middle class towards work is 85% and towards the ego is 78%. The difference between them exceeds 22%, so there is a problem in the orientation of the student's motivations.

b. Behavior adjustment: The percentage of student behavior adjustment "Each student could" is 49% and "the team could" is 34%. The rate of behavior of the average behavior of the class "Each student could" is 73% and "the team could" is 77%. The deviation between them exceeds 22%, so there is a problem of splicing the behavior.

c. Etiological determinations of success - failure: The percentages of explanatory determinations of success of the student are 44% and failure are 80%. The median success rates of the class average are 72% and failure rates are 36%. The deviation exceeds 22%, so there is a problem of causal determinations of success - failure.

6.2. Assessment of a didactic problem:

a. Recording teacher-student behavior:
Teacher behavior: Shows 31%, listens 13%, asks 18%, answers 5%, praises, shows and explains, gives 13% feedback, states and expects 9%, summarizes 5%. The course is dominated by presentation, questioning and praise, pointing and explaining and feedback.
Student behavior: Writes, chats and says 9%, asks 13%, listens / watches 52%, reads, repeats and executes 5%, fools 17%. He deals little with the work, reads, repeats and performs and is more concerned with listening / watching.

b. Teacher self-evaluation for his teaching:
The teacher underlines the statements that make up the pre-organizer's teaching strategy. Highly evaluates statements 3, 11, occasionally statement 20 and low statement 27. The overall estimate of the frequency of use of the advance organizer's teaching strategy is 71%.

c. classroom climate:

The interest of the students of the class for the lessons and the tests - evaluation is 65%, of the student with underperformance 60%, the difficulty they encounter is 45% and 80% of the student with underperformance, the acceptance of the difference is 72% and 44% of the underperforming student, and the comparison with others is 88% and 56% of the underperforming student.

Evaluating the level of prerequisite knowledge we find that the student presents underperformance with the result that the student's learning problem becomes the teacher's teaching problem. With the ecosystem evaluation we will deal with the student's underperformance and we will introduce the clinical interview. Our goal is to achieve adaptive teaching and focus on learning learning strategies, studying and mapping concepts so that all students acquire the skills of speaking, writing and reading.

Part B: Teaching intervention

7. Clinical interview

7.1. Learning problem:

Purpose: The production of written work by students, the analysis and grouping of their mistakes by compiling a list of criteria and completing it.

Organization: From the book My Language "The Incredible Pencils" of the Elementary School Classroom, second issue, pp. 27 - 28, we read the story of the "Selfish Giant". Then we try to point out meanings and phrases in the text. We discuss with the students why the children were playing in the Giant's garden, what happened when he returned, what actions he took when he returned and what happened to the Giant in the end. Then the question arises why did not Spring come to the garden of the Selfish Giant?

Then, as an extension of the question, the children are asked to write their own text on "Spring in the Giant Garden".

a) Symptoms of student mistakes
Purpose: To check the symptomatology of errors between the class average and the student.
Organization: After each student writes his text, we correct them and complete the assessment protocol.

Written evaluation protocol		
Evaluation criteria	**Yield Class** (Average)	**Yield of the D.**
1. Number of text words	248	85
2. Number of text paragraphs	3	1
3. Number of text ideas	13	2
4. Number of sub-sentences	5	3
5. Number of repetitions	8	19
6. Number of spelling mistakes	5	8
7. Number of syntax errors	3	6
8. Number of errors in the use of tenses.	2	4
9. Number of errors in the structure of paragraphs thematic proposal, analysis, conclusion proposal)	2	5
10. Number of errors in the structure of the text (eg for narrative texts: context, principle, reaction, effort, result, consequences)	3	7
11. Number of errors in the text type (function, template, content, grammatical structures)	2	8
12. Number of typographical errors (margin keeping, paragraph breaks, word spacing, smudges, etc.)	2	5

Source: Γ. Σαλβαράς (2009)

248 - 85 = 163
248 100 ⌐   163 X 100/248 = 65% left
163   X   ⌡ 100 - 65% = 35%
So it exceeds 22% of the class average.

So since the deviation in the various categories that make up the production of written speech is great the student presents underperformance.

b) Reasoning of student mistakes with project analysis

Purpose: We seek to identify the cause of the student's mistakes with underperformance and the problem solving process.

Organization: With the analysis of the project we will see how the student made decisions about the questions "what he will write", "why he will write" and "how he will write". In the first question we will examine whether the student was able to think of the familiar text we read as a model. In the second question we will see how he handled the functions and the type of text, ie if the text is literary and wants to move, taking into account the analysis of the text we read in terms of content, form and font structure of the text. In the third question we will look at the structure patterns of the sentence, the paragraph and the text. Specifically in the sentence how it has formed the subject - verb - object, how it is the structure

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of the paragraph in terms of the thematic sentence, the analysis of the subject of the paragraph and how it "closes" the paragraph, the concluding sentence. Regarding the text we will examine the context, the principle, the reaction, the effort, the result and the consequences.

c) Formulation of assumptions
The student's mistakes are due to the fact that he could not manipulate the information from the known text and have it as a model in an effective way. In the question "why will he write" he did not handle the functions and the type of the text as well as the structure shapes of the sentence, the paragraph and the text in the question "how will he write".

d) Case control
The hypotheses will be checked with the help of the semi-structured interview using exploratory questions. We will ask the student to read his text. In the process we will ask him if he has in mind a well-known text that he used as a template to write. A second question that is asked to the student and concerns the type of text is "why did he write", what did he want to achieve, to move, to explain something, to inform the reader? The third question also arises "how did he write", ie what he wrote in each paragraph.

e) cognitive profile

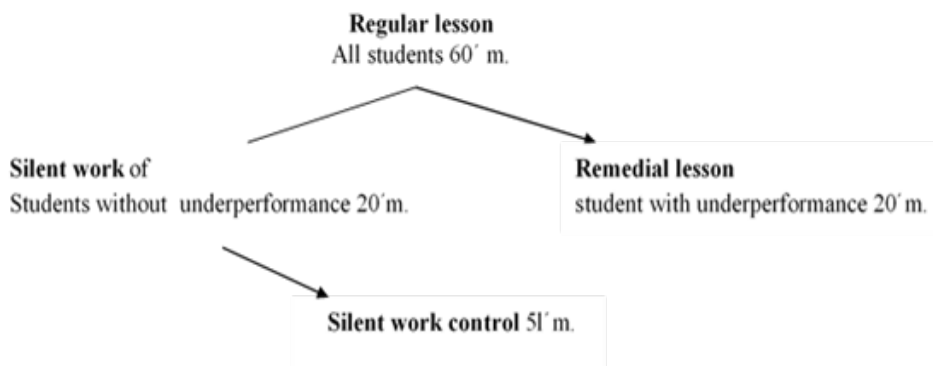| Criteria			
Scale	What he will write	Why he will write (text type)	How he will write (text structure)
Alone with me Self-control			
With help / Scaffolding			
Skill to is developing			

Source: Γ. Σαλβαράς (2009)

Cause diagnosis: While the student could not use the text we read as a template, he did not handle the functions and type of the text "why I will write" and the structure of the sentence, the paragraph and the text "how I will write". Based on the above, emphasis will be placed on the type of text, the structure of the sentence, the paragraph and the text. In this way we will succeed in increasing the number of words, paragraphs, to make better use of the main and secondary sentences of the text, to increase the ideas of the text, to reduce spelling - grammar - syntax errors.

7.2. teaching intervention

At this point the course is about normal, silent work and remedial work for underperforming students. Specifically, it will be preceded by the regular lesson

which is addressed to all students covering the ¾ of teaching time. The following is the remedial lesson for the underperforming student covering it ¼ of teaching time. We will apply the logic of co-taught classes.

Regular lesson
All students 60΄ m.

Silent work of
Students without underperformance 20΄m.

Remedial lesson
student with underperformance 20΄ m.

Silent work control 5l΄ m.

In order to methodize the didactic intervention, we must emphasize the concretization of the didactic goal, the choice of the teaching strategy and the re-writing of an evaluation protocol of the production of the written word in order to control the student's progress.

a) Concretization of a didactic goal
The production of written speech with a writing and post-writing process to be improved by 30%.
b) Choice of teaching strategy
We choose the strategic teaching of the writing and post-writing process according to the following phases:
Read and edit text
We read a text from the book My Language, second issue, pages 34 - 35 entitled "Unforgettable birthday". We read the text and discuss "What does Melina want to do?". The children mention various elements that express what Melina wants to do for her birthday. Then in the question he says, the children refer to the third paragraph and explain through the book how he says it, "He dreams of the birthday…" (p. 34).
We then emphasize the structure of the text by analyzing the context of each paragraph, what each paragraph describes such as:
1st paragraph: The reference to the face - Melina and her birthday.
2nd paragraph: The preparation for the study of her courses.
3rd paragraph: She dreams of her birthday.
4th paragraph: The dialogue with her mother.
5th paragraph: Her feelings and her decision to make the birthday she dreams of.
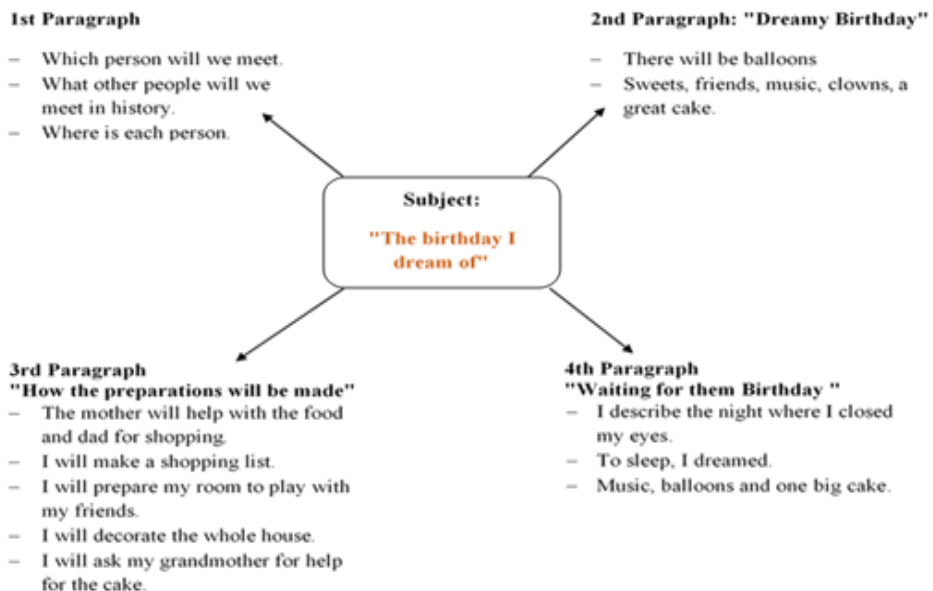Paragraph 6: The dialogue with her parents at meal time about how the party will
    be organized, asking for help from her grandmother and a classmate.

Paragraph 7: Dreaming of colored balloons.

Then we discuss with the children about the type of text. That is, what is the author's goal, what does he want to achieve with the story, to move, to what actions - actions of the persons does he refer, how does he use the verbs, is there a dialogue?

Initial text writing

Once we have studied the text, we then identify the topic of text writing, which is related to the text we studied. The topic is entitled "The birthday I dream of". After completing the writing of the text, three students read their texts and we discuss what they wrote and mention the phrases. Then in the table we form the semantic map in the form of a tree (each branch refers to a paragraph and the branches are related to the analysis of the paragraph):

1st Paragraph
- Which person will we meet.
- What other people will we meet in history.
- Where is each person.

2nd Paragraph: "Dreamy Birthday"
- There will be balloons
- Sweets, friends, music, clowns, a great cake.

Subject:
"The birthday I dream of"

3rd Paragraph
"How the preparations will be made"
- The mother will help with the food and dad for shopping.
- I will make a shopping list.
- I will prepare my room to play with my friends.
- I will decorate the whole house.
- I will ask my grandmother for help for the cake.

4th Paragraph
"Waiting for them Birthday "
- I describe the night where I closed my eyes.
- To sleep, I dreamed.
- Music, balloons and one big cake.

Review and rewrite the text

After the students with the help of the semantic map review the original text, what I wrote and how I wrote, we notice shortcomings and rewrite the text, improving the connection of the sentences, the structure of the paragraphs and the text, they increase the secondary sentences. Specifically, students rewrite the original text by reconstructing it, that is, they open the sentences - they extend the speech, they use other words, they connect the sentences and paragraphs better, they increase the secondary sentences, relying on the semantic map.

Comparison / correlation of texts

After the students have finished reading the two texts, the original and the reformulated one observe similarities and differences, find what changes and what remains the same, what he wrote and how he wrote them.

c) Assessment protocol - Symptoms of student mistakes

written evaluation protocol	
Evaluation criterias	**Yield of the D.**
1. Number of text words	**180**
2. Number of text paragraphs	**4**
3. Number of text ideas	**4**
4. Number of sub-sentences	**4**
5. Number of repetitions	**10**
6. Number of spelling mistakes	**5**
7. Number of syntax errors	**3**
8. Number of errors in the use of tenses	**1**
9. Number of errors in the structure of paragraphs (thematic proposal, analysis, conclusion proposal)	**1**
10. Number of errors in the structure of the text (eg for narrative texts: context, principle, reaction, effort, result, consequences)	**3**
11. Number of errors in the text type (function, template, content, grammatical structures)	**4**
12. Number of typographical errors (margin keeping, paragraph breaks, word spacing, smudges, etc.)	**3**

Source: Γ. Σαλβαράς (2009)

248-180=68

248 100 ⎤ 68 X 100 / 248 = 28%
68 X   ⎦ 100 – 28% = 72%

7.3. Result - comparison of evaluation protocols

From the comparison of the two evaluation protocols, diagnostic and evidential, we find significant progress of the student who showed underperformance in the production of written speech. Specifically, we observe that the number of words, paragraphs, main and secondary sentences, ideas has increased compared to the first text, we still observe the improvement of spelling - grammar - syntax errors in the second text from the original. Finally, it shows a significant improvement in the structure of the sentence, the paragraph, the text and the function of the text. It seems the attempt to move and define the literary style of the text. The improvement in the increase of the words is possible in relation to the goal that we

had initially set, that is, from 35% less that was in the first one it has improved and has increased them 72% in the second text. The teaching intervention continues until the student acquires the basic lessons with a success rate of 90%.

8. Discussion – conclusions

Effective instructional teaching is done by the teacher's own skills, because he / she chooses the appropriate planning techniques and teaching strategies. Also another important element is the initial assessment of children with learning difficulties and the assessment of their prerequisite skills with well-structured teaching and with small steps. Also the ingenuity of the teacher and his readiness in terms of ways and techniques to form a suitable school climate and to set the conditions for an effective teaching.

The evaluation that is considered a useful "tool" for the teacher is the ecosystem, because that is how the teacher finds the student with underperformance. Evaluating the prerequisite knowledge, the learning potential and the learning motivations of the student but also the teaching environment, we focus and discover the point of difficulty of the student and proceed to the didactic intervention.

Following the method of didactic intervention with the remedial course and applying the assessment protocols and the appropriate techniques we find the improvement of the student. Therefore, a student who has a learning disability needs an organized and quality teaching approach so that he does not lag behind his other classmates.

Through the didactic intervention, and specifically through the regular lesson, the tacit work and the remedial lesson, which concerns the student with underperformance, we observe that the concretization of the didactic goal, which concerns the production of the written word with a writing and post-writing process has improved to 72%. Specifically, we notice that the number of words from 85 is 180, the number of paragraphs from 1 to 4, the main and secondary sentences from 3 to 4, the ideas from 2 to 4, has increased significantly compared to the first text. We also notice the improvement of the spelling mistakes to be 8 in the original text and 5 in the final, of the grammars to be 1 instead of 4 and of the syntactic errors to be 3 in the second text from the original which was 6. Finally, it shows a significant improvement in the structure of the sentence, of the paragraph having 1 error in relation to the original text which was 5, text and in the function of the text having 4 errors in relation to the first text which was 8. It has significantly reduced its errors conventional writing having only 3 instead of 5 that it was, keeping the margins, distinguishing paragraphs, keeping the spacing of words and significantly reducing smudges. It seems that the attempt to move and define the literary style of the text. The improvement in the increase of the

words is possible in relation to the goal that we had initially set, that is, from 35% less that was in the first one it has improved and has increased them 72% in the second text. The didactic intervention continues until the student acquires the basic lessons with a success rate of 90%. Thus, we can see that our teaching goal has been achieved significantly, ie the production of written speech by writing and post-writing process has improved. Of course, this kind of teaching presupposes on the part of the teacher knowledge, disposition, organization of teaching time, utilization of methods, focus and concretization of the teaching goal in order to achieve the student's progress.

Based on the above, we tried to apply the appropriate didactics to identify and improve the progress of this student. This student had difficulty in producing written speech and by applying the writing and post-writing strategy he was able to overcome this difficulty and improve in relation to the average of the class. The improvement is seen by comparing the initial and final evaluation protocol. The teacher's effort will continue so that the student's improvement reaches the class average. Thus, the specific student is not isolated from the whole class, but is given the opportunity through the compatible teaching based on his needs that the teacher will apply to be able to write more words, to use the grammatical structure correctly, to connect sentences and paragraphs with semantic content, to enrich his ideas, to get in touch with the types of speech, to learn the speech he writes.

The production of written language is a knowledge - ability of the curriculum that is a horizontal goal of all courses. For this reason no student can be excluded from learning. All students have the right to learn to write, to read, to speak, to express themselves equally and fairly in the classroom. However, this can not be achieved by a student alone, but it is necessary for the dynamic presence of the teacher to contribute to the removal of difficulties.

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Botsoglou Maria

Online learning and digital teacher's competencies and skills

Abstract

Within the rapid changes in today's communication techniques, culture, pedagogy, and developments in knowledge, it is vital for teachers to become familiar with new educational changes, and especially those that are connecting with digital teaching. The need for teachers' digital literacy has become clear and more prominent during the last two years, as the pandemic of Covid-19 escalates the use of digital learning and teaching. This review aims to study the new role of teachers in this digital educational environment and the competencies and skills needed to accomplice effective teaching. The results of this research show that to follow the demands of today's online learning, digital teachers need to adopt a range of roles across different sectors, as well as a range of multifaceted competencies and skills.

Keywords: digital education, digital teacher, online learning.

Διαδικτυακή μάθηση και οι ικανότητες και δεξιότητες του ψηφιακού εκπαιδευτικού

Περίληψη

Μέσα από τις ραγδαίες αλλαγές στις σύγχρονες τεχνικές επικοινωνίας, τον πολιτισμό, την παιδαγωγική και την εξέλιξη της γνώσης, είναι ζωτικής σημασίας για τους εκπαιδευτικούς να εξοικειωθούν με τις νέες εκπαιδευτικές αλλαγές, και ιδιαίτερα εκείνες που συνδέονται με την ψηφιακή διδασκαλία. Η ανάγκη για ψηφιακό γραμματισμό του εκπαιδευτικού καθίσταται σαφέστερη και πιο εμφανής κατά τα τελευταία δύο χρόνια, καθώς η πανδημία της νόσου Covid-19 κλιμακώνει τη χρήση της ψηφιακής μάθησης και διδασκαλίας. Η ανασκόπηση αυτή έχει ως στόχο να μελετήσει το νέο ρόλο των εκπαιδευτικών σε αυτό το ψηφιακό εκπαιδευτικό περιβάλλον και τις ικανότητες και δεξιότητες που απαιτούνται για να επιτευχθεί η αποτελεσματική διδασκαλία. Τα αποτελέσματα αυτής της έρευνας δείχνουν ότι για να ακολουθήσουν τις απαιτήσεις της σύγχρονης ηλεκτρονικής μάθησης, οι ψηφιακοί δάσκαλοι πρέπει να υιοθετήσουν μια σειρά από ρόλους σε διάφορους τομείς, καθώς και μια σειρά από πολύπλευρες ικανότητες και δεξιότητες.

Λέξεις-κλειδιά: διαδικτυακή μάθηση, ψηφιακή εκπαίδευση, ψηφιακός δάσκαλος.

1. Introduction

Over the past decades, there was a rapid growth of distance education. The new situations arising from the pandemic of Covid-19 have also had a significant impact on the evolution of education, prompting the rapid development of distance learning modes at all educational levels and types of educational programs. In this new era of information diffusion and information technologies, teachers are challenged to find their own pace to be able to meet the new demands of online teaching and learning.

2. Purpose of study

The purpose of this review was to identify the critical competencies for effective online teaching and the new roles that digital teachers have to adapt to become more skilled to cope with online learners. The results of this study could contribute to further understanding and knowledge about the skills and competencies that teachers are required to develop to become effective digital teachers.

3. Clarifying concepts

The current demands of online learning require teachers to have the appropriate skills and knowledge to meet its needs and challenges. Online learning is characterized by Yacci[1] as *"the practical subset of education that deals with instruction in which distance and time are the criteria attributes; that is, student and teacher (and other students) are separated by distance and/or time"* (p. 1). Accordingly, Goodyear et al.[2]describes online learning and teaching as *"teaching and learning that takes place over a computer network of some kind... and in which interaction between people is an important form of support for the learning process..... It includes both synchronous and asynchronous forms of interaction as well as interaction through text, video, audio, and in shared virtual worlds"* (p. 68).

4. Teaching digital learners

In traditional teaching, teachers use a top-down process, and as the only provider of knowledge, go into the classroom with a lesson plan that is designed by themselves. In contrast, in the new digital age, the teachers prepare their students for a future they cannot clearly describe, and for the first time, students have the ability and skills to use technology that exceeds the teacher's ones[3]. Along with this, the emergence of digital literacies requires the change of teacher's roles and the awareness of the complexity of literacy contexts[4]. As Chandler-Olcott & Mahar[5] argue, teachers are dealing with students who *"are coming to school more literate in the new literacies of ICTs than their teachers"* (p.361). Thus, as the educational context is constantly changing, with the addition of more resources and tools and students are familiar with using those tools inside and outside school, there is an urgent for teachers to rethink their roles[6].

There is a need for digital teachers to understand the different ways of learners thinking and to become familiar with their practices that are closely connected to technology[7,8]. When teachers are not comfortable with digital tools, there is a danger of creating a gap between them (digital immigrants) and their students that are more comfortable with digital tools (digital natives)[9]. According to Prensky[10], a *digital native* is characterized as a person who is born after 1980, whereas a *digital immigrant* refers to those who are born before the digital revolution. Prensky[11] argues that as digital natives are familiar with digital media, their brains might function differently, because "there are used to receiving information fast. They like to parallel processes and multi-task and prefer their graphics before their text rather than the opposite. They prefer random access

9   Peterson, S.L. (1999), *Teachers and Technology: Understanding the teachers' perspectives of technology.* San Francisco: International Scholars Publications.
10 Prensky, M. (2001), Digital natives, digital immigrants. In: *On the Horizon*, vol. 9 (issue 5).
11 Prensky, (2001), Digital natives, digital immigrants. In: *On the Horizon*, vol. 9 (issue 5), p. 3.

(like hypertext). They function best when networked. They thrive on instant gratification and frequent rewards. They prefer games to "serious" work[12].

According to many scholars, to close this gap, teachers need to understand digital students in terms of not only thinking but the way they do things, included[13,14]:

- *Communication*: digital students are eager to use e-mail, texting, or chats. They tend to have a large number of online friends (e.g., via Facebook, Instagram, Twitter) and to engage in online discussion groups more easily than in a physical environment. They also tend to create their language for it (abbreviations, numbers, and codes, etc.) and use emoticons express to their feeling.
- *Share*: the sharing of digital students is through different means, such as blogs, webcams, camera phones, and multitask with cell phones.
- *Exchange*: Digital students use technology to exchange music, movies, or humor online.
- *Creation*: Digital students can easily be the creators of their websites and avatars.
- *Games:* Digital students play games on their cell phones and online, using a lot of different tools.

5. Characteristic of digital teaching roles

As Davis et al.[15] argue, online teachers, named also digital teachers and e-instructors, should possess a lot of qualities and skills, especially in the domain of technological innovations, thana traditional teacher. This set of skills and qualitative elements systematically synthesizes the e-competencies that digital teaching requires. According to Coppola et al.[16], online teacher's roles have changed from subject expert to performance coach, with cognitive, affective, and managerial roles be the most specific ones.

Palloff and Pratt[17] state that a digital instructor should have the skills to understand the nature of both online and face-to-face teaching, as well as the differences between them, and use this understanding for the implementation and

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12 Prensky, M. (2001), Digital natives, digital immigrants. In: *On the Horizon*, vol. 9, issue 5, p.1.

13 Knobel, C., Lankshear, M. (2011), *New literacies: Everyday practices and classroom learning*. Maidenhead: Open University Press.

14 Prensky, M. (2012), *From Digital Natives to Digital Wisdom: Hopeful Essays for 21st Century Learning.* Thousand Oaks, CA: Sage Publications. Corwin.

15 Davis, N., Roblyer, M. D. P., Charania, A., Ferdig, R., Harms, C., Compton, L. K. L., Cho, M. O. (2007), Illustrating the "virtual" in virtual schooling: Challenges and strategies for creating real tools to prepare virtual teachers. In*: Internet and Higher Education*, vol. 10, pp. 27-39.

16 Coppola, W. N., Hiltz, R., Rotter, N. (2002), Becoming a virtual professor: pedagogical roles and asynchronous learning networks. In: *Journal of Management Information Systems*, vol. 18 (issue 4), pp. 169-189.

17 Palloff, R. M., Pratt, K. (2011), *The excellent online instructor: Strategies for professional development.* San Franscisco: Jossy Bass.

facilitation of digital teaching. Moreover, digital teaching requires a commitment to the basic principles of e-learning to create and preserve a cognitive, social, and teaching presence. Successful digital teachers can promote and facilitate students to create an active communication, interaction, collaboration, and engagement digital environment[18]. As Keengwe et al.[19] support, these digital teachers are characterized as being highly supportive, organized, motivated, respectful, responsive, flexible, analytical, approachable, active, and leaders.

Berge[20] argues that an online instructor is a "facilitator", whose main role is to model effective teaching and deliver the e-content. In his model, the role of the online teacher should be based on four dimensions: i) pedagogical, which refers to subject expertise, coaching, and assessing; ii) social, which refers to interpersonal, communication, and facilitation skills; iii) managerial, which refers to administrative and leadership skills; and iv) technical, which refers to technological literacy.

6. Competencies of digital teacher

In literature, have been adopted different approaches for the categorizations of digital teaching competencies. According to ISTE's[21] standards, digital teaching needs eight groups of competencies that include: (a) technology operations and concepts; (b) planning and designing learning environments and experiences; (c) teaching, learning, and developing the curriculum; (d) assessment and evaluation; (e) productivity and professional practice; (f) social, ethical, legal, and human issues; (g) procedures, policies, planning, and budgeting for technology environments; and (h) leadership and vision.

The Maryland Online[22] project, titled Certificate for Online Adjunct Teaching [COAT], develops seven types of competencies for online teaching, including (a) orienting students to online learning, (b) technology skills, (c) LMS skills, (d) basic instructional design principles, (e) pedagogy and andragogy, (f) social process and presence, (g) Internet safety for k-12; (h) managing assessment, and (i) legal and institution-specific policy and procedure. This program was adopted from several other institutions, to prepare their guidelines for online

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18 Palloff, R. M., Pratt, K. (2013), *Lessons from the virtual classroom: the realities of online teaching. Oxford: John Wiley & Sons.*
19 Keengwe, J., Schnellert, G. L., Kungu, K. (Eds.). (2014), *Cross-cultural Online Learning in Higher Education and Corporate Training.* IGI Global.
20   Berge, Z. L. (1995), The role of the online instructor/facilitator. In: *Educational Technology*, vol. 35 (issue 1), pp. 22-30.
21 International Society for Technology in Education [ISTE]. (2001), *Technology Facilitation Standards*. In: https://www.iste.org/docs/pdfs/2001-technology-facilitation-standards-doc.pdf?sfvrsn=2 (Retrieved 2/5/21)
22 Maryland Online [MOL]. (2014), *Certificate for Online Adjunct Teaching (COAT): Course Competencies.* In: http://marylandonline.org/coat/documents/COAT_Course_Competencies.pdf (Retrieved 2/5/21)

teaching[23].

According to Guasch, Alvarez, and Espasa[24], digital teacher's e-competencies should include the design/planning, the social, the instructive, the technological, and the management domain. Salmon's[25] classification, describes five categories of digital teaching competencies, including (a) understanding the online process, (b) technical skills, (c) online communication skills, (d) content expertise, and (e) personal characteristics. Abdous[26], developed a framework of digital teaching competencies that contains three-stage practices. In the first stage, the teacher develops the before-teaching practices, which include preparing, planning, and designing. The second stage is about teaching competencies, which include facilitation, interactions, provision, and seeking feedback practices. The third stage is about the reflection and drawing on lessons learned competencies.

All the above-mentioned categories illustrate that digital teaching possesses various competencies and tasks and a need for performing different roles, with the main teaching skills to relate to[27,28, 29,30]:

- *Pedagogical Skills:* an effective digital teacher need to understand the fundamentals both of online teaching and pedagogy, and to apply a large number of principles and strategies including i) learning theories; ii) appropriate instructional strategies and engagement techniques; iii) facilitation of students' participation, and provision of guidance and support; iv) use of criterion-based assessment; v) motivation of students; vi) promoting knowledge construction based upon learners' prior knowledge and life experience; vii) foster learners' self-assessment and reflection; and ix) promoting group interaction, collaboration, and teamwork.
- *Content Skills*, that include: i) Expression and mastering extensive knowledge of the content; ii) learning goals and objectives according to learners' levels and characteristics; iii) learning and assessment activities according to learning goals and objectives; iv) courses that include all course components and elements; v) using appropriate learning resources, synthesized with different learning styles and preferences; vi) being able to link the subject and content with all the relevant phenomena.
- *Design Skills*. To design and develop an online course, digital teachers must be able to: i) Understand and apply all the instructional design principles, models, and theories; ii) Organize and present different formats of the teaching materials; iii) select the appropriate techniques and tools; iv) use quality assurance tools and instruments for the assession of course design.
- *Technological Skills*. To be effective online instructors, digital teachers have to possess adequate technological literacy skills for i) the assessing of various technological resources and tools; ii) knowing the technical potential, capabilities, and limitations of these tools; iii) being informed of the latest updates and renovations of new educational technology.

- *Management and Institutional Skills* are essential for the awareness of institutional policies and norms and effective digital teaching.
- *Social and Communication Skills* are vital for effective digital teaching, communication, promoting interactivity, and engaging online learners.

7. Discussion

In today's world, as information technologies are constantly developing and students become more and more familiar with new technologies and forms of online communication, it is imperative that online learning evolves in parallel. As can be understood from the above review, online teaching requires today's teachers to adopt a variety of roles and possess a range of competencies and skills. Even though researchers have developed a variety of views on what these competencies should be, the majority of them focus on those related to pedagogical, content, design, technological, management, and institutional, as well as social and communication skills. The development of these competencies by teachers involved in online education will enable a more effective educational process, in which students will be actively involved, leading to the literature development of both students and teachers.

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