International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2020): 7.803

The Contribution of Computer in the Activation of Motivations of Learning of People with Special Educational Needs

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Abstract: ***In this paper it is investigated and studied the contribution of computer in the activation of motivations of learning of children with special educational needs. In additional it shows the degree and/or no the development and improvement of academic achievement of these students, through the incorporation and use of computer in the learning practice. The motivations of learning are connected unbreakably with the self-consciousness, self-efficacy, self-estimate, and self-image that have for themselves particularly the students with special educational needs. The readers of concrete paper are those which will judge through the extensive scientifically argued reports and admissions of essential assistance computer in the activation of motivations of learning of particular team of children.***

Keywords: sentimental variables, activation of motivations, interest, attendance in the teaching, improvement of learning achievements

1. Introduction

The use of the computer for the design and elaboration of multi-sensory teaching environments of students with special educational needs has been an insurmountable reality in recent years in the field of education. Therefore, the multidimensional and multifaceted role of computer assistance in activating the learning motivation and increasing the academic results of children with special educational needs is understood. Given the circumstances, it is considered that the interest, self-efficacy and motivation of these children for learning can be enhanced, increased and improved through the use of the computer in the processes of educational practice. After all, it is well known that emotional factors (effective factors) such as learning motivation are just as important as cognitive ones in the educational process.

In the spirit of the above report, it is worth noting the substantial contribution of applications and functions of computer technology in the design and development of reflexive methods and strategies to enhance and activate the motivations of children with special educational needs in the context of their teaching and learning. Motivations, perceptions, attitudes, beliefs, and the general image that students have of themselves are related to emotional parameters. On the contrary, it is found that the processes of thinking, critical thinking and problem solving are intertwined with students' cognitive skills and abilities. Nevertheless, the importance and importance of emotional indicators in the learning process of children with special educational needs should not be overlooked (Keller, 1992: 45-62). Certainly, it is argued that emotional factors (attitudes, perceptions, beliefs, motivations, expectations, learning style) play an important role in teaching these children and, at the same time, have a beneficial effect on improving their learning performance (Jones & Issroff, 2004: 395-408).

Various pedagogical variables such as the ability, autonomy and ability of children to learn and be educated-based on the theory of motivation-are found to be influenced and activated by the use of the computer in the learning practice. However, it is worth mentioning that the encapsulation of the computer as an auxiliary cognitive tool in the education of children with special educational needs on the one hand facilitates the implementation of the conventional teaching method, on the other hand, contributes to a visible increase in learning motivation of these children. In recent years, it has been shown that computer technology has been fully boxed in the field of special education and that it is being used as an alternative and complementary teaching tool to awaken the learning motivations of children with special educational needs. Therefore, it appears that teachers using the computer can play the content of teaching, making it more attractive to these students (Deterding et al., 2011).

1.1 Concepts and declarations about learning motivation using computer in educational practice

Through the introduction and use of the computer in teaching, students practice visual intelligence, that is, virtual representation and spatial skills. In addition, they are known to be introduced to digital literacy in a secretive way. The combination of dual coding and presentation of information and knowledge to students with special educational needs during the conventional way of teaching (Subrahmanyam et al., 2001: 7-30), is likely to trigger and activate their motivation for education and improving their cognitive performance. Furthermore, it is recognized that the memory acquisition of information and knowledge through an acoustic instrument and medium, allows the retention of only a short volume of them for a minimum period.

However, it is understood that the visualization of the course content can be well combined not only with the text but also

with the audio presentation of verbal information (Kargopoulos et al., 2003: 415-430). In a very characteristic way (Phipps et al., 2002) argue that non-verbal communication is superior to verbal communication, as it contributes to the recognition, recall and communication of spatial relationships and information. The integration of the computer in the processes of the learning process is appropriate because: a) through the double processing of the delivered material the workload of the working memory is reduced and, consequently, of the paid learning projects and actions of the trainees, b) the digital learning environments provide many learning environments and polymorphic visual stimuli, through which the process of coding and processing information is strengthened and increased, c) facilitates the process of retrieval and reuse of taught knowledge (McDaniel et al., 2000: 492-502).

More specifically, it is worth emphasizing that the activation and operation of the learning motivations of children with special educational needs in the teaching practice can be achieved through the encapsulation of the computer due to:

- their ability for further practice, leading to the automation of new knowledge and/or skill and its holistic acquisition,
- provides students with endless feedback and more opportunities for practice, so that they have the opportunity through their active participation to achieve the assimilation of new knowledge,
- the multiple functions and software of the computer, adapted to the prior knowledge-skills and to the rhythms of education, teaching and learning of these children,
- the trainees have the opportunity-through the computer-to apply in practice the new content of the subjects, fact and reality, which does not exist in the conventional way and method of delivery of new information and knowledge,
- the internal and external feedback provided by computer multimedia environments, on the one hand, increase the degree of difficulty and the level of challenge of the learning task of these children, on the other hand, strengthen and further strengthen their cognitive self-awareness, self-perception, self-esteem, and self-efficacy,
- computer technology not only facilitates the conscious process of understanding new knowledge, but also enriching it with meaningful and realistic practices of its application,
- the use of the computer in the teaching practice mobilizes and motivates especially the students with special educational needs, to control the level of their academic abilities and performance in relation to the acquired new knowledge,
- the diversity of utilization of computer applications and functions, allows students with special educational needs to have a wide flexibility of application of new knowledge, to isolate and measure also the important and essential data of new knowledge and to generalize it to more a learning environment (Gentile & Gentile, 2008: 127-141).

In this regard, it is considered that the introduction of the computer in teaching as a complementary and auxiliary mental tool for educating children with special educational needs, influences the formation of their motivation in relation to their performance goals, contributes to the regulation of their teaching readiness and strengthens maintaining the effectiveness of their action, in conditions and situations of learning frustrations and frustrations. In addition, it should be noted that they improve their non-existent pedagogical-cognitive self-regulation and their persistence in relation to the achievement of their goals, strengthen the mechanisms of didactic feedback, develop their rudimentary perceived school ability and performance, and develop social skills (Hoza & Pelham, 1995: 23-35· Börger et al., 1999: 25-33· Dunn & Shapiro, 1999: 327-344· Brim & Whitaker, 2000: 57-61).

At this point, the term "interest" needs to be clarified and understood, which implies increased emotional involvement, cognitive function, and focused attention of learners in the performance of their educational work (Ainley et al., 2002: 545-561). The advanced processes seem almost effortless and territorial, when there is a high level of knowledge (background) and multifaceted skills in students. In view of the above reports, it is understood that the computer is used to rekindle the cognitive interest of children with special educational needs for learning, since they are known to be under the regime of extreme learning situations and mental deficiencies and weaknesses (Hidi, 1990: 549-571). In the light of this logic, we must not lose sight of the crucial and unique role that the computer plays as a-cognitive resource-in awakening the interest of these children for learning, as they can at any time choose, process and to measure specific types of information, which are more in line with their learning profile and level (Renninger et al., 2002: 467-491).

Given the circumstances, it appears that the encapsulation of the computer in the teaching of children with special educational needs, can mobilize their low and/or non-existent interest in learning, if they can become educational material adorned and rich in images and colors (Durik & Harackiewicz, 2007: 597-610). Students who lack and lack academic motivation, therefore, gain using the computer an additional interest in activating their cognitive abilities during the teaching practice takes place. Certainly, it is demonstrated and proven that the computer as an auxiliary cognitive tool of the learning environment of children with special educational needs contributes to the increase of their cognitive performance and the positive improvement of their emotions that are related to their levels of interest in learning (Krapp, 2002: 383-409).

1.2 The indestructible effect of the computer variable in motivating the interest of children with special educational needs

According to the scientific point of view of Wigfield and Eccles (2000: 68-81), it is considered of the utmost importance to create learning motivation in learners, using the computer in the learning process. Given this, it is argued that the use of the computer in teaching practice activates the motivation of children to learn and, in addition, has a frontal and catalytic effect on the quality and intensity of their work, the way they select and elaborate their learning work and performances. Nevertheless, it is considered that the integration of the computer in the educational process consists in encouraging teachers to adopt and use student-

centered pedagogical methods, approaches and tactics in teaching, engaging students in exploratory, exploratory and complex activities and in development. Their motivations in relation to the learning task. As far as teachers are concerned, they should not neglect to use the computer in the learning process, as it provides appropriate auxiliary work in its processes and because students derive and gain satisfaction through its use (Vekiri, 2010: 941-950).

In this case, it is known that children with educational needs perceive computer boxing in the learning process, as a channel for seeking meaningful solutions to their complex and difficult learning problems and as a means of communication with others (classmates, teachers). In short, it is argued that computer-assisted teaching helps to encourage interaction and feedback between children and to activate their motivation to learn. Among other things, it facilitates cooperation between them, promotes and enhances active learning, self-efficacy and reflection, utilizes their experiences and individual interests and highlights the positive functions of practical technological applications in educational reality (Roberts et al., 1999).

Regarding the extracurricular interests of children with special educational needs, it is observed that the use of the computer for purely educational use is of little to no interest, because it offers few learning stimuli and challenges. In particular, it is shown that the way and the form of utilization of extracurricular technological experiences, experiences and skills of students, generally causes concerns and concerns, as in the Greek educational system even today the traditional method and form of teaching prevails. In the context of the aforementioned reasoning, it is considered that the extracurricular activity of children with the computer, complements their mental development as an informal auxiliary form of learning, contributes to the strengthening, development and release of their cognitive skills and powers and plays an important role in shaping of their motivation for learning (Pedro, 2007: 244-264).

Taking into account the data and findings so far, it is found that through the use of the computer, the teaching-learning and cognitive needs of children with special educational disabilities are served in the best possible way, since they have the freedom of testing, experimentation and approach to the material under teaching-goal-while at the same time their learning motivations are positively and substantially influenced and activated (Mumtaz, 2001: 347-362). Given this, the current education system and school has failed to take advantage of children's extracurricular knowledge and skills about new technologies and to strengthen their interest in effective and efficient educational use of computer technology, although it is a daily activity and their habit (Vekiri & Chronaki, 2008: 1392-1404).

1.3 The tool utilization of the computer as a means of creating motivation for children with special educational needs

The computer is a digitally popular and engaging tool for children with special educational needs. Among other things, it is well known that the main and basic source of information for the reception and feedback of this particular group of children is most often the optics. In this case, it seems to be commonplace that the computer is perhaps the only teaching tool that mobilizes all students in the educational process. In the middle, it is understood that the use of the computer provides students with special educational needs with the ability to interact during their teaching and routine and their daily learning work (Yelland, 2005: 201-232).

In this regard, it is recognized that the replacement of the conventional way and method of computer learning, is a regular tactic that is often used and followed in the education and feedback of these children. It is noteworthy, however, that the interactive functions and visual representations of the computer are the most effective and essential means of utilizing them for the teaching and education of this special group of children. In any case, it seems that the introduction and use of the computer in the learning process of children with special educational needs is a pedagogical change that transforms and holistically evolves the way and the form in which these children interact, recruit, analyze and measure the information and knowledge in educational practice (Durkin & Barber, 2002: 373-392).

Admittedly, it becomes clear and obvious that the introduction and use of the computer in educational practice, strengthens and facilitates people with learning problems and deficiencies in three specific areas: a) in their correct and multifaceted cognitive preparation regarding the reality and problems that will, b) in their life outside and outside school, c) their access to information and knowledge that is extremely necessary for them to improve and promote their academic performance, as well as to acquire new cognitive skills and abilities, d) in communication which is an additional means of cognitive approach and intervention of these children in the school environment (Meimaris, 1997: 607· Bardis, 1997: 740).

In this regard, it is argued that the introduction of computer technology in the education of children with special educational needs, forms a highly fertile and popular teaching environment for these children, in which they have the ability and ability to think and process based on their individual learning profile and rhythm, complex, incomprehensible and complex to those contents, concepts and meanings, contained in the material of the cognitive objects. Therefore, it is considered that with the use of the computer, it is possible for this group of students to carry out their learning task smoothly and to collect information about the methods of facilitating and operating it in the educational process. As Resnick and Ocko (1991) insist, computer support creates solid learning conditions for the development of new cognitive skills, motivation, and ideal and favorable participation of these children in the learning process (Resnick, 1993: 64-71).

Nevertheless, it is pointed out that the reasonable, thoughtful, and rational application of computer support and intervention in the teaching of this special group of children, functions as a powerful cognitive tool and learning motivation, which enhances and at the same time enriches their teaching and methodological opportunities and possibilities for learning. Therefore, it is established that the

effective integration of the computer in the education of these children, contributes invisibly to the processes of teaching practice, so that they acquire a relative learning freedom and responsibility in the performance of their educational work (Cook & Finlayson, 1999). In this case, it can be recognized that the type of teaching that takes place in the system of Special Education and Training, is in fact the main parameter of seamless use of the computer to create motivation for learning of these children (Bozic & Murdoch, 1996).

Interpreted, it is understood that the treatment of low academic difficulties, the lack of self-esteem and self-efficacy and the frustration that they feel during their participation in the activities of the learning practice, children with special educational needs can be improved and computer utilization in their teaching (Fowler, 1994: 1-16). For this reason, on the one hand, the need for ad hoc and ad hoc use of the computer (Bender & Bender, 1996) in the learning process of these children is evident, on the other hand, the positive, catalytic, and obvious effect of computer support and intervention on individuals with multiple educational deficits, cognitive impairment, and low motivation to learn (Page, 2002: 389-409).

2. Conclusions-Suggestions

Computer technology is now considered to be able to be used as a pedagogical tool, as a tool for restructuring and development of the learning process, as a mechanism that functions as a promotional launcher for the acquisition of knowledge, as a philosophy of the Information Society and as a mean to facilitate and promote adequacy and training in the field of education. Nevertheless, the ways and conditions under which the new Information Technologies, contribute to the essential and efficient operation and upgrade of the learning process, must be discussed, and studied, so that they can be used and effectively integrated in Education, especially in Special Education. In the light of this logic, it is understood that the value of technological means is not measured and valued by the amount and amount of information and knowledge they can provide and offer to learners, but by the extent to which the recipient/recipient, who In this case, people with special educational needs have the ability and ability to assimilate all this knowledge, so as to transform and improve their social skills and general behavior regarding the values, attitudes, perceptions and ideals of life.

In short, it is emphasized that computer technology should be embedded in Special Education and Training, to facilitate the learning work of people with special educational needs, so that they acquire knowledge, skills and attitudes that will make them truly active members of the school community and social life, like the rest of their fellow citizens. In this regard, it is demonstrated that the computer is an alternative cognitive tool/object, through which specific students acquire and adopt values, attitudes, perceptions, and perspectives, as it is a radical and unparalleled means of communication.

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