



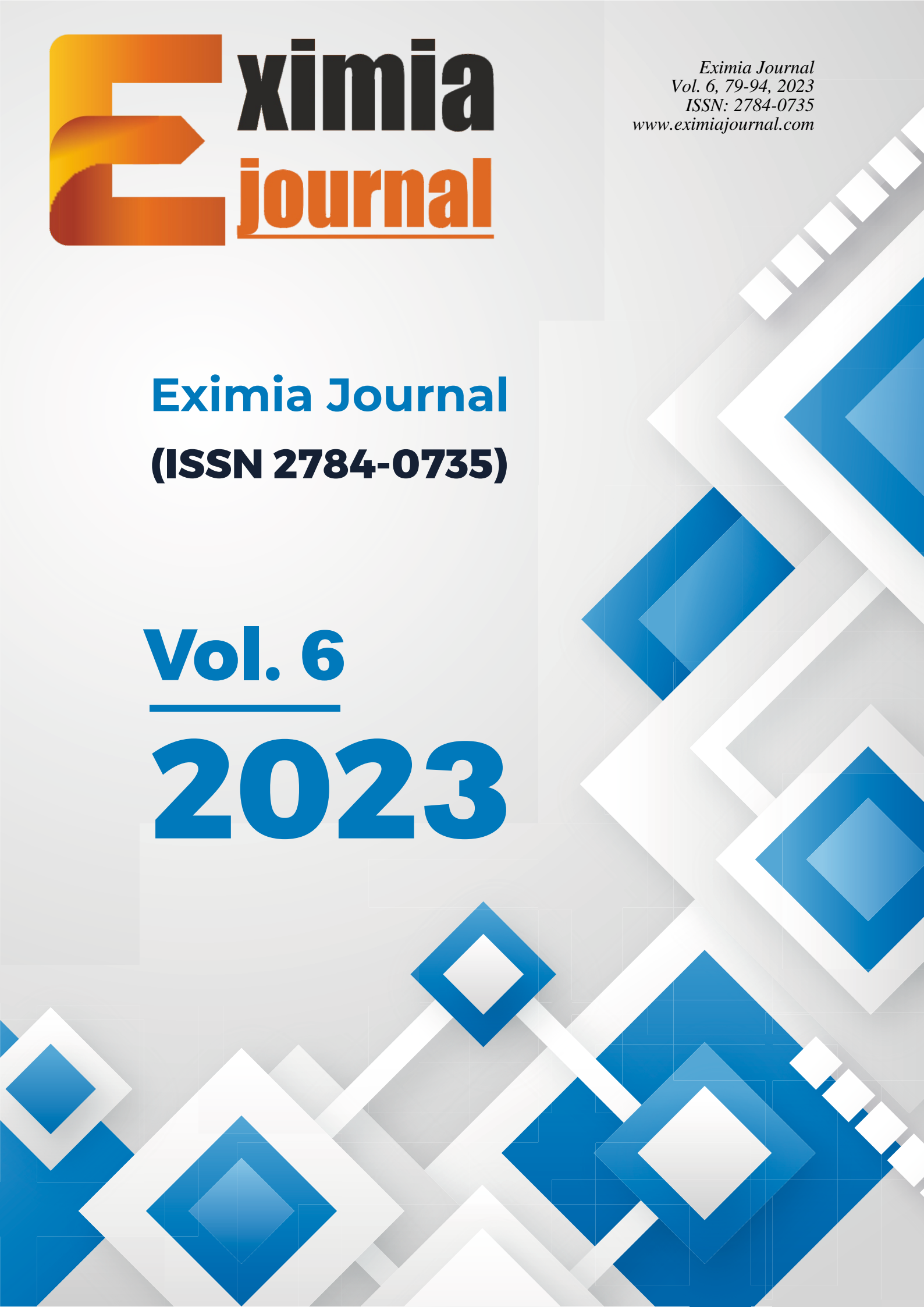
*Eximia Journal*  
Vol. 6, 79-94, 2023  
ISSN: 2784-0735  
[www.eximiajournal.com](http://www.eximiajournal.com)

**Eximia Journal**  
**(ISSN 2784-0735)**

**Vol. 6**  

---

**2023**



## **The impact of an empowering school leadership on teachers' organizational effectiveness outcomes and the role of ICTs.**

**Eleni Karagianni, Angeliki Papadaki, Zoe Karabatzaki, Anna Maria Driga**

karagiannieleni10@hotmail.com

**Abstract:** Nowadays, in order to take steady steps towards the transformation of the modern school, the transition from the hierarchical model of school administration to a participatory leadership model, sharing of control and responsibilities is required, which focuses on the teachers' empowerment, through the provision of chances for motivation, autonomous action and professional development. The aim of this paper is to study the supportive mechanisms of teachers' empowerment, which is developed by a school principal who acts as a leader, in order to cope with their multiple responsibilities, contributing, dynamically, to the success of the school organization's mission. The results of this study showed that a school leadership, which creates quality opportunities for teacher's empowerment, has a catalytic impact on their active engagement, joint commitment, cooperation, innovative and inquisitive attitude, job satisfaction, but also on the high achieving of their students, contributing, essentially, to the restructuring of the educational field.

**Keywords:** School leadership, teachers' empowerment, high-quality educational processes, high students' performance

### **1. Introduction**

The international framework for the education of the 21<sup>st</sup> century, reflecting the constant changes of the wider socioeconomic and political situation, requires the modernization of outdated educational structures and the redefinition of the modern school's mission. The central axis of the school reform is the concept of "quality", aiming to create schools of excellence and high achieving that evolve to meet the emerging opportunities and challenges of the future [1]. However, since human resources are the most important investment capital of any organization, an educational organizational, in order to have high quality indicators to meet the students-clients' needs, incorporates high qualified teachers [2].

At the same time, in the modern era of increased school accountability, the necessity of a decentralized school leadership is becoming imperative, encouraging teachers to take on new tasks and share their ever-increasing and demanding workload. The priority of the educational mechanism for the restructuring of the modern school is the teachers' empowerment. In this way, they understand and adequately respond to their multifaced roles and responsibilities, which require the activation of their abilities and the acquisition of new knowledge and skills, through their continuous professional development. Through the process of empowerment, it is realized that the views and the attitudes of the school leadership and the teachers present a continuous dynamic, which is reflected in the setting of the school's goals, in making decisions and the selection of the necessary acts and actions for their implementation [3].

In this direction, modern school leadership trends have incorporated practices of empowering teachers, starting from the understanding that, since they are involved in teaching and education issues, they must actively participate in the programming and control of the

educational processes [4]. At the core of this effort is a culture of distributed leadership, by a transformational school principal, who as a mentor creates an authentic work environment [5]. Within this, teachers value their educational work as important, utilize their knowledge and abilities and develop new skills, through self-determination and selection provided experiences, to achieve it. Thus, they experience a sense of their impact on the overall outcomes of the school organization, ensuring a slow but in-depth change of the school [6], [7], [8].

The present literature research aims to examine the strategies of teachers' empowerment that a school principal uses as an administrator of the school environment, making them sharers of his/her power, through the targeted combination of their forces, their progressive initiation and co-responsibility in decision making, for the realization of the school organization's common goals and the achievement of its renewal [9]. In addition, it highlights the school principal's personality traits and behavioral style, who acting as a leader supports and motivates the teachers, with a view to forming a sustainable and robust school organization, with high-effectiveness teaching staff and high-achieving students. Moreover, it investigates how, in a school organization, the principal coordinating teachers' educational work, through the "dynamic interactive process of influence" [3], contributes to higher organizational outcomes, compared to schools where teachers work individually. Furthermore, this study makes it possible to be realized the distinction and excellence of schools with open cooperation networks, diffuse of knowledge and information as well as innovative and creative actions, in comparison to those schools, where principals insist to introversion and teachers remain stagnant, without being interested in their professional development.

## **2. Clarification of concepts**

### **2.1. The leadership**

According to the social influence theory "leadership" is the ability to change views, attitudes and behaviors of subordinates, based on two key features of the leader: a. his/her credibility as a result of his/her expertise, i.e., of the knowledge and the skills required to solve problems, but also his/her reliability, i.e., their ethical use for the common good [10] and b. his/her social attractiveness, which derives from the subordinates' admiration and their desire to develop reciprocity relationships with the leader [11].

The main sources of leader's power are considered to be the development of information diffusion mechanisms and his/her competence to create relationships and alliances networks, inside and outside the organization. In addition, the expression ways of his/her power determine the relationships of influence, confidence or conflict with his/her subordinates [12].

### **2.2. The empowerment**

Education policymakers adopted the term "empowerment" from the field of business administration [13], where it was used in post-industrial society to address work alienation and increase productivity [4]. The empowerment is a process of redistributing the leader's power, in other words, the control s/he has over the organization's resources [5]. Firstly, it refers to the influence of the working environment on the way which a working person understands and perform his/her role and tasks within it. Besides, it refers to the internal incentives -of the meaning of his/her work, self-efficacy, self-determination and his/her impact on the

achievement of overall organizational outcomes- that s/he develops to obtain a strong professional identity [14].

In this context, it was realized that the teachers' empowerment, who are the core of the educational processes, by an authentic school leadership that provides opportunities for self-management as well as for collective management and co-responsibility, can become the main driving force for maximizing their efficacy and school organization's efficiency [8].

### 2.3. Teachers' organizational behavior

The term "teachers' organizational behavior" refers to the mutual responsibility relationships that develop between teachers and the school environment and includes:

- The organizational commitment, which describes the alignment of the teachers' needs with the schools' goals. It concerns their resilience and high energy levels, which allow them to work with willingness, responsibility, persistence and patience. It also reflects their focus on their particularly meaningful work, as stable members of the school community, so as to present continuity and consistency [13].
- The professional commitment, which reflects the recognition of the importance that their profession has for them, but also their efforts to meet the needs of their teaching task. It takes place by providing lifelong learning opportunities and acquiring new knowledge and skills, in order to develop a strong professional identity, which perceives educational work as an essential part of their life [15].
- The organizational behavior of citizenship, which refers to the teacher's behavior as individual, member of a team, or the entire school community.
- The supervisory support, which concerns the teachers' belief that the school principal values their personal contribution as important and is interested in their professional development.
- The engaging in work, which implies the teachers' psychological identification with their educational work [2].

## 3. Teachers' empowerment leadership behaviors and their effectiveness outcomes

### 3.1. The school leadership's behaviors styles and personality traits as key factors of teachers' empowerment

In the traditional school, the principals wielding their power in a centralized way and in a unilateral orientation to the task, directing and controlling the teaching staff, had the whole responsibility for the creation of a stable learning environment, the rational distribution of resources and the achievement of school goals. Despite the fact that there have been no changes in the hierarchical structures of the school, it is noteworthy the transition to a collaborative model of leadership, to establish a common direction and coherence of the school organization [16].

In this perspective, today's school leaders must perform their work, utilizing the influence and persuasion of their power, in order to positively influence teachers, to effectively respond to their new tasks and develop innovative practices. Nowadays, as the model of individual leadership is questioned, in the field of educational administration three leadership models are recognized as more effective [17]:

- The distributed leadership style, with democratic and collaborative cues, which is centered on the concept of empowering teachers. The school principal is the holder of power and expertise as well as the creator of school organization's vision, which implemented through his/her dynamic interaction with them [11].
- The transformational leadership style, in which school principal guides the transformation of the school into an attractive place of creation and development, sharing responsibilities and enhancing the teachers' autonomy action.
- The authentic leadership style, in which school principal, demonstrating trust, collegiality, reason-action consequence and having high level of ethics, engages teachers in decision-making for the welfare of school organization [18].

Thus, in the reformed school environment, the «empowering leaderships' chain of influence» refers to the principal's effort to shape the appropriate conditions, which will positively affect the commitment, effectiveness and job satisfaction of the teaching staff [14]. Taking into account the socio-cognitive theory, that the individual's perceptions affect his/her cognitive processes and behavior in social contexts, it seems that teachers' beliefs of the school principal's behaviors authenticity are an important psychological mechanism for their empowerment, affecting their organizational behavior [19].

More specifically, "teachers' empowerment", which refers to their pursuit of personal and professional development, is considered to be a school principal's moral activity that lays the ethical basis for teachers' autonomy and professionalism and the creation of a positive school climate, which promotes the upgrading of the working environment, the relationships that take place within it and the learning products [20]. It is carried out with the teachers' cooperation in the management of issues that affect the quality of their working conditions and educational work. Besides, it describes a systematic process of teachers' consent in decision-making, professional self-determination and self-realization, which takes place slowly and requires collectiveness, confidence as well as readiness, volunteering and available time, in order to take on them a wide range of responsibilities and to engage in every aspect of school life [21]. Additionally, it aims to increase their power in decision-making and accountability and to develop a collaborative learning and development school settings [3]. In this empowerment process, the most important factor is considered the school leadership's authenticity, but also the provided chances for access to information, the embracing new ideas and innovative approaches, the respect and the freedom of teachers' expression, the recognition and the reward of their contribution [22].

Therefore, depending on the particular characteristics of the school's social context, school leadership chooses the appropriate sociopsychological mechanisms to empower teachers and redefine their traditional roles, by readjusting his/her authority relations, which stems from his/her hierarchical position, personal and political power. The power, due his/her hierarchical position, is reflected in his/her control over important areas of the workplace, such as the distribution of resources, the provision of rewards or sanctions, the diffusion of information, the programming of educational work. However, a distributed school leadership transfers part of this control to teachers. The personal power emerges from his/her expertise and charismatic personality. Nevertheless, an authentic school leadership recognizes and rewards teachers' professional experience and development, valuing their individual contribution to teaching and pedagogical decision-making. At the level of political power, the school leadership and the teaching staff cooperate to influence important decisions, concerning the quality of their professional life, to the extent that they are not limited by the decisions of the central educational administration [21]. Hence, an

empowering school leadership promotes democratic participatory structures and processes in the school organization, provides substantial opportunities for teachers' professional development and encourages initiatives and innovations [20].

In this team-centered leadership or teachers' collective leadership, the responsibility for the school organization's effectiveness is distributed among teachers and school principal, who acts as a consultant and coordinator of their educational work, within a working environment of autonomy and multitude of choices, embedding a strong organizational culture with core values, the sense of community, the freedom of their expression and the approval of their diverse ideas. Viewing the team as a collective entity, s/he organizes regular meetings, assigns them a part of his/her power and provides them with sufficient time for collaboration and programming of their educational work, supporting them, even for initiatives that didn't not work out [6]. In line with above, a school leadership is considered successful, recruiting the teachers' abilities and actions, so that they are willing to improve and voluntarily contribute high quality educational work to their students. In particular, teachers' empowerment is, mainly, carried out, through six parameters:

- Their participation in decisions making that directly affect their educational work, enabling them to gain control over their working environment.
- Their professional development, with the training opportunities provided by the school organization for expanding their knowledge and skills.
- Their professional status, which derives from their sense that they are valued and respected by the educational community for their specialized knowledge, attitudes, skills and professionalism.
- Their self-efficacy, resulting from their belief that they can bring out quality educational outcomes, thanks to their professional adequacy and effectiveness.
- Their autonomy, giving them a sense of power and control the planning and programming of the educational work and the possibility of making choice of the practices and the resources for the perform of it.
- Their impact, which boosts their self-esteem and stems from their sense of being able to influence every aspect of school life with their personality and professionalism [2].

Other dimensions of school principal's empowering behaviors include the fostering of the collective working way, the creation of open communication channels, the articulation of the school organization's coherent vision, the provision of mental stimuli and role models to develop potential leadership behaviors. In the same direction, aims the allocation of control and responsibilities, according to teachers' individual capacities, recognition of their success and sharing of their failures, expressing confidence in their abilities, encouraging and reinforcing their effectiveness, considering the consequences before taking action, individually listening and observing their needs and concerns, as well as ensuring their autonomy. Likewise, the offer of rewards and positive feedback for initiatives and taking risks and the developing of innovative work behavior of teachers, ensuring the necessary resources for fulfilling their need to experiment, explore new flexible ideas and strategies and consider alternative solutions to solve problems serve the purposes of their empowerment. In the same vein, is the provision of specialized training programs for their continuous professional development [17], [23], [24].

In the sight of above, critical personality traits of an empowering school leadership are accessibility, genuine interest, optimism, honesty, emotional intelligence, discretion, courtesy, integrity, sense of justice [15].

### 3.2. The organizational effectiveness outcomes of teachers' empowerment

Hence, it seems that the empowerment and the sense of control their working life is considered crucial parameters for working people's well-being [19]. This means that the high levels of teachers' empowerment are predictive and mediating in reinforcing the organizational culture, by multiplying the possibilities of school organization's development.

In this light, school leadership has to develop tangible and intangible strategies to empower teachers, providing them with the necessary structural and social context, in order to engage them in those activities that will commit them to their educational work, in order to improve their students' learning and development [15]. Moreover, by discussing and co-deciding with them, about school organization's values, policy and vision, s/he facilitates the alignment of teachers' expectations with the mutually agreed school's goals [22]. Thus, empowered teachers, through giving meaning to their educational work, experience a sense of self-efficacy, which is increased by the recognition of their individual contribution to the desired educational outcomes. At the same time, their sense of self-determination is increased, through the provision of vital space for their personal choices in their working way. Additionally, they experience a strong sense of their impact in work environment, through participative decision-making and respect for their professional contribution to the school organization's high efficiency [25]. Therefore, a constructive school leadership creates a motivational context for empowering teachers, which promotes self-determination, self-regulation, flexibility and high effectiveness degree, enhances their professional identity, ensures the quality of life of their working environment and contributes to the internalization of determined educational goals, the creativity, innovation, sense of community and job satisfaction.

In particular, job satisfaction of an individual, which is considered a key pillar of an organization's success, is related to the emotions of internal fulfillment in the performance of his/her work and is boosted by the recognition and the reward of his/her work, but also, it derives from his/her appreciation for director's personality, expertise and working experience [12]. The more school leadership filters teachers' needs for autonomy and creativity, through the school's shared goals, the more it contributes to their job satisfaction [26]. When teachers get intellectual stimulation, professional respect and positive prompting in participative decision-making, they configure high expectations of self-efficacy, demonstrating a higher commitment to their profession and educational work, but also mental resilience, advancing the completion of their multiple and demanding tasks. They remain to the specific school where they diligently work and demonstrate high levels of participation in the whole of school life, beyond their formal obligations, but also, they take advantage of the provided professional development prospects and develop authentic relationships of interpersonal trust with the school leadership [2].

Besides, the high levels of teachers' empowerment by an authentic school leadership facilitate the development of an innovative professional teachers' culture, through the diffusion of knowledge and good practices, which emerges from an investigative curiosity and is reinforced by self-determination, discussion and actions prompts, creativity, risk-taking, the critical thinking, problem solving and developing of internal incentives [24].

On the contrary, low levels of their empowerment cause high levels of work stress, which are experienced as a reduced professional self-concept or even as work burnout. This occurs when the teachers' self-efficacy is disturbed by some endogenous or external factors of the school workplace, the lack of interpersonal trust, poor job satisfaction, or even indistinct roles and relationships with school leadership, which trigger conditions of confusion and role

conflict. Then, there are resulted in stressful conditions of cognitive resources expenditure as well as teachers' withdrawal and distancing that inhibit the creative mood of interaction and have a negative impact on the school organization's effectiveness outcomes [5].

#### **4. Discussion & Conclusions**

There is no doubt that the educational field, in a rapidly changing society, thanks to technological and scientific achievements, calls for a redefinition of standards and updating of traditional roles, through a responsible review of attitudes and perceptions as well as of the change attempt appropriation, by the school community. Today, more than any other time, it puts forward the demand for reflection, reconsideration of efficiency criteria and reforming a quality school, with teachers who invest in the continuous improvement of their educational work and the high achieving of their students, imparting added value and prestige to the school organization.

In this direction, school principal as a leader has a catalytic role in empowering teachers, who are school organization's most valuable resource, ensuring a high-quality working environment, through dynamic interactions, authentic interpersonal relationships and commitment to collaborative actions, to realize the vision of a coherent, sustainable and competitive school. In the same vein, contributes to the developing of multi-force and multi-modal culture of collaboration, fosters flexibility, empathy and a sense of security, develops mechanics for information diffusion, motivates and rewards taking risks and innovative practices to solve problems and provides opportunities for autonomy and self-regulation for the emergence of potential school leaders. Such school leaderships, who diffuse empowerment practices at all levels of the school administration, leaving an indelible reformative imprint on the field of education, facilitate and coordinate teachers' educational work, contributing so that they, internalizing the school organization's coherent vision, become tireless workers of knowledge as well as autonomous education professionals. Moreover, considering that a school principal is evaluated by high teachers' efficacy and high students' performance, it is clear that empowering teachers, s/he actually increases his/her power and status, creating a dynamic school organization, with a strong organizational culture.

Consequently, schools, with empowered teachers, are steadily and in depth changing and serve as active professional learning and development communities. They are organizations of high-quality education processes, opened to society, oriented towards the future, which achieve their determined goals thanks to systematic but also collective responses to even unexpectedly situations. At the same time, they are attractive workplaces, where are recorded high rates of creativity, exploratory action and innovative practices by professional teachers, who value their educational work as very important and develop internal and external collaboration networks.

To sum up, the modern school is called upon to align itself with the constant challenges of the information society and a highly competitive job market, preparing active citizens, in order to join them smoothly and successfully.

Finally we underline the importance of the digital technologies in leadership education domain and leadership empowerment that is very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures via Mobiles which brings educational activities everywhere [33-45], various ICTs applications which are the core supporters of education [46-88], AI, STEM & ROBOTICS which raise educational procedures into new levers of performance [89-109], and games which transforms the education in a very friendly and enjoyable interaction [110-120]. Additionally the enhancement and combination

of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [121-169] as well as with environmental factors and nutrition [27-32], accelerates and improves more over the educational practices and results, especially in the teachers' leadership empowerment domain and its methods and practices.

## 5. Acknowledgements

This article is supported by the Inter-institutional postgraduate degree program: SPECIALIZATION IN ICTs AND SPECIAL EDUCATION: PSYCHOPEDAGOGY OF INCLUSION of University of Thrace and NCSR Demokritos Greece.

## 6. References

- [1] Bourantas, D. (2005). *Leadership: The road to lasting success*. Athens: Kritiki Publications.
- [2] Tindowen, D. J. (2019). Influence of Empowerment on Teachers' Organizational Behaviors. *European Journal of Educational Research*, 8(2), 617-631.
- [3] Moran, K., & Larwin, K. H. (2017). Building administrator's facilitation of teacher leadership: Moderators associated with teachers' reported levels of empowerment. *Journal of Organizational & Educational Leadership*, 3(1), 2.
- [4] Short, P. M., & Johnson, P. E. (1994). Exploring the Links among Teacher Empowerment, Leader Power, and Conflict. *Education*, 114(4), 581-594.
- [5] Davis J., & Wilson, S.M. (2000). Principals' Efforts to Empower Teachers: Effects on Teacher Motivation and Job Satisfaction and Stress. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 73(6), 349-353.
- [6] Muijs, D., & Harris, A. (2003). Teacher leadership—Improvement through empowerment? An overview of the literature. *Educational Management & Administration*, 31(4), 437-448.
- [7] Bourantas, D. (2002). *Management. Theoretical Background – Contemporary Practices*. Athens: Benou.
- [8] Sagnak, M. (2012). The empowering leadership and teachers' innovative behavior: The mediating role of innovation climate. *African Journal of Business Management*, 6(4), 1635-1641.
- [9] Saitis, C. (2000). *Organization and Management of Education: Theory and Praxis*. Athens. Atrapos.
- [10] Papaloi, E., & Bourantas, D. (2012). The wisdom of managers in the field of education as a fundamental condition for the renewal of educational and administrative practices. In D. Karakatsani, G. Papadiamantaki (eds.), *Contemporary issues in Education Policy: Searching for the "New School"*. Thessaloniki: Epikentro.
- [11] Rinehart, J. S., Short, P. M., Short, R. J., & Eckley, M. (1998). Teacher empowerment and principal leadership: Understanding the influence process. *Educational Administration Quarterly*, 34(1\_suppl), 630-649.
- [12] Elmazi, E. (2018). The role of principal's power and teacher empowerment. *European Scientific Journal*, 18(43), 1867-7881.
- [13] Kiral, B. (2020). The Relationship between the Empowerment of Teachers by School Administrators and Organizational Commitments of Teachers. *International Online Journal of Education and Teaching*, 7(1), 248-265.
- [14] Kōiv, K., Liik, K., & Heidmets, M. (2019). School leadership, teacher's psychological empowerment and work-related outcomes. *International Journal of Educational Management*, 33(7), 1501- 1514.

- [15] Lee, A. N. (2014). Teachers' perceptions of principal's and immediate supervisor's empowering behaviours, psychological empowerment and work-related outcomes. *Teaching and Teacher Education*, 41, 67-79.
- [16] Saitis, C. (2007). *The principal in the modern school: From theory to practice*. Athens. Self-Publication.
- [17] Lee, A. N., & Nie, Y. (2017). Teachers' perceptions of school leaders' empowering behaviours and psychological empowerment: Evidence from a Singapore sample. *Educational Management Administration and Leadership*, 45(2), 260-283.
- [18] Yukl, G. A., (2010). *Leadership in Organizations*. (7th edition). New Jersey: Prentice Hall/Upper Saddle River.
- [19] Stander, A. S., & Stander, M. W. (2016). Retention of educators: The role of leadership, empowerment and work engagement. *International Journal of Social Sciences and Humanity Studies*, 8(1), 187-202.
- [20] Keiser, N. M., & Shen, J. (2000). Principals' and teachers' perceptions of teacher empowerment. *Journal of Leadership Studies*, 7(3), 115-121.
- [21] Bredeson, P. V. (1989). Empowered Teachers-Empowered Principals: Principals' Perceptions of Leadership in Schools. Paper presented at the Annual Meeting of the University Council for Educational Administration, 1-17.
- [22] Blase, J., & Blase, J. (1996). Facilitative school leadership and teacher empowerment: Teacher's perspectives. *Social Psychology of Education*, 1(2), 117-145.
- [23] Lee, A. N., & Nie, Y. (2013). Development and Validation of the School Leader Empowering Behaviours (SLEB) Scale. *The Asia-Pacific Education Researcher*, 22(4), 485-495.
- [24] Gkorezis, P. (2016). Principal empowering leadership and teacher innovative behavior: a moderated mediation model. *International Journal of Educational Management*, 30(6), 1030-1044.
- [25] Moye, M. J., Henkin, A. B., & Egley, R. J. (2005). Teacher-principal relationships: Exploring linkages between empowerment and interpersonal trust. *Journal of Educational Administration*, 43(3), 260-277.
- [26] Yangaiya, S. A., & Magaji, K. (2015). The relationship between school leadership and job satisfaction of secondary school teachers: A mediating role of teacher empowerment. *People: International Journal of Social Sciences*, 1(1), 1239-1251.
- [27] Stavridou Th., Driga, A.M., Drigas, A.S., 2021. Blood Markers in Detection of Autism, *International Journal of Recent Contributions from Engineering Science & IT (iJES)* 9(2):79-86.
- [28] Zavitsanou, A., & Drigas, A. (2021). Nutrition in mental and physical health. *Technium Soc. Sci. J.*, 23, 67.
- [29] Driga, A.M., Drigas, A.S. 2019 "Climate Change 101: How Everyday Activities Contribute to the Ever-Growing Issue", *International Journal of Recent Contributions from Engineering, Science & IT*, vol. 7(1), pp. 22-31. <https://doi.org/10.3991/ijes.v7i1.10031>
- [30] Driga, A.M., and Drigas, A.S. 2019 "ADHD in the Early Years: Pre-Natal and Early Causes and Alternative Ways of Dealing." *International Journal of Online and Biomedical Engineering (IJOE)*, vol. 15, no. 13, p. 95., doi:10.3991/ijoe.v15i13.11203
- [31] A Fotoglou, I Moraiti, A Diamantis, V Stergios, Z Gavriilidou, A Drigas 2022 Nutritious Diet, Physical Activity and Mobiles. *The Game Changers of ADHD BioChemMed* 3 (2), 87-106
- [32] V Tsopanidou, A Drigas 2022 ENVIRONMENTAL FACTORS AND THEIR EFFECT ON THE OCCURRENCE OF AUTISM *BioChemMed* 3 (1)
- [33] Vlachou J. and Drigas, A. S., 2017 "Mobile technology for students and adults with Autistic Spectrum Disorders (ASD)," *International Journal of Interactive Mobile Technologies*, vol. 11(1), pp. 4-17,
- [34] Papoutsi C., Drigas, A. S., and C. Skianis, 2018 "Mobile Applications to Improve Emotional Intelligence in Autism – A Review," *Int. J. Interact. Mob. Technol. (iJIM)*; Vol 12, No 6,

- [35] Karabatzaki, Z., Stathopoulou, A., Kokkalia, G., Dimitriou, E., Loukeri, P., Economou A., & Drigas, A. (2018). Mobile Application Tools for Students in Secondary Education. An Evaluation Study. *International Journal of Interactive Mobile Technologies (IJIM)*, 12(2), 142-161
- [36] Stathopoulou A., Loukeris D., Karabatzaki Z., Politi E., Salapata Y., and Drigas, A. S., 2020 "Evaluation of Mobile Apps Effectiveness in Children with Autism Social Training via Digital Social Stories," *Int. J. Interact. Mob. Technol. (IJIM)*; Vol 14, No 03,
- [37] Stathopoulou, et all 2018, Mobile assessment procedures for mental health and literacy skills in education. *International Journal of Interactive Mobile Technologies*, 12(3), 21-37,
- [38] Drigas, A., Kokkalia, G. & Lytras, M. D. (2015). Mobile and Multimedia Learning in Preschool Education. *J. Mobile Multimedia*, 11(1-2), 119–133.
- [39] Kokkalia G, AS Drigas, A Economou 2016 Mobile learning for preschool education. *International Journal of Interactive Mobile Technologies* 10 (4)
- [40] Stathopoulou A, Karabatzaki Z, Tsiros D, Katsantoni S, Drigas A 2019 Mobile apps the educational solution for autistic students in secondary education *International Journal of Interactive Mobile Technologies*. 2019, Vol. 13 Issue 2, p89-101
- [41] M Anagnostou, A Drigas 2022 Mobile Applications for stress management *Scientific Electronic Archives* 15 (2)
- [42] P Leliopoulos, A Drigas 2022 The evolution of wireless mobile networks and the future 5G mobile technology for sustainability. *Technium Sustainability*, 2(4), 28–43. 2 (4), 28-43
- [43] A Doulou, A Drigas, C Skianis 2022 Mobile applications as intervention tools for children with ADHD for a sustainable education. *Technium Sustainability*, 2(4), 44–62. 2 (4), 44-62
- [44] V Tsakou, A Drigas 2022 Early Detection of Preschool Children with ADHD and the role of mobile Apps and AI *Technium Social Sciences Journal* 30, 127-137
- [45] E Karagianni, A Drigas 2022 Language Development and Mobile Apps for Down Syndrome Children *Technium Social Sciences Journal* 34, 193-213
- [46] Drigas, A. S., & Ioannidou, R. E. (2011, September). ICTs in special education: A review. In *World Summit on Knowledge Society* (pp. 357-364). Springer, Berlin, Heidelberg.
- [47] Drigas, A. S., J.Vrettaros, L.Stavrou, D.Kouremenos, 2004. E-learning Environment for Deaf people in the E-Commerce and New Technologies Sector, *WSEAS Transactions on Information Science and Applications*, Issue 5, Volume 1, November
- [48] Drigas, A.S., Vrettaros, J. and Kouremenos, D. (2004) 'Teleeducation and e-learning services for teaching English as a second language to deaf people, whose first language is the sign language', *WSEAS Transactions on Information Science and Applications*, Vol. 1, No. 3, pp.834–842.
- [49] Drigas, A., Koukianakis, L., Papagerasimou, Y., 2011, Towards an ICT-based psychology: *Epsychology, Computers in Human Behavior*, 27:1416–1423. <https://doi.org/10.1016/j.chb.2010.07.045>
- [50] Charami, F., & Drigas, A. (2014). ICTs in English Learning and Teaching. *International Journal of Engineering and Science*. Vol. 2(4):4-10. DOI: 10.3991/ijes.v2i4.4016
- [51] Drigas A.S., Kouremenos D (2005) An e-learning system for the deaf people. In: *WSEAS transaction on advances in engineering education*, vol 2, issue 1, pp 20–24
- [52] Drigas A., Pappas M, and Lytras M., 2016. "Emerging technologies for ict based education for dyscalculia: Implications for computer engineering education," *International Journal of Engineering Education*, vol. 32, no. 4, pp. 1604–1610,
- [53] Drigas, A. & Kokkalia, G. 2017. ICTs and Special Education in Kindergarten. *International Journal of Emerging Technologies in Learning* 9 (4), 35–42.
- [54] Drigas, A. S., Stavridis, G., & Koukianakis, L. (2004). A Modular Environment for E-learning and E-psychology Applications. *WSEAS Transactions on Computers*, 3(6), 2062-2067..
- [55] Drigas, A., Leliopoulos, P.: Business to consumer (B2C) e-commerce decade evolution. *Int. J. Knowl. Soc. Res. (IJKSR)* 4(4), 1–10 (2013)

- [56] Pappas M, Drigas A, Papagerasimou Y, Dimitriou H, Katsanou N, Papakonstantinou S, et al. 2018; Female Entrepreneurship and Employability in the Digital Era: The Case of Greece. *Journal of Open Innovation: Technology, Market, and Complexity*. 4(2): 15.
- [57] Papanastasiou G., Drigas, A. S., Skianis Ch., M. Lytras & E. Papanastasiou, 2018. “Patient-Centric ICTs based Healthcare for students with learning, physical and/or sensory disabilities,” *Telemat Inform*, vol. 35, no. 4, pp. 654–664, 2018. <https://doi.org/10.1016/j.tele.2017.09.002>
- [58] Drigas, A., & Kontopoulou, M. T. L. (2016). ICTs based Physics Learning. *International Journal of Engineering Pedagogy (iJEP)*, 6(3), 53-59. <https://doi.org/10.3991/ijep.v6i3.53-59>
- [59] Papanastasiou, G., Drigas, A., Skianis, C., and Lytras, M. (2020). Brain computer interface based applications for training and rehabilitation of students with neurodevelopmental disorders. A literature review. *Heliyon* 6:e04250. doi: 10.1016/j.heliyon.2020.e04250
- [60] Drigas, A. S., John Vrettaros, and Dimitris Kouremenos, 2005. “An e-learning management system for the deaf people,” *AIKED '05: Proceedings of the Fourth WSEAS International Conference on Artificial Intelligence, Knowledge Engineering Data Bases*, article number 28.
- [61] Pappas, M., Demertzi, E., Papagerasimou, Y., Koukianakis, L., Kouremenos, D., Loukidis, I. and Drigas, A. 2018. E-Learning for deaf adults from a user-centered perspective. *Education Sciences* 8(4)206:
- [62] Pappas, M., Eleftheria Demertzi, Yannis Papagerasimou, Lefteris Koukianakis, Nikitas Voukelatos, and Drigas, A. S., 2019. Cognitive Based E-Learning Design for Older Adults. *Social Sciences* 8, 1 (Jan. 2019), 6. <https://doi.org/10.3390/socsci801000>
- [63] Drigas, A. S., Lefteris Koukianakis 2009: Government online: An e-government platform to improve public administration operations and services delivery to the citizen. *WSKS (1)*, volume 5736 de *Lecture Notes in Computer Science*, 523–532. Springer,
- [64] Theodorou, P.; Drigas, A. 2017, ICTs and Music in Generic Learning Disabilities. *Int. J. Emerg. Technol. Learn.* 12(4), 101–110
- [65] Pappas, M.A., & Drigas, A.S. (2015). ICT based screening tools and etiology of dyscalculia. *International Journal of Engineering Pedagogy*, (5)3, 61-66.
- [66] Drigas, A., & Kostas, I. (2014). On Line and other ICTs Applications for teaching math in Special Education. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 2(4), pp-46. <http://dx.doi.org/10.3991/ijes.v2i4.4204>
- [67] Alexopoulou, A, Batsou, A, Drigas, A. (2019). Resilience and academic underachievement in gifted students: causes, consequences and strategic methods of prevention and intervention. *International Journal of Online and Biomedical Engineering (iJOE)*, vol. 15, no. 14, pp. 78.
- [68] Drigas, A. & Ioannidou, R. E. (2013). Special education and ICT's. *International Journal of Emerging Technologies in Learning* 8(2), 41– 47.
- [69] Drigas, A., & Papanastasiou, G. (2014). Interactive White Boards in Preschool and Primary Education. *International Journal of Online and Biomedical Engineering (iJOE)*, 10(4), 46–51. <https://doi.org/10.3991/ijoe.v10i4.3754>
- [70] Drigas, A. S. and Politi-Georgousi, S. (2019). Icts as a distinct detection approach for dyslexia screening: A contemporary view. *International Journal of Online and Biomedical Engineering (iJOE)*, 15(13):46–60.
- [71] Lizeta N. Bakola, Nikolaos D. Rizos, Drigas, A. S., 2019 “ICTs for Emotional and Social Skills Development for Children with ADHD and ASD Co-existence” *International Int. J. Emerg. Technol. Learn.*, 14(5), 122-131.
- [72] Kontostavlou, E.Z., & Drigas, A.S. (2019). The Use of Information and Communications Technology (ICT) in Gifted Students. *International Journal of Recent Contributions from Engineering, Science and IT*, 7(2), 60-67. doi:10.3991/ijes.v7i2.10815
- [73] Drigas, A. S., and Vlachou J. A., 2016. “Information and communication technologies (ICTs) and autistic spectrum disorders (ASD),” *Int. J. Recent Contrib. Eng. Sci. IT (iJES)*, vol. 4, no. 1, p. 4, <https://doi.org/10.3991/ijes.v4i1.5352>

- [74] Drigas, A. S., Koukianakis, L., Papagerasimou, Y. (2006) "An elearning environment for nontraditional students with sight disabilities.", *Frontiers in Education Conference, 36th Annual. IEEE*, p. 23-27.
- [75] Drigas A., and Koukianakis L. 2006 An open distance learning e-system to support SMEs e-enterprising. In proceeding of 5th WSEAS Internationalconference on Artificial intelligence, knowledge engineering, data bases (AIKED 2006). Spain
- [76] Drigas A, Petrova A 2014 ICTs in speech and language therapy *International Journal of Engineering Pedagogy (iJEP)* 4 (1), 49-54
- [77] Bravou V, Oikonomidou D, Drigas A, 2022 Applications of Virtual Reality for Autism Inclusion. A review *Retos* 45, 779-785
- [78] Chaidi I, Drigas A, 2022 "Parents' views Questionnaire for the education of emotions in Autism Spectrum Disorder" in a Greek context and the role of ICTs *Technium Social Sciences Journal* 33, 73-91
- [79] Chaidi I, Drigas A, 2020 Parents' Involvement in the Education of their Children with Autism: Related Research and its Results *International Journal Of Emerging Technologies In Learning (Ijet)* 15 (14)
- [80] L Bakola, I Chaidi, A Drigas, C Skianis, C Karagiannidis 2022 Women with Special Educational Needs. Policies & ICT for Integration & Equality *Technium Social Sciences Journal*
- [81] M Karyotaki, L Bakola, A Drigas, C Skianis 2022 Womens Leadership via Digital Technology and Entrepreneurship in business and society *Technium Social Sciences Journal*
- [82] M Tsakiridou, A Drigas 2022 A REVIEW OF STRESS ON STUDENTS WITH ADHD. THE ROLE OF ICTS & MENDAL INTERVENTIONS TO IMPROVE PRODUCTIVITY *Technium Sustainability* 2 (5), 39-57
- [83] H Koutsonika, A Drigas 2022 High functioning ASD profile adult employees in global labour markets. ICT supported employment *Technium Sustainability* 2 (4), 17-27
- [84] I Chaidi, A Drigas 2022 Key to Behavioral Observation of Developmental Disorders by teachers in Greek School and the role of ICTs. *Technium Social Sciences Journal* 34, 110-125
- [85] T Vouglanis, AM Driga, A Drigas 2022 Physical and mental exercise to create new congenial neurons, to increase intelligence and the role of ICTs. *Technium BioChemMed* 3 (3), 21-36
- [86] I Chaidi, A Drigas 2022 "Digital Learning: Differentiated Teaching Models using e-Twinning I COMMUNICATE WITH MY NEIGHBOR THROUGH CULTURE AND TRADITION: e - Twinning Project" *Technium Education and Humanities* 2 (3), 59-77
- [87] I Moraiti, A Fotoglou, K Dona, A Katsimperi, K Tsionakas, Z Karampatzaki, ... 2022 Assistive Technology and Internet of Things for people with ADHD *Technium Social Sciences Journal* 32, 204-222
- [88] A Fotoglou, I Moraiti, K Dona, A Katsimperi, K Tsionakas, Z Karabatzaki, ... 2022 IoT Applications help people with Autism *Technium Social Sciences Journal*, 115-130
- [89] Drigas, A. S., Rodi-Eleni Ioannidou, 2013 A Review on Artificial Intelligence in Special Education, Information Systems, Elearning, and Knowledge Management *Research Communications in Computer and Information Science* Volume 278, pp 385-391, [http://dx.doi.org/10.1007/978-3-642-35879-1\\_46](http://dx.doi.org/10.1007/978-3-642-35879-1_46)
- [90] Drigas, A., Vrettaros, J. (2004): An Intelligent Tool for Building e-Learning Contend-Material Using Natural Language in Digital Libraries. *WSEAS Transactions on Information Science and Applications* 5(1) 1197-1205
- [91] Drigas, A.S., Vrettaros, J., Koukianakis, L.G. and Glentzes, J.G. (2005). A Virtual Lab and e-learning system for renewable energy sources. *Int. Conf. on Educational Tech.*
- [92] Drigas AS, Argyri K, Vrettaros J (2009) Decade review (1999-2009): artificial intelligence techniques in student modeling. In: *World Summit on Knowledge Society*. Springer, pp 552-564
- [93] Vrettaros, J., Tagoulis, A., Giannopoulou, N., & Drigas, A. (2009). An empirical study on the use of Web 2.0 by Greek adult instructors in educational procedures. *World Summit on Knowledge System (WSKS)*, 49, 164-170. [http://dx.doi.org/10.1007/978-3-642-04757-2\\_18](http://dx.doi.org/10.1007/978-3-642-04757-2_18)

- [94] Drigas, A., Dourou, A. (2013). A Review on ICTs, E-Learning and Artificial Intelligence for Dyslexic's Assistance. *iJet*, 8(4), 63-67.
- [95] Anagnostopoulou, P., Alexandropoulou, V., Lorentzou, G., Lykothanasi, A., Ntaountaki, P., & Drigas, A. (2020). Artificial intelligence in autism assessment. *International Journal of Emerging Technologies in Learning*, 15(6), 95-107. <https://doi.org/10.3991/ijet.v15i06.11231>
- [96] Pappas, M., & Drigas, A. (2016). Incorporation of artificial intelligence tutoring techniques in mathematics. *International Journal of Engineering Pedagogy*, 6(4), 12–16. <https://doi.org/10.3991/ijep.v6i4.6063>
- [97] Lytra N, Drigas A 2021 STEAM education-metacognition–Specific Learning Disabilities *Scientific Electronic Archives* 14 (10)
- [98] Mitsea E, Lytra N, A Akrivopoulou, A Drigas 2020 Metacognition, Mindfulness and Robots for Autism Inclusion. *Int. J. Recent Contributions Eng. Sci. IT* 8 (2), 4-20
- [99] Chaidi E, Kefalis C, Y Papagerasimou, A Drigas 2021 Educational robotics in Primary Education. A case in Greece. *Research, Society and Development* 10 (9), e17110916371-e17110916371
- [100] S Stavridis, D Papageorgiou, Z Doulgeri 2017 Dynamical system based robotic motion generation with obstacle avoidance, *IEEE Robotics and Automation Letters* 2 (2), 712-718
- [101] T Kastritsi, D Papageorgiou, I Sarantopoulos, S Stavridis, Z Doulgeri, 2019 Guaranteed active constraints enforcement on point cloud-approximated regions for surgical applications 2019 *International Conference on Robotics and Automation (ICRA)*, 8346-8352
- [102] S Stavridis, Z Doulgeri 2018 Bimanual assembly of two parts with relative motion generation and task related optimization 2018 *IEEE/RSJ International Conference on Intelligent Robots and Systems ...*
- [103] S Stavridis, P Falco, Z Doulgeri 2020 Pick-and-place in dynamic environments with a mobile dual-arm robot equipped with distributed distance sensors *IEEE-RAS 20th International Conference on Humanoid Robots (Humanoids)*
- [104] D Papageorgiou, S Stavridis, C Papakonstantinou, Z Doulgeri 2021 Task geometry aware assistance for kinesthetic teaching of redundant robots *IEEE/RSJ International Conference on Intelligent Robots and Systems ...*
- [105] T Kastritsi, I Sarantopoulos, S Stavridis, D Papageorgiou, Z Doulgeri Manipulation of a Whole Surgical Tool Within Safe Regions Utilizing Barrier Artificial Potentials *Mediterranean Conference on Medical and Biological Engineering and Computing ...*
- [106] S Stavridis, D Papageorgiou, L Droukas, Z Doulgeri 2022 Bimanual crop manipulation for human-inspired robotic harvesting *arXiv preprint arXiv:2209.06074*
- [107] A Sideraki, A Drigas Artificial Intelligence (AI) in Autism *Technium Social Sciences Journal* 26, 262-277
- [108] M Karyotaki, A Drigas, C Skianis 2022 Chatbots as Cognitive, Educational, Advisory & Coaching Systems *Technium Social Sciences Journal* 30, 109-126
- [109] E Karagianni, A Drigas 2022 The STEM Education of Down Syndrome Children in Algorithmic and Computation Thinking for a sustainable life *Technium Sustainability* 2 (5), 58-78
- [110] Chaidi I, Drigas A 2022 Digital games & special education *Technium Social Sciences Journal* 34, 214-236
- [111] Papanastasiou, G. P., Drigas, A. S., & Skianis, C. (2017). Serious games in preschool and primary education: Benefits and impacts on curriculum course syllabus. *International Journal of Emerging Technologies in Learning*, 12(1), 44–56. <https://doi.org/10.3991/ijet.v12i01.6065>
- [112] Kokkalia, G., Drigas, A., Economou, A., Roussos, P., & Choli, S. (2017). The use of serious games in preschool education. *International Journal of Emerging Technologies in Learning*, 12(11), 15-27. <https://doi.org/10.3991/ijet.v12i11.6991>
- [113] Drigas, A. S., and Pappas M.A. 2015 "On line and other Game-Based Learning for Mathematics." *International Journal of Online Engineering (iJOE)* (11)4, 62-67, <https://doi.org/10.3991/ijoe.v11i4.4742>

- [114] Papanastasiou, G., Drigas, A., Skianis, C., & Lytras, M. D. (2017). Serious games in K-12 education: Benefits and impacts on students with attention, memory and developmental disabilities. *Program*, 51(4), 424-440. <https://doi.org/10.1108/prog-02-2016-0020>
- [115] Drigas, A. S., & Kokkalia, G. K. (2014). ICTs in Kindergarten. *International Journal of Emerging Technologies in Learning*, 9(2). <https://doi.org/10.3991/ijet.v9i2.3278>
- [116] Doulou A, Drigas A 2022 Electronic, VR & Augmented Reality Games for Intervention in ADHD Technium Social Sciences Journal, 28, 159.
- [117] Kokkalia, G., Drigas, A., & Economou, A. (2016). The role of games in special preschool education. *International Journal of Emerging Technologies in Learning (iJET)*, 11(12), 30-35.
- [118] Kefalis C, Kontostavlou EZ, Drigas A, 2020 The Effects of Video Games in Memory and Attention. *Int. J. Eng. Pedagog.* 10 (1), 51-61
- [119] I Chaidi, A Drigas 2022 Digital games & special education Technium Social Sciences Journal 34, 214-236
- [120] G Papanastasiou, A Drigas, C Skianis 2022 Serious Games in pre-K and K-6 education. *Technium Education and Humanities* 2 (3), 1-18
- [121] Drigas, A., & Mitsea, E. (2020). The 8 Pillars of Metacognition. *International Journal of Emerging Technologies in Learning (iJET)*, 15(21), 162-178. <https://doi.org/10.3991/ijet.v15i21.14907>
- [122] Drigas, A., & Papoutsi, C. (2019). Emotional intelligence as an important asset for HR in organizations: Leaders and employees. *International Journal of Advanced Corporate Learning*, 12(1). <https://doi.org/10.3991/ijac.v12i1.9637>
- [123] Drigas, A. S., and M. Pappas, 2017. "The Consciousness-Intelligence-Knowledge Pyramid: An 8x8 Layer Model," *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, vol. 5, no.3, pp 14-25, <https://doi.org/10.3991/ijes.v5i3.7680>
- [124] Drigas A, Karyotaki M (2017) Attentional control and other executive functions. *Int J Emerg Technol Learn iJET* 12(03):219–233
- [125] Drigas A, Karyotaki M 2014. Learning Tools and Application for Cognitive Improvement. *International Journal of Engineering Pedagogy*, 4(3): 71-77. From (Retrieved on 13 May 2016)
- [126] Drigas, A., & Mitsea, E. (2021). 8 Pillars X 8 Layers Model of Metacognition: Educational Strategies, Exercises & Trainings. *International Journal of Online & Biomedical Engineering*, 17(8). <https://doi.org/10.3991/ijoe.v17i08.23563>
- [127] Drigas A., Papoutsi C. (2020). The Need for Emotional Intelligence Training Education in Critical and Stressful Situations: The Case of COVID-19. *Int. J. Recent Contrib. Eng. Sci. IT* 8(3), 20–35. [10.3991/ijes.v8i3.17235](https://doi.org/10.3991/ijes.v8i3.17235)
- [128] Drigas, A., & Mitsea, E. (2020). The Triangle of Spiritual Intelligence, Metacognition and Consciousness. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 8(1), 4-23. <https://doi.org/10.3991/ijes.v8i1.12503>
- [129] Kokkalia, G., Drigas, A. Economou, A., & Roussos, P. (2019). School readiness from kindergarten to primary school. *International Journal of Emerging Technologies in Learning*, 14(11), 4-18.
- [130] Drigas, A., & Mitsea, E. (2021). Metacognition, stress-relaxation balance & related hormones. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 9(1), 4–16. <https://doi.org/10.3991/ijes.v9i1.19623>
- [131] Pappas M, Drigas A. 2019; Computerized Training for Neuroplasticity and Cognitive Improvement. *International Journal of Engineering Pedagogy*.9(4):50-62
- [132] Papoutsi, C. and Drigas, A. (2017) Empathy and Mobile Applications. *International Journal of Interactive Mobile Technologies* 11(3). 57. <https://doi.org/10.3991/ijim.v11i3.6385>
- [133] Papoutsi, C. & Drigas, A. (2016). Games for Empathy for Social Impact. *International Journal of Engineering Pedagogy* 6(4), 36-40.
- [134] Karyotaki, M., & Drigas, A. (2015). Online and other ICT Applications for Cognitive Training and Assessment. *International Journal of Online and Biomedical Engineering*. 11(2), 36-42.

- [135] Papoutsis, C., Drigas, A., & Skianis, C. (2019). Emotional intelligence as an important asset for HR in organizations: Attitudes and working variables. *International Journal of Advanced Corporate Learning*, 12(2), 21–35. <https://doi.org/10.3991/ijac.v12i2.9620>
- [136] Chaidi I. Drigas, A. S., 2020. “Autism, Expression, and Understanding of Emotions: Literature Review,” *Int. J. Online Biomed. Eng.*, vol. 16, no. 02, pp. 94–111, <https://doi.org/10.3991/ijoe.v16i02.11991>
- [137] Drigas, A. S., & Karyotaki, M. (2019). A Layered Model of Human Consciousness. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 7(3), 41- 50. <https://doi.org/10.3991/ijes.v7i3.11117>
- [138] Drigas, A. S., Karyotaki, M., & Skianis, C. (2018). An Integrated Approach to Neurodevelopment, Neuroplasticity and Cognitive Improvement. *International Journal of Recent Contributions from Engineering, Science & IT (iJES)*, 6(3), 4-18.
- [139] Karyotaki M. and Drigas, A. S., 2016. “Latest trends in problem solving assessment,” *International Journal of Recent contributions from Engineering, Science & IT (iJES)*, vol. 4, no. 2, 4-10.
- [140] Mitsea E., Drigas, A. S., and Mantas P., 2021. Soft Skills & Metacognition as Inclusion Amplifiers in the 21st Century,” *Int. J. Online Biomed. Eng. IJOE*, vol. 17, no. 04, Art. no. 04, <https://doi.org/10.3991/ijoe.v17i04.20567>
- [141] Angelopoulou, E. Drigas, A. (2021). Working Memory, Attention and their Relationship: A theoretical Overview. *Research. Society and Development*, 10(5), 1-8. <https://doi.org/10.33448/rsd-v10i5.15288>
- [142] Tourimpampa, A., Drigas, A., Economou, A., & Roussos, P. (2018). Perception and text comprehension. It’s a matter of perception! *International Journal of Emerging Technologies in Learning (iJET)*. 13(7)
- [143] Drigas A, Mitsea E 2020 A metacognition based 8 pillars mindfulness model and training strategies. *International Journal of Recent Contributions from Engineering, Science & IT* 8(4), 4-17.
- [144] Papoutsis C, Drigas A, C Skianis 2021 Virtual and augmented reality for developing emotional intelligence skills *Int. J. Recent Contrib. Eng. Sci. IT (IJES)* 9 (3), 35-53
- [145] Kapsis S, Katsantoni S, Drigas A 2020 The Role of Sleep and Impact on Brain and Learning. *Int. J. Recent Contributions Eng. Sci. IT* 8 (3), 59-68
- [146] Drigas A, Mitsea E, Skianis C 2021 The Role of Clinical Hypnosis and VR in Special Education *International Journal of Recent Contributions from Engineering Science & IT* 9(4), 4-17.
- [147] V Galitskaya, A Drigas 2021 The importance of working memory in children with Dyscalculia and Ageometria *Scientific Electronic Archives* 14 (10)
- [148] Chaidi I, Drigas A 2020 Parents' Involvement in the Education of their Children with Autism: Related Research and its Results *International Journal Of Emerging Technologies In Learning (Ijet)* 15 (14), 194-203.
- [149] Drigas A, Mitsea E 2021 Neuro-Linguistic Programming & VR via the 8 Pillars of Metacognition X 8 Layers of Consciousness X 8 Intelligences *Technium Soc. Sci. J.* 26, 159
- [150] Drigas A, Mitsea E 2022 Conscious Breathing: a Powerful Tool for Physical & Neuropsychological Regulation. The role of Mobile Apps *Technium Social Sciences Journal* 28, 135-158
- [151] Drigas A, Mitsea E, C Skianis 2022 Clinical Hypnosis & VR, Subconscious Restructuring-Brain Rewiring & the Entanglement with the 8 Pillars of Metacognition X 8 Layers of Consciousness X 8 Intelligences. *International Journal of Online & Biomedical Engineering* 18 (1)
- [152] Drigas A, Karyotaki M 2019 Attention and its Role: Theories and Models. *International Journal of Emerging Technologies in Learning* 14 (12), 169-182
- [153] Drigas A, Karyotaki M 2019 Executive Functioning and Problem Solving: A Bidirectional Relation. *International Journal of Engineering Pedagogy (iJEP)* 9 (3)

- [154] Bamicha V, Drigas A 2022 ToM & ASD: The interconnection of Theory of Mind with the social-emotional, cognitive development of children with Autism Spectrum Disorder. The use of ICTs as an alternative ... *Technium Social Sciences Journal* 33, 42-72
- [155] Drigas A, Mitsea E, C Skianis 2022 Neuro-Linguistic Programming, Positive Psychology & VR in Special Education. *Scientific Electronic Archives* 15 (1)
- [156] Drigas A, Mitsea E, Skianis C. 2022 Virtual Reality and Metacognition Training Techniques for Learning Disabilities *SUSTAINABILITY* 14(16), 10170
- [157] Drigas A., Sideraki A. 2021 Emotional Intelligence in Autism *Technium Soc. Sci. J.* 26, 80
- [158] Drigas A, Mitsea E, Skianis C.. 2022 Subliminal Training Techniques for Cognitive, Emotional and Behavioural Balance. The role of Emerging Technologies *Technium Social Sciences Journal* 33, 164-186
- [159] Bakola L, Drigas A, 2020 Technological development process of emotional Intelligence as a therapeutic recovery implement in children with ADHD and ASD comorbidity. . *International Journal of Online & Biomedical Engineering*, 16(3), 75-85
- [160] Bamicha V, Drigas A, 2022 The Evolutionary Course of Theory of Mind - Factors that facilitate or inhibit its operation & the role of ICTs *Technium Social Sciences Journal* 30, 138-158
- [161] Mitsea E, Drigas A., C Skianis 2022 Breathing, Attention & Consciousness in Sync: The role of Breathing Training, Metacognition & Virtual Reality *Technium Social Sciences Journal* 29, 79-97
- [162] A Drigas, E Mitsea, C Skianis Intermittent Oxygen Fasting and Digital Technologies: from Antistress and Hormones Regulation to Wellbeing, Bliss and Higher Mental States *BioChemMed* 3 (2), 55-73
- [163] A Sideraki, A Drigas Artificial Intelligence (AI) in Autism *Technium Social Sciences Journal* 26, 262-277
- [164] E Mitsea, A Drigas, C Skianis Cutting-Edge Technologies in Breathwork for Learning Disabilities in Special Education *Technium Social Sciences Journal* 34, 136-157
- [165] A Stathopoulou, M Liouni, Y Salapata, A Drigas 2022 Emotional difficulties and post-traumatic stress disorder symptoms in children refugees & the role of ICTs: A case study in northern Greece borders *Technium Social Sciences Journal* 31, 213-227
- [166] V Bravou, AM Driga, A Drigas 2022 Emotion Regulation, the Function of Stress Hormones & Digital Technologies *BioChemMed* 3 (2), 27-34
- [167] A Drigas, E Mitsea, C Skianis Subliminal Training Techniques for Cognitive, Emotional and Behavioural Balance. The role of Emerging Technologies *Technium Social Sciences Journal* 33, 164-186
- [168] T Vouglanis, AM Driga, A Drigas 2022 Charismatic Children: Heredity, Environment and ICTs *Technium Sustainability* 2 (5), 1-15
- [169] E Mitsea, A Drigas, C Skianis 2022 Mindfulness for Anxiety Management and Happiness: The Role of VR, Metacognition, and Hormones *Technium BioChemMed* 3 (3), 37-52