

# Kinesiology Education of the Future

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## **Abstract**

*Taking into consideration children's essential and existential needs to adapt to contemporary life circumstances, the future of kinesiology education must be viewed in the context of at least four factors. Those are continuous change, children's sensibility towards contemporary civilizational trends, the need for a continuous transformation of the educational system and emphasized importance of kinesiology and its applied areas within that system.*

*Kinesiology theory and kinesiology practice readily confront contemporary life circumstances, and numerous research indicate that appropriate teaching of physical and health education, alongside physical exercise are becoming a universal corrective to insufficient physical activity.*

*With such awareness, the paradigm of kinesiology education of the future implies dealing with issues, which immanently belong to kinesiology and its applied areas, but also dealing with other global issues, or their parts that other sciences do not deal with. It is expected that the changes of paradigm of the substrate science with its applied areas, and their authority are scientifically grounded. Applied areas of kinesiology in the broadest sense, the physical and health education field in the narrower sense and, physical and health education in the narrowest sense have exceptional merit. This merit is, reflected in its universality, intactness, domination and other comparative advantages, alongside family and school, the third system of education.*

*One of the strategic developments of kinesiology education of the future, with respect to the increased presence of motor inactivity among all age groups, children, pupils and youth, should be in the direction of promoting a new lifestyle. In that sense, ensuring the acquisition of kinesiology literacy throughout schooling should be proclaimed a basic human right and an initiative for adopting it in the "Declaration of Human Rights" should be sent to the United Nations. Various types of diagnostic procedures are implemented in theory and practice of many areas including the*

*field of kinesiology education; however, educational diagnostics is scarce. The future of kinesiology education most certainly depends on the appropriate education of future kinesiology professionals, their professional development, but also on defining standards of the kinesiology profession, in line with new and significantly changed life and work circumstances of present-day society. Kinesiology as a substrate science and its applied areas confidently approach the future, which is evident in the results achieved to date. It is expected that awareness of the necessity of engaging in physical activities throughout a person's life, age-appropriate and taking into consideration opportunities and circumstances will gain ground in the 21<sup>st</sup> century. What is more, everything points to the conclusion that not only will man and society recognize that physical activity are the sine qua non of human existence, but that the aims of civilized society cannot be realized without kinesiology and its applied areas!*

**Key words:** *contemporary conditions; educational system; future; kinesiology; kinesiology education; kinesiology literacy.*

## Introduction

To speak today, at the onset of the 21<sup>st</sup> century, about kinesiology education of the future, particularly from the point of view of the essential and existential needs of children, pupils and youth, for an efficient adaptation to contemporary life is impossible without emphasizing at least four fundamental factors.

The first factor, the time and world we live in, is among other, characterised by changes. Actually, it can be said that changes are the one constant of contemporary society. Changes affect everyone and everything, which is reflected in the life and work of people in a contemporary society, and particularly so when it comes to their health, and the ever-growing presence of hypokinesia.

The second factor refers to research findings. Numerous research conclude that changes which blindly follow civilizational trends and mostly affect the youngest and youth originate from the dominance of motor inactivity that consequently, negatively reflects on their health (Bretshneider & Naul, 2007; Findak & Prskalo, 2011; Hardman, 2008; Kovač, Jurak, Starc, & Strel, 2007).

The third factor relates to education, i.e., ensuring a continuous transformation of the system of education. In other words, in order for children, students, and youth to prepare for and respond to the challenges of our world, particularly those with negative influences on their health, it is necessary to ensure quality school; a school which can quickly and easily adapt to life's circumstances and which can train children and youth to act in most diverse situations. That is not irrelevant, on the contrary, the time that children, students and youth spend in school represents our ideal opportunity to keep training and train them for life (Findak & Prskalo, 2003; Hardman 2008; Keneth, 2005).

Finally, the fourth factor relates to the corpus of values which comprise kinesiology, particularly kinesiology education, i.e. products of this area of applied kinesiology –

physical and health education field and the subject physical and health education. Today, kinesiology theory and practice are at a level that can, based on scientifically founded physical exercise, offer successful solutions to issues accompanying civilizational trends, particularly those related to the developmental-compensational role of physical exercise (Findak, 2012).

Accordingly, the need for kinesiology education, i.e. the physical and health educational area, and in particular physical and health education subject to take on a more significant role in establishing a balance in the ever-more present motor inactivity of children and youth and the negative effects it bears on their health. This particular educational field, i.e. subject, has fundamental importance for a balanced development of psychosomatic characteristics of children, students, and youth (Findak, 2011).

## **Theoretical Assumptions for Kinesiology Education of the Future**

For better comprehension and hopefully better future communication, it is necessary to talk about kinesiology education of the future but also to point to the factors which, to a greater or lesser extent, determine kinesiology education in the future. In order to speak of the paradigm of kinesiology education of the future, basic theoretical assumptions, which are also basic conditions for its implementation in practice, should be taken into consideration.

When we speak of changes that accompany civilized society, including answers to global issues of the present-day, we should exclaim that kinesiology and its applied areas have, for the majority part, readily received the numerous changes that characterize life and work in the contemporary society (Findak, 2009). In support to that, is the fact that fundamental theoretical issues are well established, which is why kinesiologists today have great influential power on the anthropological status of their subjects. As a matter of fact, there are few human activities which can be simultaneously influenced by such a great number of features, abilities, dimensions and characteristics. Numerous research confirm that appropriate implementation of physical and health education is a universal corrective not only for efficient confrontation to scarce physical activity (Fairclough & Stratton, 2005; Kovač et al., 2007), but for the formation of attitudes regarding regular physical exercise as one of the key factors for appropriate adulthood living (Bretshneider & Naul, 2007; Corbin, 2002). That is not because physical and health education represents the only regular physical exercise for the entire population of pupils and youth between the ages of 6 and 18, but because physical and health education as a subject has one of the most significant roles in shaping a healthy lifestyle.

It is a fact that, today, the science of kinesiology has access to information relating to the merits of kinesiology activity and manners with which particular kinesiology activities can effectively be carried out. What is more, today's achievements in

the area of kinesiology are at a level that enables the creation of precise models of organization and implementation in all areas of applied kinesiology, including kinesiology education (Findak & Prskalo, 2011). That is owing to the emphasized developmental-compensational role of the field of physical and health education, i.e. the subject physical and health education for which we can rightfully assume will be even more present in the future. Moreover, it will affect the youngest and youth in the sense of more quality preparation and implementation of the learned (Bignasca, 2002), in extracurricular activities, in their free time at home, during weekends, school holidays, throughout their education and ultimately for engaging in physical exercise regardless of form at later stages of life.

Clearly, kinesiology theory and practice readily answer to those civilizational challenges relating to the growing trend of motor inactivity of children and youth. Owing to the achievements of the science of kinesiology, the field of physical and health education, i.e. the subject physical and health education significantly differs from all other areas of education and subjects. Through means with which it disposes, it can and must influence morphological characteristics, motor abilities, functional abilities, and cognitive and conative dimensions of children, students and youth, which underpins the long-term orientation of kinesiology education. We maintain that, for as long as physical exercise can influence the transformation of the anthropological status of children, students, and youth, that must remain not only the fundamental orientation of physical and health education but also the motto of its aims (Findak, 2009).

Obviously, what has been mentioned has not exhausted the possible issues and views relating to the theoretical assumptions for kinesiology education of the future. In fact, the mentioned should be understood and taken as incentive for thinking about generators that are or can be in the function of their possible and necessary contribution to additional, more successful, development of kinesiology education of the future.

## **Paradigm of Kinesiology Education of the Future**

Considering that the title of this chapter, more precisely, the issues relating to this subject are rather complex to provide a uniform answer, we can only attempt to draw attention to several important factors on which kinesiology as a substrate science and kinesiology education depend.

In order for the possible and necessary paradigm of future kinesiology education to be implemented in the theory and practice of the field of physical and health education, i.e. the subject physical and health education, it is necessary to, among other things, do the following:

1. To a greater or lesser extent, everyone faces universal issues of the civilized world such as health, education, free time, ecology, decrease in anthropological ability, various types of addiction, etc. Those are issues without boundaries, issues which

are subjects of many sciences including kinesiology and its applied areas where we rightfully ask what is to be done in the near and distant future?!

We maintain that our substrate science must (1) continue to deal with issues which are immanent to kinesiology and its applied areas; (2) intensively focus on facing those global issues or aspects of those issues which are not subjects of interest of any other science, i.e. which have not been researched by any other science, or have only been analyzed in a by-the-way manner. It is our opinion that, when referring to the paradigm for a more efficient substrate science and its applied areas, those are key empirical questions of kinesiology and kinesiology education (Findak, 2016).

2. When referring to the paradigm of kinesiology education of the future, consent must be reached, among other, that it implies a change in the paradigm of the substrate science system. Accordingly, we hold that kinesiology and its applied areas have greatest merit when they have a clear authority; authority which is based on new scientific knowledge. Because of that, our strategic thoughts and strategic changes relating to our substrate science and profession, and accordingly expectations of our kinesiology product – our colleagues, cannot be 2016 or earlier, as that leads us to think and solve problems from the past. On the contrary, for strategic changes to take place, we must envisage the year 2022 (when high school students who will graduate in 2016/2017 will have finished college); 2026 (when students who have enrolled into the first year in high school in 2016/2017 will have finished college); 2034 (when students who have enrolled into the first grade of primary school will have finished college) (Findak, 2016).
3. Applied areas of kinesiology, in the broadest sense, the physical and health education field in the narrower sense, and physical and health education in the narrowest sense have exceptional merit. That merit is, among other, reflected in its universal nature (the overall influence on the anthropological status of the ones involved in the system), intactness (from any form of influence on the result), dominance (in almost all media), and numerous other comparative advantages, making it, alongside family and school, the third educational system. In practice, that means that if the role of primary education belongs to family, general education to school and other educational institutions, then kinesiology education, i.e. the physical and health education field, i.e. physical and health education takes on the role of secondary education (Findak, 2009).

Here we tentatively speak of actual capital, which has been recognized and observed by kinesiology theory, but not so much by kinesiology practice. In order for prompt changes, which are to the health benefit of our children and youth, to take place, we must remind ourselves that the benefits of physical exercise do not depend solely on the quality of exercise but on the frequency, i.e. the number of hours of physical and health education in school! Can we capitalize on our

substrate science under such conditions where the number of contact hours of physical and health education is the same as it has been for the last hundred years? It seems as if not much has changed with respect to way of life within that period!?

4. One of the strategic directions of kinesiology education of the future, from the point of view of the more present motor inactivity among all age groups, children, pupils and youth (Bretshneider & Naul, 2007; Corbin, 2002; Fairclough & Stratton, 2005; Kovač et al., 2007; Raczek, 1998), should be the promotion of a new lifestyle. Obviously, that does not imply that there have not been any active attempts by professionals and the profession to deal with growing hypokinesia in our country and abroad. On the contrary, the attempts were simply scarce, particularly due to the insufficiently used comparative advantages of physical exercise in contemporary conditions of life and work (Findak & Prskalo, 2005; Findak, 2011; Findak, 2014).

Accordingly, the need for ensuring kinesiology literacy throughout schooling is being imposed as a universal need of contemporary man. Due to the confirmed values of physical activity on the contemporary lifestyle (Bretshneider & Naul, 2007; Findak, Metikoš, & Mraković, 1995; Hardman 2008; Kovač et al., 2007; Raczek, 1998), we hold that throughout their education, all pupils should, along with general literacy and IT literacy, also acquire kinesiology literacy.

Pursuant to that, we suggest that ensuring the acquisition of kinesiology literacy throughout schooling be declared one of the fundamental human rights. Stipulated as such, the “Declaration” should be addressed to the United Nations for adoption, conforming to the procedures and regulations for adopting such an initiative (Findak, 2016).

5. Whether the future will guarantee kinesiology education better work quality definitely depends on diagnostics. The diagnosis of the current state of the anthropological status of subjects represents one of the basic conditions for implementing procedures relating to planning and programming, selecting appropriate teaching methods, methods of assessment and evaluation, etc.

The theory and practice, including the field of kinesiology education, different types of diagnostic procedures are being implemented, but scarcely educational diagnostics. In our area of work, exercise, i.e. motor activity is analogous to medication in medicine and the aim of educational diagnostics is to provide information on the current level of motor knowledge of a subject (Findak, 2011). For a more efficient implementation of procedures relating to diagnostics, agreement should be reached that in the future, other types of diagnostics, including educational diagnostics be implemented more frequently than to date.

6. The future of kinesiology education certainly depends not only on appropriate kinesiology education of future professionals and their professional development,

but also on defining standards of the kinesiology profession according to the new and substantially changed life and work conditions of contemporary society! In support to that claim, it is sufficient to say that in a relatively short period of time, we have witnessed significant changes in work conditions, with reference to new technologies, which are used in the field of kinesiology education, from the aspect of increased responsibility of kinesiology experts but also children, pupils and youth who use it. At the same time, it is the reason why our experts dispose of markedly subtle information about their subjects. Such information surpasses general information and due to their level of sensitivity become turn into highly sensitive, relevant, information! If to that we add that our experts have access to other powerful means while teaching, then it is necessary to define professional autonomy, and more importantly professional responsibility (Findak, 2016).

Surely, the examples, viewpoints and suggestions given above, are not the only ones aimed at the paradigm of kinesiology education of the future. However, we maintain that based on the mentioned examples, one can judge not only the paradigm of kinesiology education of the future, but its possible and necessary contribution to ensuring a quality education of children, pupils and youth, and consequently their preparation for a successful life and work in a contemporary society.

## Conclusion

Based on what has been mentioned, consensus must be reached that this issue deserves not only greater attention, but also more answers to issues relating to kinesiology education of the future.

We hold that this issue will become the focus of interest not only of participants in this conference, but other experts, particularly those who deal with issues relating to education in the broader sense and kinesiology education in the narrower sense.

At the same time, that is the reason that points to the conclusion that the mentioned vision of the future of kinesiology education should be understood and accepted as enquiry which is and can be a necessary contribution to further improvement of the field of kinesiology education and consequently the future of kinesiology education.

However, one is certain, our substrate science and its applied areas safely walk the future which is evident in the results achieved so far. It is expected that awareness of the necessity of engaging in physical activities throughout a person's life, age-appropriate and taking into consideration opportunities and circumstances will gain ground in the 21<sup>st</sup> century. What is more, everything points to the conclusion that not only will man and society recognize that physical activity are the *sine qua non* of human existence, but that the aims of civilized society cannot be realized without kinesiology and its applied areas!

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# Kineziološka edukacija budućnosti

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## **Sažetak**

*Kineziološka edukacija budućnosti, posebice s motrišta esencijalnih i egzistencijalnih potreba prilagodbe djece suvremenim životnim uvjetima, mora se promatrati u kontekstu barem četiri čimbenika: stalnosti promjena, osjetljivosti najmlađih na suvremene civilizacijske tokove, potrebu stalne transformacije odgojno-obrazovnog sustava, naglašenu važnost kineziologije i njezinih primijenjenih područja u tom sustavu.*

*Suvremeni su životni uvjeti spremno dočekani od kineziološke teorije i kineziološke prakse, a brojna istraživanja pokazuju kako primjereno provođenje nastave tjelesne i zdravstvene kulture, ali i tjelesno vježbanje, postaje univerzalni korektiv nedovoljne tjelesne aktivnosti.*

*S obzirom na takve spoznaje paradigma kineziološke edukacije budućnosti podrazumijeva bavljenje problematikom koja imanentno pripada kineziologiji i njezinim primijenjenim područjima, kao i onim globalnim problemima ili dijelovima tih problema kojima se ne bavi ni jedna druga znanost. Očekuje se i promjena paradigme supstratne znanosti i njezinih primijenjenih područja, a njihov autoritet treba biti znanstveno utemeljen. Primijenjena područja kineziologije u najširem smislu, tjelesno i zdravstveno odgojno-obrazovno područje u užem smislu i tjelesna i zdravstvena kultura u najužem smislu imaju iznimnu vrijednost koja se, uz ostalo, očituje u tome što u suvremenom društvu zbog svoje univerzalnosti, intaktnosti, dominacije, kao i brojnih drugih komparativnih prednosti, uz obitelj i školu, predstavlja treći odgojno-obrazovni sustav. Jedan od strateških pravaca kineziološke edukacije u budućnosti, poglavito uvjetovan sve prisutnijim motoričkim inaktivitetom svih dobnih skupina djece, učenika i mladeži, trebao bi biti u promicanju novog stila života, zbog čega osiguranje stjecanja kineziološke pismenosti tijekom školovanja treba proglasiti temeljnim ljudskim pravom i prijedlog „Deklaracije” uputiti u Ujedinjene narode na usvajanje. U teoriji i praksi, uključujući i područje kineziološke edukacije, primjenjuju se različite vrste dijagnostičkih postupaka, ali još uvijek relativno malo i obrazovna dijagnostika. Budućnost kineziološke edukacije sasvim sigurno ovisi ne samo o primjerenoj kineziološkoj izobrazbi budućih stručnih kadrova, njihovu stručnom usavršavanju,*

nego i o definiranju standarda kineziološke profesije u skladu s novim i bitno promijenjenim uvjetima života i rada u suvremenom društvu. Kineziologija kao supstratna znanost i njezina primijenjena područja sigurno koračaju u budućnost, o čemu najbolje govore do sada postignuti rezultati. Može se očekivati da će u 21. stoljeću napokon pobijediti svijest o neophodnosti bavljenja tjelesnim aktivnostima tijekom čitava čovjekova života, u skladu s njegovom životnom dobi, prilikama i okolnostima. Štoviše, sve upućuje na zaključak da će ne samo suvremeni čovjek i društvo spoznati da su tjelesne aktivnosti *conditio sine qua non* ljudske opstojnosti, nego i da se ciljevi civiliziranog društva bez kineziologije i njezinih primijenjenih područja ne mogu realizirati!

**Ključne riječi:** budućnost; kineziologija; kineziološka edukacija; kineziološka pismenost; odgojno-obrazovni sustav; suvremeni uvjeti.