GERGELY GYIMOTHY

Distancing from the living environment

◆

Abstract

The usage of digital equipment has recently become a worldwide issue. Technical progress is a great opportunity for people. However, the latest technological devices are coming under increasing criticism from many aspects. The generation which has grown up in the virtual world rejects traditional lifestyle and value-creating manual activities. Nevertheless, it is promising to see that the initiatives of some social and church organisations may modify young people's environmental attitude. The aim of this study is to highlight the variable relationship between the man and his natural environment in the mirror of the effects of digital revolution.

Keywords: digital equipment, living environment, environmental attitude

INTRODUCTION

This paper has been inspired by my own observations that worry me about social behaviour caused by the usage of digital equipment. It is of great concern how people are becoming distant to the living environment. We contemplate the process as a parent with a large family and a teacher in a certain case we do feel responsibility for the upcoming generation. I would like to give an overview on some initiatives which may restrain children's negative environmental attitude. This problem has arisen recently and it has many roots, making it difficult to approach. It is commonly known that progressive technical development has some advantages, but its negative effects are enhancing difficulties within our societies. Fast-growing digitalisation is even *demanded* by people, although the enchanting virtual world involves numerous traps, too. Turning students' attention towards the living environment and saving our children from nature-deficit disorder (Louv, 2008) may often seem to be a challenge. There are, however, some promising environmental educational elements standing for the provision of daily class-work. We can find examples in several societies of developed countries of how people are sensitizing themselves to an environment-focused way of thinking. They provide adequate answers to the problem using an unorthodox philosophy of eco-theology. Gardening may be one of the solutions among the activities that are based on value creation and co-operation with the living environment.

In the first part of the paper the global effect of the technical development, the anomalies of digitalism and the grades of the digital use are discussed. The next part shows some examples of environmental education which can be used for raising children closer to the nature.

1. EFFECTS OF TECHNICAL DEVELOPMENT

I consider it is important to review one of the most significant stages of the road towards digitalization i.e. industrialization. Industrialization puts economy interests above classic human values. This is the disembeddedment theory of Karl Polanyi (Polányi, 1957.) The human workforce was replaced by machines. General historical studies have shown that the rapid technological development of the industrial revolution caused social tensions. Undoubtedly, we can make life easier by using machines. However, new technologies were not regulated in most cases. Craft workshops were liquidated by factories, the expansion of capitalist societies made factory goods become definitely more preferable to craft goods. Economy quickly recognized the opportunity of mass production. Large-scale production caused the degradation of product quality whilst small producers of high-quality products became largely unemployed. In developed societies, scientifically proven treatises analysing the effects of an industrialization ignoring its own consequences were published at the end of the 20th century (Kaczynski, 1995). Today's market economy labels products with the inscription "craft mark" that may reassure consumers who are responsible for their environment. This phenomenon could be positive if the content corresponded with the manufactory quality in all cases. Obviously, development cannot be prevented, new equipment make everyday life comfortable, although the new technical tools and the way we use our Earth resources should not harm us or future generations.

The negative human-psychological effects of technical development should not be ignored. The central dogma of "self-centeredness", individualism, is a common phenomenon in today's societies. Modern tools can kill the need for personal communication, they lead us to the virtual world and online relationships. It is more comfortable for the individual to hide from the real world, but this will just confirm their egoistic reflection. The result of the degradation of the value system in family life is a sociological problem which is reflected in the egoist person. Thus, society becomes psychologically vulnerable because its smallest sociological unit on which it is based, is slowly being liquidated. This procedure serves the purpose of money-centred worldview while "single-existence" and truncated families are becoming a large market gap (Végh, 2018).

2. PEDAGOGICAL ANOMALIES AGAINST THE DIGITAL WORLD

New and innovative things are great opportunities, but they also involve risks. Gyarmathy (2011) says in her study that student memory has latterly deteriorated with unprecedented speed. The spatial visual processing of children's nervous systems is dealt with even more nowadays. Children do not learn how to use their imagination if they get ready-made images. Machines are run instead of active pastime; the passive experience acquisition is more emphasized, entailing modest bodily-neural participation. The listed characteristics are factors of attention disturbance. Pupils cannot pay attention to things in front of them because other stimuli distract their attention, and this results in decreasing performance. Golnhofer (2009) affirms that school learning does not demand new learning organization methods, but it is necessary to inspire pupils to create and lifelike learning. This is achievable, however, only by active participation.

A reformed pastor of Józsa-Debrecen analysed the unlimited quantity and dubious value system of digital information during a service. The take-home-messages of the mass drew my attention to the problem of the illusion of omniscience. The user becomes confident because of the easy-going information acquisition while using internet, and everything goes blind in the fallacy of this knowledge. Everything that once belonged to traditional life is qualified as worthless by the user, so the victim underestimates all the activities carried out by physical work (Gacsályi, 2017).

Digital prosperity is desirable for developed (and developing) societies in the 21th century. People without internet connection are even isolated from the world. Buda (2012) classifies the information society into several groups according to their digital competences, demonstrating the transition between these categories, too:

1. Digital hermits who do not use info-communication devices.
2. Digital explorers having already started to become acquainted with the devices of digital prosperity represent the next stage.
3. There are intensifying differences between internet users: digital nomads, wanderers, and settlers.
4. Digital conquerors are on the top of the classification. For them, the internet means the only information source, they are online continuously, they just communicate digitally, and they start to have withdrawal symptoms when they have to disconnect from the internet.

Becoming addicted to the web and of computer games is nowadays a common psychological illness. A Hungarian neurologist, Janszky (2016) talked about addictions in an interview. He said that the effects of excessive internet usage are typical to those of cocaine addiction. Therefore, the brain construction in the rewarding centre of the brain may change. He ascertained that internet dependence originates from another psychological problem. When internet dependence is not treated in a proper way, even drug addiction may appear later on. While using information technology

devices, children and young people spend a considerable part of their time playing computer games. One of the disadvantages of computer games which should be emphasized is that they cause dependence. An excessive time spent with computer games often makes people lose their sense of time. Moreover, basic needs are sidelined as well (Jensen–Nutt, 2016).

Block (2008), a famous American psychiatrist, discussed the main signs and symptoms provoking a computer gambling addiction. When there is no computer access, withdrawal symptoms might appear, such as tenseness, depression or aggressive behaviour. Additional symptoms could be the tendency to tell lies and social isolation.

Batthyány et al. (2009) investigated the prevalence of excessive computer game playing behaviour among adolescents. Their results show there are substantial correlations between excessive computer and video game playing behaviour and psychosocial and also psychopathological abnormalities, such as alterations in the intensity of social conflict, concentration deficits, maladaptive coping behaviour, stress and psychosomatic challenge, and school phobia.

The study of Frölich et al. (2009) demonstrated that children with attention-deficit hyperactivity disorder (ADHD) are especially vulnerable to addictive use of computer games due to their neuropsychological profile.

Likewise, Tauszig (2014) provided more information regarding game dependence. Depression, lack of appetite, daily life rhythm problems, being in debt, sleep disorders, work and family problems are all the symptoms of game dependence. Online games reign over the victims as an addictive habitat.

3. GOOD PRACTICES OF ENVIRONMENTAL EDUCATION

It is important to lead children's interest back to the nature, shaping their environmental attitude in the kindergarten education already to avoid being addicted to digital devices.

Children's environmental interest starts by doing adequate thematic activities, being part of the kindergarten daily programme. Villányi (2009) discussed the methods of the pedagogy for sustainability. Discovery plays an important role at the beginning of the learning process. Essentially, the objectives of the kindergarten classrooms must reflect sustainability.

Iván (2004) writes that a school can be considered "green" when the goals of sustainability infiltrate its pedagogic programme, completely taking part of its quality assurance system. The school's local condition is considerable when determining its environmental educational aims. Necessarily, the non-pedagogic employees, the teachers should be involved in the programme, besides the pupils.

The next parts of the paper illustrates some methods of environmental education which can be used both in kindergartens and schools.

3.1. THE BENEFICIENT EDUCATIONAL DEVICES OF A SCHOOL GARDEN AND THE "LIVING CLASSROOM"

Johannes Amos Comenius, the famous theologian and teacher who worked in Sárospatak, declared in his study of Didactica Magna in 1632 as follows: "There shall be a garden beside the school where the pupils can relax, where the pupils can study trees, flowers, medicinal plants comfortably and they learn how to enjoy them!"

At the time of the Rousseauian enlightenment, a collection of natural knowledge, botany and the pedagogy of the physical education spread parallel with the harmful effects. All of these became the part of the history of school gardens.

The Darwinian natural selection theory and cell biology scientific results brought about educational reforms, followed by the education of the natural sciences. As a result, more than ten thousand school gardens were created until the middle of the 20th century.

József Eötvös, religion and public education minister, proclaimed a law (Hungarian Law XXXVIII/1868 on public education) in parallel with the introduction of compulsory education and the initiation of making practice gardens.

Nowadays, the so-called School Garden Programme works in our country. According to the draughting of the programme the primary aim of the school garden is to provide a tangible, practical experience for the pupils from the work itself and from the production of values. More than 110 school have joined the school garden programme so far. A considerable number of the gardens are larger than 500 m². Currently, more than 80% of all school gardens were established after 2010 and the dynamical development of the programme was fruitful in later years (Lukács, 2017a). Among various type of school gardens the most common ones are the flower garden, the vegetable garden, the spice & herb garden and the compost heap. The most important goal of school gardens is environmental education and education for sustainability in Hungary (Halbritter, 2018)

Creating school gardens is not possible for all schools, especially in dense urban areas. Instead of school gardens, even a nature-friendly sunny shelf system of the classroom could fulfil a similar role, called a "living classroom". Plant exhibitions can enrich pupils' knowledge about the ontogeny of plants. The features of vegetal organs can be observed. Children can monitor how plants adapt to their environment. In case of the setup of weeds, the haphazardness and the tolerance of them are observable. The additional aim of the living classroom is to improve pupils' sense of responsibility (Dámné, 2005; Lukács, 2017b).

Reisinger and Bándy (2018) stated in their paper that school gardens can be one of the main tools for educating active citizenship. Their results show that citizens can be active in shaping environmental issues, but the most important factor seems to be that they need to be concerned personally about the issues.

3.2. FIELD TRIPS INTO NATURE AND FOREST SCHOOL PROGRAMME

Field trips and such excursions may be qualified as study work where the pupils are able to improve their whole personalities. They get as close as possible to the living environment, they become acquainted with natural and social phenomena and objects and they get the chance to study in natural circumstances. The additional effect of the field trips which should be emphasized is the knowledge to help children's emotional processing. Exploring the beauties of nature and to feel its aesthetic power are also an advantage of field trips. According to the topics of excursions, several nature transformer activities made by the humankind can be shown. Patriotism, the national self-awareness, local identity and popular education competences can be developed due to excursions (Dámné, 2005).

According to my own experience a young person's interest can be aroused by organizing canoeing tours and this is how pupils or students can be energised. I organized water camps for several years on the Tisza river, in the Tiszalök area. The aim of the water camps is more than a general examination of the living world of the Tisza river. The participants can observe the waterside flora and fauna habitats, and they face the physical challenge of rowing the canoes. In addition, I observed that the participants act as a solidary company even long after the three-day rowing camp. I think that the strength demanding work and the intellectual challenges acts as cohesive force between them.

Bilku (2004) says that the forest school is a specific learning organization form which is able to integrate the school's local curriculum, the subject of its cognition is the characteristically natural and sociocultural environment. The realisation of the programme is based on the students' activity. The teacher builds the teaching process primarily on a collective-learning technique. The forest school educates children how to make personal contacts by using the team opportunities. The weekly common work develops the students' social susceptibility in the course. The sense of practicality could significantly increase the self-sufficiency. The students' self-knowledge is converted by using the empirical way of learning. The uprising good relation between the teachers and the pupils helps them with their connection development. Likewise, the forest school is expected to increase the students' physical stamina.

3.3. THEMATIC EDUCATION PROGRAMME WITH THE APPLICATION OF THE PROJECT METHOD

John Dewey, who wished to break with the old methods of education, consulted about the project method firstly in the history of universal education, and he created his experimental school in Chicago in 1896. According to his principal aim of teaching he intended to place special emphasis on the real activity and the experience. He maintained the child's motivation by doing activity and he

perceived the process of learning as a row of acts; accordingly he considered the school life "active" by way of his theory. The teacher's task is complex in the course of the project work. The projects solved by the participating study groups are based on teacher instructions.

Nowadays, pupils' and the students' parents expect more practical knowledge from educational institutes. Therefore, the teacher's role is now changing; the young audience prefers a project-like organizing of the learning process and they dislike learning organization work based on frontal communication. Thus the teacher tries to place emphasis on the pupil or student active participation. We may accomplish the project method easily during biology lessons. Moreover, we may even organize thematic days to stimulate the youth to the cognition of a topic, and this can be a superb occasion to turn their attention to experimentation. An exploration-focused way of learning helps children to take responsible decisions, such as to use creativity urges, and to develop their problem-solving thinking (Hegedűs, 2007).

The value-creating projects, such as the popularization of farming work or any other related program supplies, appear to be essential for our future sustainability. In Hungary, it is part of the seminar curriculum of the biology teacher training programme that students prepare an optional example of the project method for popularizing the self-supporting farming. A study on practical methodology of mine discusses an optional example of the project method for popularizing the self-supporting farming. I defined the "farming" day programme in order to arouse student interest in self-supporting farming production. The aim of this programme was for children to appreciate rudimental work, and to gain cultivational and rudimentary knowledge on plant production and also animal husbandry. I consider it necessary for pupils and students to recognize the fundamental concepts of the rural self-supporting farming. In my opinion they should get to know the most frequent vegetable crops and domestic animals as well as appreciating a traditional lifestyle. The projects also have some additional advantages: they show whether a young person is able to learn how to create a subsistence farm with environmentally friendly methods for ecological agriculture. At the end of the project, students may be required to write a report on the inception of an optionally chosen farm and to have some knowledge about the production of some vegetables and fruit varieties and breeding of domestic animals. This may be an optional initiative permitting pupils to evaluate themselves at the end. Besides this, it should be pointed out that the personal competence connected with creativity is crucial from a pedagogical perspective since this is one of the basic competences to be improved. Social skills develop by working on the farm project of the thematic programme. During agriculture classes, acceptance and appreciation can be achieved by such programmes. Aesthetic and artistic ability is improved due to the part processes of the competition ability and due to the tasks embedded in skill subjects during the project work.

3.4. THE SELF-SUPPORTING FARMING AS A POSITIVE RESULT IN EDUCATION

There is an apparently obvious fact which nevertheless seems to be ignored: parents have an important role to play trying to increase their children's interest in appropriate environmental attitude. They generally do not offer any opportunity for their children to learn about farming or gardening. Nevertheless, this pedagogic aim would be useful to stimulate self-reliance and self-sufficiency in children.

It is commonly known that healthy food consisting of unobjectionable components originates from ecological farming. Traditional horticulture production and livestock conservation as factors of self-sufficiency may work again in the present as well as it worked in the past (Dobos, 2000).

In my opinion we can see some similarities between conventional, large-scale agricultural firms and other large industrial firms, and the motivations seem to be identical for both of them. Large-scale agrarian firms are focused on making as much profit as possible, rather than producing healthy food. Although the above mentioned quantitative production does not contradict any economic rules or regulations, from my point of view it may involve a substantial large ethical burden (Gyimóthy, 2015).

Environmentally friendly behaviour can be improved either on biblical and evangelical or on rational secular bases. It is of vital importance to deal with the Earth's ecological crisis, so it is significant what sort of agrarian production methods are used. Ángyán (2008) recommends ecological farming, instead of the soil blackmailing conventional agrarian production. He affirms that smallholders and medium-sized farms mostly use ecological methods in their farming activities.

4. CONCLUSION

I have pointed out those anomalies which disposed me to think what I have developed in the introduction of my paper. I feel real concern regarding the negative environmental attitude reflected in society. I mentioned the excessive increase in digital use during my teaching practice in numerous situations, based on my spontaneous observation in the student communities. Those who believe in the created world by virtue or by experience, may feel some moral responsibility to keep the unrequired effects of the social processes under control. Firstly, we may address small communities, then also larger ones, to reach that point from which a self-healing process may begin on a social level. After that, we will be able to recognize the consequences of the all-consuming digital consumption which causes self-centeredness, several types of dependence and the negligence of traditional real values. I think it is a wrong way to follow political campaigns agitating for a positive environmental attitude. It may seem to be the best solution to show our environmental conception just through our lifestyle, and not to expect and force others to think similarly. This could be a possible way to exhort the new

generation to reject the restraints placed on human individuality and a roboti-cized lifestyle, so that the people may turn back towards the values of the created world, due to a positive environmental attitude becoming continually more and more popular in public thinking.

I have pointed out that people may experience isolation when spending time in the virtual space. Therefore, they may become victims of physical loneliness.

The domestic institutional education system provides all the knowledge for the benefit of the next generation. Online content can be reached promptly with a few mouse clicks, and this immediately satisfies any childlike curiosity in the young. Browsing in the virtual world of instant gratification completely extin-guishes the chance of gradual discovery and the retardation of the children's expectations. Therefore, they become addicted to the technologies while they are not able to accept the laws of the nature.

These examples may lead to an increasing value creation as it popularizes the ability of self-sufficiency as well as sustainable life. School excursions, forest schools and project works can help the children to interiorize the aims of sustain-ability. The pedagogy of self-sufficiency organized by the schools, common family gardening and self-supporting farming play a key role so that there may be more and more people who love and admire the living environment.

REFERENCES

• Ángyán J. (2008) *Tájgazdálkodás és vidékfejlesztés.* Szent István University, Faculty of Agricultural and Environmental Sciences, Institute of Nature Conservation and Environmental Management, Szent István University Publishing House, Gödöllő.

• Batthyány, D.–Müller, K.–Benker, F.–Wölfling, K. (2009) Computer game playing: clinical characteristics of dependence and abuse among adolescents . *Wiener Klinische Wochenschrift,* 121, 15–16, pp. 502–509.

• Bilku, R. (2004) Erdei iskola. In: Albert J.–Varga A. (eds.): *Lépések az ökoiskola felé.* National Institute of Public Education, Budapest. 71–78.

• Block, J. (2008) *Addiction to internet is an illness,* Macmillan Publishers Ltd. https://www.theguardian.com/technology/2008/mar/23/news.internet Downloaded: 01 10 2017

• Buda A. (2012) Az információs társadalom tanártípusai. In: Pusztai G.–Fenyő I.–Engler Á. (szerk.): *A tanárok tanárának lenni.* Debrecen University, Center for Higher Education Research & Development, Debrecen. 129–138.

• Dámné Erdei G. (2005) *A környezetismeret-természetismeret tanításának módszer-tana.* Debrecen Reformed Theological University, Kölcsey Ferenc Teacher Training Insti-tute, Dept. of Sciences, Debrecen.

• Dobos K. (2000) *Családi gazdaságok.* Mezőgazdsági Szaktudás Kiadó, Budapest.

• Frölich, J.–Lehmkuhl, G.–Döpfner, M. (2009) Computer games in childhood and adolescence: relations to addictive behavior, ADHD, and aggression. *Zeitschrift fur Kinder- und Jugendpsychiatrie und Psychotherapie,* 37, 5, pp. 393–402.

• Gacsályi Zs. (2017) *Reformed Worship.* Debrecen-Józsa Reformed Congrigation, Worship 10th September, 2017.

- Golnhofer E. (2009) *A tanulás fejlesztése és a nevelői kompetenciák*. Eszterházy Károly Egyetem, Oktatáskutató és Fejlesztő Intézet. http://ofi.hu/tudastar/tanulas-fejlesztese/tanulas-fejlesztese-090617-1 Downloaded: 16 09 2017
- Gyarmathy É. (2011) A digitális kor és a sajátos nevelési igényű tehetség. *Fordulópont*, 51, 79–88.
- Gyimóthy G. (2015) Az ökológiai gazdálkodás lehetőségei a református egyház gyülekezeti közösségeiben. *Mediárium: Kommunikáció, Média, Társadalom*, 9, 3–4, 69–77.
- Halbritter A. A. (2018) *A 2018. évi országos iskolakert-felmérés eredményei*. Iskolakertekért Alapítvány, Budapest. http://www.iskolakertekert.hu/az-iskolakertekrol/2018-as-orszagos-iskolakerti-ovodakerti-felmeres Downloaded: 10 10 2018
- Hegedűs G. (2007) *A projekmódszer, a projektpedagógia Magyarországon.* Kecskeméti Főiskola, Kecskemét. http://rmpsz.ro/uploaded/tiny/files/magiszter/2007/osz/03.pdf Downloaded: 01 10 2017
- Iván Zs (2004) Környezeti nevelés az iskola pedagógiai programjában In: Albert J.–Varga A. (eds.): *Lépések az* ökoiskola *felé.* National Institute of Public Education, Budapest. 9–14.
- Janszky J. (2016) *Magyar kutatók szerint ilyen az internetfüggőség (radio interview).* http://www.hazipatika.com/psziche/fuggosegek/cikkek/magyar_kutatok_szerint_ilyen_az_in-ternetfuggoseg/20161109123633 Downloaded: 01 10 2017
- Jensen, E. F.–Ellis Nutt, A. (2016) *A kamasz agy - Útikalauz a serdülőkorhoz*. Libri, Budapest.
- Kaczynski, T. (1995) *Industrial society and its future.* Jolly Roger Pr, Bristol. http://www.photodady.com/kaczynski2.pdf Downloaded: 01 11 2018
- Louv, R. (2008) *The last child in the woods,* Algonquin Books, Chapel Hill, NC.
- Lukács I. (2017a) *Az iskolakertek története.* Nádland Kft., Budapest. http://www.iskolakertprogram.hu/az-iskolakert-tortenete Downloaded: 16 09 2017
- Lukács I. (2017b) *Iskolakertek ügye.* Nádland Kft. Budapest. http://www.iskolakertprogram.hu/foldmuvelesugyi-miniszteriumban-az-iskolakertek-ugye Downloaded: 16 09 2017
- Polányi K. (1957) *The Great Transformation - The Political and Economic Origins of Our Time.* Beacon Press, Boston.
- Reisinger A.–Bándy K. (2018) Different Ways of Environmental Issue Management by Active Citizens: Case Studies from Hungary. *Managing Global Transitions*, 16, 3, pp. 259–278.
- Tauszig, M. (2014) *A játékfüggőség tünetei és kezelés.* Centrál Digitális Média Kft., Budapest. http://www.hazipatika.com/betegsegek_a_z/jatekfuggoseg/822 Downloaded: 01 10 2017
- Végh L. (2018) *Előadásjegyzetek*: *A gazdság által kedvelt egyén.* Atommag Kutató Intézet, Debrecen http://w3.atomki.mta.hu/kornyezet/f18t.pdf Downloaded: 10 10 2018
- Villányi Gy. (2009) *A környezeti nevelés alakulása az óvodai nevelésben – úton a zöld óvoda felé.* Eszterházy Károly Egyetem, Oktatáskutató és Fejlesztő Intézet. http://ofi.hu/tudastar/gyakorlatkozelben/kornyezeti-neveles Downloaded: 16 09 2017

Legal resource:
- Hungarian Law XXXVIII/1868 on public education