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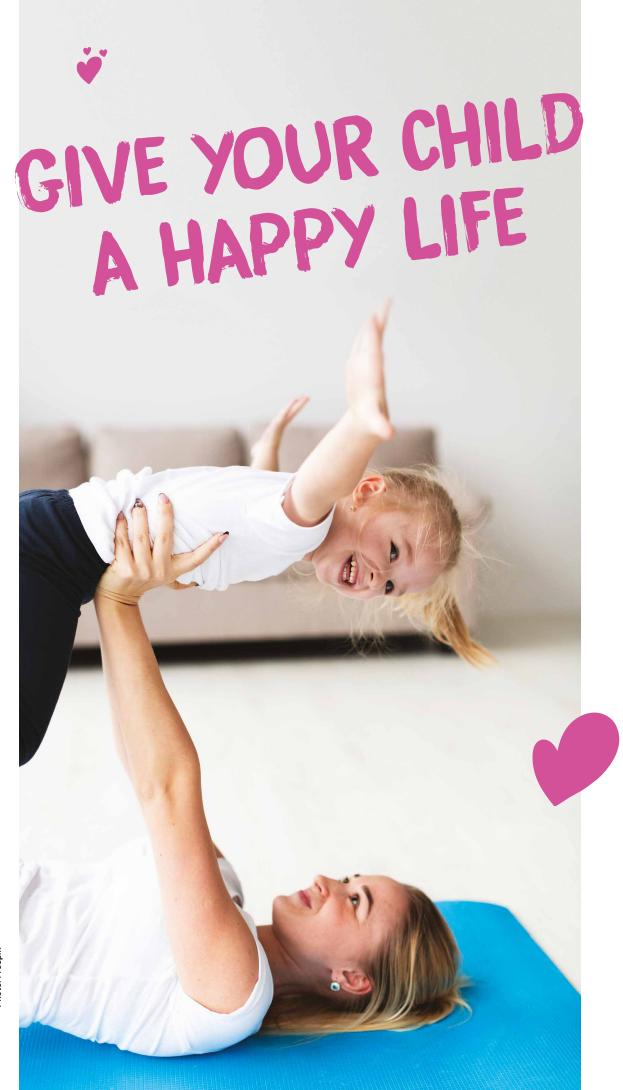


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Katarzyna Suchańska

Sylwia Wrona, PhD Institute of Pedagogy Faculty of Arts and Educational Science University of Silesia sylwia.wrona@us.edu.pl All responsible parents are aware of how much commitment and knowledge is required to look after their children. Some are able to be more independent, while others are tied to their mother's apron strings out of fear of making their own decisions. The initial stages in children's development play a crucial role for their future, especially in those with observed abnormalities. To ensure that their children are off to a good start, many parents opt for early childhood development support classes. What are they and which children need help in the early stages of life?

Some children may struggle with serious health problems right from the very beginning. In such cases, they will be looked after by specialists and offered assistance in coping with their illnesses. Some of them are temporary and completely curable. How can you spot abnormalities in your child and how should you go about seeking help? Sylwia Wrona, PhD, from the Faculty of Arts and Educational Science of the University of Silesia, Head of the Postgraduate Qualifying Studies in Early Childhood Development and Family Support, says that developmental abnormalities aren't always noticed right away. Sometimes it takes a while for them to become apparent. If a child is born with a genetic defect or visible dysmorphic features, doctors usually notice it very quickly and take appropriate steps to further the diagnosis and, most importantly, to recommend rehabilitation measures. However, sometimes a child needs to start crawling, moving around, and babbling to show that they are suffering from an abnormality.

'This is when parents should seek medical advice', suggests the specialist. 'If the concerns are confirmed by the doctor, the next step is to go to the psychological and pedagogical counselling centre with a medical certificate of the diagnosed abnormalities'. Then, a team of specialists can issue a decision on the need for early development support. At this point, the child can start therapy in the indicated centres. Bear in mind that this is just one of the pathways that parents can take. Other facilities that provide support include rehabilitation and education centres and leading coordination, rehabilitation and care centres offering early intervention classes. Unfortunately, the latter are few in number.

Under Polish law, early childhood development support is available from birth until the child starts primary school. Among the most common reasons for early development support are problems with eyesight, hearing, and delays in psychomotor development. Premature babies are a group with the highest risk of developing various abnormalities.

'Therapy brings the best results when specialists work together with parents', says the researcher. 'Although people often assume that parents are helpless without the involvement of a specialist, they in fact have the greatest influence on their child's development, even when abnormalities are identified. Research confirms that the better the quality of cooperation, the faster the results start to appear'.

A young child develops best during prolonged and structured exercises. These include the more specialised ones as well as the ordinary everyday activities. Forcing the child to do a lot of boring exercises tires not only them but also the parents.

'Activity should be sought everywhere. Everything is important in a child's development: how they sit at the table, the way they walk, whether and how much they hunch over, and how long and how close they sit in front of a computer screen. Correct body posture in all of these situations and the correct distance from electronic displays can correct many defects, and when combined with therapeutic activities under the guidance of professionals, the probability of achieving the desired results increases greatly', explains the researcher.

When a child enters the next stage of their life and starts school, they come under the care of school counselors and teachers. At this and other stages of life, it is the parents or legal guardians who take care of the child. The child is never deprived of care.

There is a therapeutic kindergarten called Słoneczna Kraina (Sunny Land) at the Cieszyn Campus of the University of Silesia, near the Faculty of Arts and Educational Science, run under the auspices of the university. The pupils are cared for by scientists from the University of Silesia, as well as by a qualified teaching staff. The researchers focus on introducing new methods into the curriculum and monitoring their effectiveness. In comparison to other such institutions in Poland, this kindergarten is a pioneer in introducing model solutions. Although many people with different specialisations are involved, they are guided by one common goal: to ensure that the child receives proper care and leads a healthy and happy life.



Art education plays an important role in children and young people's educational process. It is crucial in developing imagination, creativity, communication skills, problem-solving skills, and self-expression through various artistic media such as drawing, painting, photography, music, and dance. Through art, children learn to express their thoughts in an original and unique way and to relate to their environment. Prof. Urszula Szuścik, an educator, psychologist, and visual artist from the Faculty of Arts and Educational Science of the University of Silesia in Katowice, talks about the challenges of art education.

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THE IDEA BEHIND ART EDUCATION

ART EDUCATION - THE BEGINNINGS

The beginnings of art education in Poland date back to the reign of Stanisław August Poniatowski, i.e. the second half of the 18th century. Prior to that, art was treated as a craft, and art teaching in schools was rare. It was conducted only in certain types of schools, usually on an optional basis, and not as an element of children's formal education.

In the second half of the 18th century, fine arts, music, and theatre enjoyed growing interest in Poland, and the artistic community was developing steadily. The artistic community in Kraków, later also in Warsaw, played a significant role in the development of artistic education. However, this initially informal teaching of fine arts did not involve art education being included in school curricula. Even later, the so-called drawings were not a compulsory subject. The role of art in the education and upbringing process was only recognised in the 19th century. This was due to the development of pedagogy as a separate scientific discipline, among other factors. At the end of the 19th century, the interest in research on children and their artistic endevours increased, and the first studies on their development, upbringing, and the formation of attitudes were initiated.

The 20th century saw intensive development of children studies. Attention began to turn not so much to shaping children in terms of their abilities, but through creative activities intended to bring out their potential. The basic principles of modern art teaching methodology began to be implemented in the inter-war period. It was facilitated by the development of psychology, as well as by the emergence of new artistic trends, such as Expressionism, Impressionism, Abstractionism, and Symbolism. All of this had a significant influence on the development of the new educational programme and the current of new education, which took into account children studies, the mechanisms of their development, and their understanding of the world.

In Poland, of note are the works of Stefan Szuman, who emphasised the role of art as that which educates a person culturally and shapes their psyche. The author believed in three basic principles of aesthetic education: availability (art should be subject to the direct influence of the audience), accessibility (educational activities generating interest and demand for art in the audience and teaching them how to look and appreciate art) and art promotion (bringing art closer to the broad masses of society by making the best works easily available and widely accessible). His understanding of aesthetic education is still relevant, even though nowadays many elements of education have been replaced by globalised modern technologies allowing for the transmission of information and images.

Outdoor painting for children (Cieszyn 2015) conducted by Prof. Urszula Szuścik and Julia Gąszczak-Wilde, MA | Photo: Julia Gąszczak-Wilde



GOOD EDUCATION

Education, not only art education, starts already in the family environment and continues at the next levels of education - kindergarten and primary school. Often the initial stages are downplayed and underestimated. Pre-school and early school children are characterised by a high degree of spontaneity and a desire to discover the world and acquire knowledge. Therefore, it is necessary to help them develop their creative thinking skills. Meanwhile, reproductive activities are often the predominate ones. They do not help children develop, as they do not create problem situations in which children come to solutions on their own. The basis for this process should be a well-structured teaching and learning process. Well-thought-out education promotes the development of the child and supports their intellectual, emotional, social, and aesthetic development. It is also extremely important in terms of learning about the world and about oneself.

Thus, art in children's education should not be reduced to a tool used to illustrate the world. Art education should teach young people about the values of beauty, i.e. facilitate the development of a human being who is sensitive to all expressions of artistic and non-artistic beauty.



Good education is all about the child's creativity. Such education consists of turning the young person's attention to the organisation of the place of this activity, to the form of expression, and to the relationship with the environment through creative activity. It is a mistake not to create problem-solving, exploratory situations in which the child comes to solutions on their own. This is one of the most important aspects of child development, which is not at all widely recognised, even by educators.

'Art often escapes the general discourse on child creativity. It is important that activities related to art or music are kept strictly to the use of artistic means and do not appear as complementary to other activities that are called creative', states Prof. Urszula Szuścik.



A good musical and visual arts education puts the child's world in order. It enables them to know what they are doing, why they are doing it, and what they want to express; they are also able to consciously use and name artistic means of expression.

'If a child says: "This is a portrait", I know that the child will be able to recognise a portrait even in an noneducational situation, such as a trip with their parents', the researcher explains. "The idea is to pay attention to the use of language related to experiences. Of course, the child can fully understand it only at an appropriate stage of development'.

The educator from the University of Silesia points out that the problem is quite large and significant. We need to put more effort to ensure good education of the arts – visual arts, music – at school. However, all these activities require specialist teachers. Specialists in art education have a broader skillset, which gives them more options to create the aforementioned problemsolving situations for children. It is not about teaching them definitions, but about experiencing, experimenting and setting up unconventional situations for creative action, so that children can venture beyond the common patterns. 'If it is raining, it is not enough to paint rain. You can introduce a specific technique, talk about colours, show examples from the world of art, delve into deeper issues related to colour temperature', explains Prof. Urszula Szuścik. 'A child will always draw something, but what is important in the course of their education is their awareness of the use of such elements of artistic language as colour, line, spatial form, texture, composition, sound, and the resulting subjective cognitive and aesthetic value. Musical culture develops through spontaneous activities, i.e. musical improvisations, singing, and humming. There are children who are trained, who go to musical mornings, e.g at the philharmonic - these activities educate and nurture. Often times school or kindergarten is the only place where this aspect of art as a value is available to children'.



It is important to remember that without knowledge of psychology, including the psychology of artistic creativity, we will not offer anything close to a deep experience. The aim of pedagogical action should be to generate the child's inner need for creativity, to encourage creative experience, and teachers should be offered a lot of curricular concepts in art education, at the same time indicating very clearly the goals and the developmental and cognitive consequences resulting from their implementation. For art education is about educating the society, not about manufacturing artists.

TO LEARN ABOUT CULTURES IS TO APPRECIATE DIFFERENCES INTERCULTURAL EDUCATION

For centuries, there has been great ethnic and religious diversity in the territory of present-day Poland. It was not until the forced resettlement of the population after 1945 and the attempts to create a single, valid 'Polish identity model' that Poland became one of the most homogeneous countries in the world. It is more difficult for us to open up to people from other cultures when we are not in contact with them, and it is also easier to fall into the trap of stereotypes. The solution may lie in intercultural education, making it easier to open up to the 'stranger'.

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COMBINING KNOWLEDGE WITH EMOTIONS

It is easy to confuse multicultural education with intercultural education, as both refer to diverse backgrounds. However, there is a fundamental difference. In the first case, we gain knowledge about other cultures, try to understand them, but the engagement is missing and we may still maintain the belief that 'others' are alien to us.

'Intercultural education is an attempt to break the standstill of multicultural education. This is because it focuses on interactions between people from different cultures. We encourage an understanding of the Other, a respect for difference. Most importantly, intercultural education makes it easier to understand that all cultures are equally valid and valuable. It enables us to get rid of the feeling of superiority', explains Barbara Grabowska, PhD, DLitt, Associate Professor at the Faculty of Arts and Educational Science of the University of Silesia in Katowice.

Knowledge alone is not enough to instil certain attitudes in someone, which is why teaching methods that involve emotions and make the student feel something on their own are so effective. Ideally, young people from different backgrounds should be in the same class or school because this is the easiest way to exchange experiences. However, even when this is not possible and the group is homogeneous, tried and tested simulation methods can be used. One such method is role-playing, where students are assigned distinctive characteristics and told to act out certain scenarios. This alone is enough to trigger empathy and a sense of 'stepping into someone else's shoes'.



TEACHER'S SENSITIVITY

A lot depends on the teacher, their sensitivity and whether they learned the tenets of intercultural education themselves. You can equip someone with knowledge, but you cannot force anyone to treat another person with respect.

'Intercultural education implies respect, understanding, and acceptance of cultural differences, and teachers play a key role in shaping this approach at school. An important part of a teacher's sensitivity to cultural diversity is the ability to notice and appreciate differences between students. The teacher should be aware that their pupils may come from different cultural backgrounds and have different traditions, languages, values, and norms. The teacher's sensitivity allows to effectively account for them in the teaching process', believes Prof. Barbara Grabowska. Therefore, the teacher should be open to intercultural dialogue. In doing so, communication is key to understanding and resolving any difficulties arising from cultural differences. A sensitive educator adapts teaching methods and teaching materials to the students' diverse cultural backgrounds. They should also create an atmosphere of mutual respect and acceptance so that students can share their experiences. The researcher notes that such an approach not only fosters a better understanding of cultural differences but also promotes mutual respect and opens students to cooperation, which is an important part of preparing the younger generation to function in a global society.

SILESIAN EXPERIENCES

For centuries, Silesia has been a place where different cultures and faiths meet. They were able to coexist in harmony for a long time. It is not unusual to find a German-sounding surname in the region, and you may come across Protestant churches in the vicinity of a Catholic church. A remnant of the former cultural melting pot are also the (unfortunately much neglected) Jewish cemeteries.

As a border region, Silesia was able to reconcile different realities, at least un-

til World War I and then World War II, when changes to the existing borders threw the people living in the area into a completely different world, which they had to learn anew.

'The Silesian language encountered difficulties. Following population movements and after Silesians of German origin were forced to leave their homes, there was a shortage of labour. Teachers from different parts of Poland were hired and many of them did not know Silesian. They fought against it all the more because they did not understand what their pupils were saying to them', says Prof. Barbara Grabowska.

If intercultural education had been known at the time, it might have been possible to avoid at least some of the harm and trauma that Silesian pupils suffered back then. Fortunately, today we do not have to repeat past mistakes, and by appreciating other cultures, we can learn a lot from each other.

Janina Marcinkowa Student Song and Dance Ensemble 'Ziemia Cieszyńska', Cieszyn folk costume | Photo: Wojciech Korpusik



FITTING IN WITH THE KEY OR FINDING YOUR OWN APPROACH

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Photo: USil archive

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'A fundamental mistake of the education system in many countries, including Poland, is that in secondary schools we teach young people for the sole purpose of achieving the best possible score on the Matura exam. You have to fit in with the answer key. What good is talking about experiments, hypotheses, or chemical reactions if they are not based on any practice? Meanwhile, there are many simple activities, e.g. chlorophyll extraction, which do not require sophisticated apparatus and could be performed in a school room. But it rarely happens, which is why the changes in education are so needed. The core curriculum has been "slimmed down", but this is not the be-all and end-all, only the bare necessity to reduce the amount of material that students have to learn', says Aleksandra Nadgórska-Socha, PhD, DSc, Associate Professor of the University of Silesia, Degree Programme Director: Biology, Biotechnology and Environmental Protection at the Faculty of Natural Sciences of the University of Silesia in Katowice. According to the scientist, the material should also be differentiated according to students' interests. Everyone should acquire basic knowledge in biology, while only those interested in pursuing it further should delve into the fine details. What's more, these types of changes, at every level of education, need to be made in cooperation with specialists from various disciplines, i.e. pedagogy, psychology, and biological sciences.

We can already notice some changes, although not yet globally. Recently, my niece was telling me about her homework assignment. It involved coming up with *Organic farming, 100% recycled polyester, cruelty-free makeup.* When shopping, we increasingly often read labels; we are no longer only interested in the ingredients but also in the conditions under which they were produced. But what do these and similar buzzwords really mean? Isn't this just simple greenwashing, i.e. false ecological image that manufacturers like to use in order to sell their products? The Internet tells us that being green is worth it – if not to save the planet, then perhaps for our health and the future of our children. But we need the right competencies, the basic knowledge and skills to help us make rational and responsible decisions in a world where economics still triumphs over environmental concerns. We should start acquiring these competencies from the very beginning of our education at school and develop them throughout the rest of our lives.

a way to demonstrate how hydrochloric acid works in the stomach. So, she bought chicken stomachs and had hydrochloric acid, baking soda, and coca-cola at her disposal. She carried out the experiment all by herself and it was great! The vital difference was that there were no ready-made solutions, where she would only exercise her memory and her ability to follow instructions. Instead, there was a certain openness to creativity, to the crucial opportunity to make mistakes, and to independence. We have to teach students to draw conclusions from observation, from experimentation. Not the answer key, but your own approach to learning', stresses Prof. Magdalena Rost-Roszkowska, also from the Faculty of Natural Sciences of the University of Silesia, a chemist and biologist who studies the effects of plastics on living organisms.

At the end of 2023, the scientists took part in a symposium on modern biological education entitled 'Edukacja – czas



na zmiany. Część I: Nauki przyrodnicze' [Education – time for changes. Part I: Natural Sciences] organised by the Polish Academy of Arts and Sciences. Prof. Magdalena Rost-Roszkowska emphasises that those attending the symposium were in no doubt that changes in biology teaching are necessary. For inspiration, we can look to education systems in such countries as Finland, Japan, and South Korea. 'Textbooks are important, but it is equally as important to put them down and get out for a trip into the woods, for example. Children learn about nature by literally touching it, and that's how it should be. Experiences are more memorable than definitions', admits the researcher.

Prof. Aleksandra Nadgórska-Socha concurs and adds that this is also the right path for secondary schools to follow.

"We can now see how pivotal green lifestyle is. But what good does it do when such issues as biodiversity or nature conservation only appear at the end of our education? Far too late for us to be able to talk about developing the right attitudes and not just those "fashionably" pro-environmental. It comes as no surprise that *green deal* and *green transformation* exist only as theoretical propositions and empty buzzwords', emphasises the scientist.

She supports her thesis by citing the results of the survey conducted among young people in secondary schools together with scientists from the Ecology Team: Gabriela Barczyk, PhD and Marta Kandziora-Ciupa, PhD.

'Even if young people are able to define biodiversity and list forms of nature conservation, they do not connect this with their actual lives in any way. They cannot answer how they could protect the said biodiversity themselves. They do not understand what sustainable development is, although they can give a proper definition of it, and they are not familiar with the term *Anthropocene*. A lot depends on the sensitivity of





teachers. They should be given proper tools to teach biology and natural sciences in a modern way'.

What needs to be done to give concepts a proper meaning and ensure that pro-environmental attitudes are not just a passing social media fad? Before the changes in the education system take hold, it is worth taking up grassroots action.

Prof. Aleksandra Nadgórska-Socha brings up her own classes as an example.



'If we are talking about destroyed ecosystems, we go out and see the waste heaps or other post-industrial sites. When we are discussing biodiversity, we analyse untransformed ecosystems or flower meadows in the city. If we want to learn about some ordinary forest species, we don't have to travel far, we have them within a few kilometres. And if we are tackling the issue of waste sorting? Let's look for bins and see what waste sorting looks like in our towns. Then we can analyse what we have seen and discuss what could be improved'.

Prof. Magdalena Rost-Roszkowska also emphasises the importance of personal experience.

'I explain the ideas of *zero waste* and *less waste* to my child by e.g. taking him shopping. Food products and chemicals with a short shelf life are usually discounted, but that doesn't mean they are inferior in any way. It doesn't mean that the day after the expiration date they should be thrown away. We buy them not because of the price, but precisely so they don't end up in the bin', says the researcher. 'When I see students with

drinks in disposable cups with straws made of plastic, I tend to point out those seemingly insignificant things. I recommend carrying your own cup and a metal straw. I have such a set myself', she adds.

The topic of plastics is important to Prof. Magdalena Rost-Roszkowska who invites biology students to participate in her research projects.

'They carry out a biological experiment as part of their studies. It is fascinating how students get involved in this activity', she explains. In her group, the scientist proposes a topic related to her research. The results are very good: 'My group brainstormed and the young people planned an experiment. The first one didn't work out so well, so they met again and analysed what went wrong. The second one turned out successful. At the end, we reviewed the subsequent stages together. I saw in them people who were committed to the topic and were able to spend hours in the lab to find a solution. Suddenly, they began to wonder what the sandwich bags that many of them pack their lunches in every day were made of, and how the rubbish that is generated in this way can affect different organisms. It is worth mentioning that students have the opportunity to present the results of their analyses at scientific conferences, and their names are often featured in scientific publications as co-authors.

Prof. Aleksandra Nadgórska-Socha also emphasises the importance of involving students in the scientific activities of university employees. The Biology Experiment module is an example of such an activity, but there is more to it: this is also an offer for those choosing to become teachers. Thanks to this experience, they can then apply similar methods in primary and secondary schools. It is an interesting way to learn critical thinking, activity planning, data analysis, and drawing conclusions. A novelty in the educational offer for, among others, biology students at the University of Silesia is area-based education allowing them to select additional thematic modules to study. These may include: artificial intelligence and data analysis: methods and tools, which is perfect for people studying biology. There are also other areas to choose from, such as creative expression and critical thinking, the boundaries of science, personal development and health, and civil society and entrepreneurship with a legal vademecum. On the other hand, those studying other degree programmes can choose modules related to biology, from the area of natural environment and technology, i.e. catastrophic elements and green technologies. In this way, they gain skills that they can successfully implement not only in their scientific discipline but also in everyday life. They have the opportunity to better understand what the aforementioned buzzwords, such as the Anthropocene, global warming, and biodiversity stand for and to be more sensitive to cases of *greenwashing*. What's more, they might also analyse their regular daily activities and think about what they can actually do for the environment.



It is never too late to change your attitude. Therefore, we should undertake extensive educational activities to shape the proper pro-environmental attitudes. These activities will help young people understand the modern world and give them new, much broader competencies. Both researchers are firmly convinced that it is a worthwhile undertaking.

TOWARDS SYMBIOCENE*

*We use the ideas of Glenn Albrecht, a transdisciplinary environmental philosopher, who in 2011 postulated the creation of a new conceptual framework for a new era, which he called the "symbiocene". He presented it in the book *Earth Emotions. New Words for a New World*.

Photo: nikilitov - Fotolia

The sixth great extinction, biological annihilation, eco-apocalypse, armageddon – these are just some of the terms we are likely to hear from climate scientists when asked about the ongoing climate changes.

THE FUTURE OF CLIMATE EDUCATION IN POLAND



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Prof. Plotr Skubara Institute of Biology, Biotechnology and Environmental Protection Faculty of Natural Sciences University of Silesia piotr.skubala@us.edu.pl Narratives and stories are powerful – they affect imagination, evoke emotions, and encourage action. Magdalena Ochwat, PhD, from the Institute of Polish Studies of the University of Silesia and Prof. Piotr Skubała from the Institute of Biology, Biotechnology and Environmental Protection of the University of Silesia talk about the effectiveness of environmental education based on the humanities and natural sciences.

LIVING ON CREDIT

Merciless data confirm that we need to take seriously all those grim scientific prognoses regarding the future of our planet.

'According to the concept of ecological footprint, which defines the level of pressure humans exert on the biosphere, we are currently using 175% of the planet's resources, i.e. 3/4 more than is being created', says Prof. Piotr Skubała.

Another strong term is Earth Overshoot Day or, in other words, Ecological Debt Day. This is the date by which humanity has used its annual resources (soil, fossil fuels, forests, water, etc.) to produce all kinds of goods and exceeded the planet's ability to replace them. In 2023 it was 2 August, whereas in Poland it fell much earlier, on 2 May. In 2009, when the concept of planetary boundaries, defining a safe space for our activities, was first presented, three out of nine safety thresholds had been exceeded; by now we have exceeded six of them. Currently, species are going extinct at a rate thousands of times higher than the natural rate.

'Climate change is said to be only gaining momentum', explains the biologist.

VOICE OF THE YOUNG

Magdalena Ochwat, PhD is certain that the European Green Deal will only be possible if the right education policy is launched and a profound social transformation takes place.

'Schools need to teach about what is happening to our planet and reflect critically on the ways in which *Homo sapiens* has been inhabiting it based on destruction, extraction, and exploitation', she argues. The degradation of the environment will not leave the morality, sensitivity, and imagination of the youngest generation unaffected, and we will all feel its consequences. Therefore, schools have the duty to prepare students for the inevitable.

'Education on the climate crisis should be a core element of the curricula for all courses', argues Magdalena Ochwat, PhD. The scientist also points to the increasingly vocal needs of younger generations demanding that up-to-date climate and environmental knowledge should be made available to them.

'Environmental education and climate education are essentially about the same thing', explains Prof. Skubała. 'They both show us the possible ways out, pointing out the need to care for the Earth, nature, animals, plants, and people. When we talk about climate education, we are as much concerned with the climate as with the environment, biodiversity, and nature in all its richness. Climate and nature cannot be treated as separate issues'.

COLD SHOWER

'Are pupils in Polish schools aware of the crisis? How much time is devoted to it? Does the school teach about the causes? Does it focus on our responsibility for the fate of the endangered Earth? Are children, teachers and young people looking together for ways out of this situation? Does the Polish school teach students about what each of us, our families, the state, and humanity as a whole should immediately change if we want to preserve the world as we know it? Is school education centred around the knowledge of dependencies?', asks Prof. Piotr Skubała.

The answer to each of these questions is a resounding no. 'Information on climate and environmental education hardly appears in the core curriculum of school courses', points out Magdalena Ochwat, PhD. 'And if it does, it is scattered, selective, and present only in extended curricula'.

Prof. Skubała is critical about Polish

textbooks, but not due to the lack of care: 'There is little information there about anthropogenic emissions and greenhouse gases. Words such as global warming, climate change, and biodiversity crisis are avoided', he points out. According to a 2021 survey carried out on 2,181 students by the Interdisciplinary Centre for Research on Education of the University of Silesia, nearly 60% found climate education to be unsatisfactory. Only 37.65% of students indicated that climate change issues are addressed in their schools.

Prof. Skubała presents New Zealand as a leader in climate education. In this country, climate neutrality is to be achieved by 2050. Based on the correct assumption that positive practices



should be instilled in society from an early age, a programme has been launched there to encourage students to make pro-environmental choices. Since 2020, New Zealand's youth is taught in schools what the climate crisis is all about, as well as what activism and environmental fear look like. Another example is Italy, which introduced compulsory classes on climate change awareness in schools. In addition to separate classes that will take place once a week, the Italian Ministry of Education also announced the introduction of elements of sustainability into such courses as biology, geography, and physics.



'The Polish school system needs a holistic approach to climate and environmental education', argues Magdalena Ochwat, PhD. 'People tasked with education reform in Poland should listen to the voices of young people and take their expectations and recommendations into account when developing new core curricula'.

Prof. Skubała points to the need to present life as a set of dependencies. A teacher should be willing and able to explain to their pupils what the inextricable threads connecting all elements of earthly existence are.

The primary goal of education should be to make the pupils feel that they are part of the great web of life', he says. 'Only by creating a deep, emotional



connection with nature can a young person appreciate its inherent value and take environmentally conscious action'.

One of the most important terms that appears in climate education thought is *Symbiocene*, or the awareness of being connected to everything that surrounds us. Symbiocene is to provide us with a conceptual framework for the coming era. The Polish school system needs to introduce terms such as *climate crisis* and *biodiversity crisis* into the core curriculum. Climate education is supposed to lead to a shift in our consciousness towards a biocentric, ecocentric, and symbiotic awareness and a sense of community with other people and nature.

CLIMATE EDUCATION

Magdalena Ochwat, PhD and Prof. Skubała included their suggestions for climate education within the project 'Geologos. Humanities in the time of the Anthropocene' funded by the Excellent Science programme of the Ministry of Education and Science. Among them were such recommendations as the introduction of climate and environmental education at all stages and levels of education and in every course, including academic education, changes to teacher training in all areas of knowledge, changes to the methodology in favour of field-based, engaging education, future-oriented education, the interdisciplinary nature of the environmental content presented, a return to cross-curricular paths in schools and, within academic education, consideration of the interweaving of disciplines, an appreciation of regionality (indigenousness, locality, and territoriality) and the perception of pro-environmental behaviour as civic and patriotic. An interesting proposal is the introduction of Fridays free from indoor classes in favour of project and field work.

CATASTROPHE OF IMAGINATION

Magdalena Ochwat, PhD argues that the lack of faith in the potential of the humanities was a significant mistake made in the previous attempts at environmental education. The primacy of the natural and exact sciences over narratives that influence the way we perceive the world made environmental awareness ineffective. The neglect of imagination exercises, operating only with numbers and diagrams led us to the point where even when presented with the knowledge of the dire situation of our planet, we are still unable to believe it.

Prof. Lawrence Buell, an American literary scholar and founder of ecocriticism, warned us more than 30 years ago that the environmental crisis is a product of the crisis of imagination. Today, as the researcher notes, we are facing a catastrophe of imagination. Abstract curves and diagrams should be replaced by stories – this is the only way to open up young people's imagination. It is unlikely that empathy for anything or anyone will develop without it.

A RAY OF HOPE – THE CLIMATE IN KATOWICE

At the beginning of 2024, the Katowice climate education programme was launched as part of the European City of Science Katowice 2024 (ECSK 2024) celebrations. It was developed in cooperation with the Open University at the University of Silesia and with the support of UNICEF. Magdalena Ochwat, PhD and Prof. Piotr Skubała are members of the Team for the Development of a Pilot Curriculum for Climate Education, which was established back in 2022 and is being implemented in self-government schools in Katowice. The initiative developed four guiding areas of the original climate programme for Katowice, namely criticism of consumerism, loss of biodiversity, anthropogenic climate change, and energy transition. The programme was complemented by practical activities for teachers, including nature workshops and field activities (e.g. forest bathing). As far as Polish self-government schools are concerned, this is a novel programme, whose uniqueness lies in the integration of climate change content into the core curriculum of all courses at the second education stage (in 7th grade of primary school). It is intended to facilitate the formation of pro-environmental attitudes and environmental awareness in young people. The classes will be interactive and interdisciplinary and will aim to engage students in discussion and motivate teachers to teach with passion.

As of the 2023/2024 school year, two video games have finally been included in the secondary school Polish language curriculum: *This War of Mine* and *Cyphers Game*. Although both titles are only on the supplementary reading list, it is still an important step towards fully appreciating video games as a cultural product that can be used in the teaching process.









Game studies – understood as a research field rather than as a discipline – have been developing for over 30 years

This War of Mine is a game inspired by the siege of Sarajevo during the Balkan war in the 1990s and released in 2014 by Poland's 11 bit studios. The player takes on the role of a resident in the city of Pogoren and must make morally difficult choices to find shelter, food, and medicine. On the other hand, *Cyphers Game* is a 2022 gaming project by the Institute of National Remembrance about the 1920 Polish-Bolshevik war and the significance of the work carried out by Polish cryptologists for the ultimate victory – in this case, the player can take on the role of real Polish soldiers from that period, activate a communication device of the time, break the enemy cypher and consequently destroy the Bolshevik armoured train.

'It's great that the people involved in education have recognised that games are a part of culture and that video game specialists should be invited to cooperate: noteworthy is the fact that Joanna Pigulak, PhD and Marcin Pigulak, PhD from the Adam Mickiewicz University in Poznań prepared an excellent information brochure on how to teach This War of Mine', says Michał Kłosiński, PhD, DLitt, Associate Professor at the Faculty of Humanities of the University of Silesia and Director of the Game Studies Research Centre of the University of Silesia. 'However, teacher training within a variety of fields still lacks classes devoted to game culture and there is still no textbook explaining how to teach games. This means that the legislator is shifting the responsibility for further training in this area onto teachers who are already burdened with many additional tasks. We need systemic solutions that support not only the teachers of Polish language but also history, geography, and biology, among others.

Why have video games (i.e. computer, console, and mobile games) been overlooked for so long and treated by part of society as a 'dark current in culture'? According to Prof. Michal Kłosiński, their status as an inferior cultural object is due to games falling prey to pre-judgement. Such thought did not come from nowhere: the belief that video games are a threat originates from their presence in disreputable spaces – casino gaming rooms that assumed a certain amount of gambling, monetary loss, potential addiction, and contact with activities meant only for adults, such as smoking. In addition, people with right-wing sensibilities, especially in the United States, regarded video games as, so to speak, training grounds for murderers - every time there was a tragic shooting in an American school, the real culprit was already known. 'Computer games became the scapegoat responsible for everything, and not at all the American weapon culture, their accessibility, and fetishisation', Prof. Kłosiński says ironically, adding that at the same time the systemic exclusion of hardcore gamers created the image of game enthusiasts as white, heterosexual, misogynistic men who celebrate certain cultural divisions, for example with regard to gender, as a consequence of which some parts of the gaming community are considered to be degenerate. We should not forget that, based on medical, psychological, and sociological research results, gaming disorder has been recognised as a genuine illness and is included in ICD-11 (drawn up by the World Health Organisation) and DSM-5 (published by the American Psychiatric Association). In spite of all these worrying aspects, games are certainly worth pursuing scientifically, and game studies - understood as a research field rather than as a discipline have been developing for over 30 years. As Prof. Michał Kłosiński argues, a scientific reflection on games allows us to 'disenchant' them.

'Even with gaming addiction as a starting point, we are already able to see how large of an impact video games have on human biology. Much larger, as it turns out, than literature, cinema, or comic books! Video games allow us to study humans a little differently than the media we are familiar with, they show us how many aspects of human engagement with a cultural object we can access by playing games', argues the Director of the Game Studies Research Centre.



Video games are also the fastest growing market for cultural and artistic consumption in the world – we play them on our phones, computers, consoles, and increasingly TV sets. In a sense, games dominate our culture; after all, we are all witnessing the transition from written culture (with literature being its most important manifestation) to digital culture (created through internet and social media).

Unfortunately, games can also be used to ideologise play, which is, as Johan Huizinga said, at the core of all human action and, therefore, also at the foundation of culture creation. This is why gaming studies seek to investigate, for example, how systems of corporate control are built, how game interfaces and mechanisms make their way into the everyday management of our time and lives – e.g. the loyalty programmes for collecting points in shops and gas stations, and point systems in education.

'We need to study games in order to more effectively counter ideologies that use them to manipulate behaviour and expose us to the mental, cognitive, financial, and social game exploitation. In the latter case, they take advantage of our sensibility, our need for contact with other people, and our need to get immersed in other worlds', states Prof. Michał Kłosiński.

This is because games offer us other worlds, alternative to our reality. We can take advantage of this offer in two ways: we can choose the negative, escapist path - and escape from reality. We can also choose the positive, utopian path and treat game worlds as a space to seek alternatives that reinvigorate our desire for change, which may translate into political, social, or economic action, and ultimately a change in the status quo. And it is precisely this approach to games that creates a multitude of opportunities for their use in school education: designing social spaces, engaging young people in thinking about climate issues (through the socalled green gaming), asking fundamental questions about human existence, our relationship with the environment, relationships with other people, reconstruction of history, reflection on the future state of society, analysis of our engagement with natural resources, and reflection on

how new types of socialisation and society are created through games.

'Video games give us the opportunity to test different solutions in virtual reality that is safe and yet responsive to what is happening in the real world. At the height of the migration crisis, mobile games were created about people fleeing war zones, such as *Bury Me, My Love*, and during the women's marches, a game called *Fantastic Fetus* was released in which we care for a fetus (spoiler alert: the fetus dies after birth)', enumerates the USil researcher, adding that nowadays children and young people are exposed to history mainly through such games as *World of Tanks*, *World of Warships*, and *Assasin's Creed* – and it was the 3D models of Notre Dame Cathedral from the latter game that proved to be the most reliable sources when the famous building needed to be rebuilt after the fire in 2019!

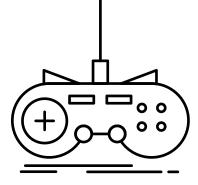
The stimulation of creative thinking is yet another benefit of games worth mentioning.

'Let's show that games are a creative space! Not everyone has to be a gamer, but let's encourage students to create their own games, such as board games, for example. In general, I don't think we should assign video games as homework, but rather ask what young people like to play. I'm interested in what excites young people today. What gets them going, colloquially speaking. We shouldn't reduce the contribution of games in education only to their history, or create a digital version of Polish martyrdom', argues Prof. Michał Kłosiński. 'Let's ask which games young people like to play and what kinds of games they would like to create to express themselves - let us be carried away by their creativity. The Director of the Game Studies Research Centre is also a member of the GETES initiative dealing with certification and dissemination of knowledge about VR simulators in education: thanks to the introduction of simulators in schools, vocational skills training, which takes three or four years these days, could be significantly shortened. This is yet another area as part of which the development of the game industry can have a significant impact on school education.



Tomasz Płosa

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DIGITAL EDUCATION:

the key to success in the 21st century



Photo: SSilver – Fotolia



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Olimpia Orządała

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By 2030, not less than 80% of EU citizens should have at least a basic level of digital literacy. This is the target of the EU programme setting the course for digital transformation in Europe. What is the situation like today? Monika Karwacka, PhD, a member of the Digital Humanities Team at the Faculty of Humanities of the University of Silesia in Katowice, talks about the digital skills of young people, the use of AI in the classroom, and the role of teachers.

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At the end of 2023, Eurostat published a digital competence report. 56% of European Union citizens aged 16-74 possess at least some basic digital skills. The highest percentage was recorded in the Netherlands (83%), Finland (82%), and Denmark (70%) and the lowest in Romania (28%), Bulgaria (36%), and Poland (44%). These figures do not inspire optimism given the role digitality plays in our lives - there is no denying that we live in two parallel worlds: the real one and the virtual one. Puzzling is the fact that many young people do not know how to use online resources. Social media seems to be the exception; students navigate it flawlessly.

'The biggest problem is the ability to obtain and process information, verify it, and use it for educational purposes. I see it constantly when working with students', says M. Karwacka, PhD.

Young people don't know where and how to look for information. The first and often only step they take is to type the search term into Google. In the era of the rapid development of artificial intelligence, there is also the opinion that you can just enter the topic into ChatGPT and you will receive a ready-made paper. Nothing could be more wrong. You have to think carefully how to ask the right question to get a satisfactory result, react to the answers, and also verify them because artificial intelligence has a unique tendency to bend the truth and invent facts.

'I once conducted an experiment and asked ChatGPT to impersonate a scientist and write an article on a given topic and provide a bibliography. I got a text in which most of the sources were fictional. It looked beautiful though! But it turned out that the papers written by AI were substantively off-base', admits M. Karwacka, PhD.

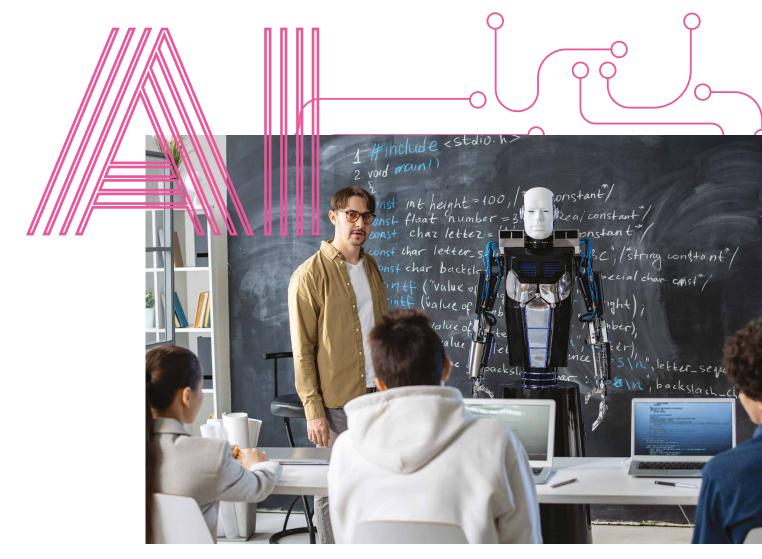
Scientists specialising in their field are able to spot made-up publications with ease. However, students rarely verify information produced by artificial intelligence, taking it at face value. Many teachers approach AI with great resentment because they believe it will increase cheating. It is therefore crucial to teach young people how to use digital tools responsibly, so that they help them with their work and do not replace independent thinking.

'ChatGPT is an incredible tool that can save you a lot of time. However, you need to know, among other things, how to formulate the question properly. It teaches inventiveness, critical thinking, problem solving, and creativity. Digital tools are perfect to develop these competencies. We, as teachers and lecturers, should support students who need our guidance in this regard', notes the scientist.

Introducing young people (and not only them) to online safety is important as well. These days, it is a priority. Our society still seems to be very ignorant in this area, e.g. we tend to use passwords that are way too simple (e.g. '123456', 'admin') and we often use a single password for multiple platforms. There is a strong resistance to technology among teachers, with few using digital tools in their work. According to EU reports, less than 40% of educators are interested in digital education. Classes often take a passive form – students listen and take notes. However, M. Karwacka, PhD emphasises that digital education should not serve as the replacement for traditional classes, but should make them more attractive.

The possibilities are vast - there is a lot of web content that meets the needs of the modern world. Teachers share various applications and lesson plans. EU websites and non-profit organisations make it possible to learn about good digital practices. Participating in training sessions organised, among others, by the USil Digital Humanities Team is at the very least worth considering. Through a variety of methods, students can develop their creativity and freedom of thought by creating projects, podcasts, multimedia exhibitions, and even family trees. Digital tools can be used in any subject: English, chemistry, biology, or mathematics. It's a matter of creativity and teaching approach.

'I would like to encourage teachers to look for interesting ideas on how to change our teaching process. It's convenient to teach in the same way for years, but it just not good enough anymore. The greatest satisfaction in teaching comes when our students are doing well in the job market', concludes M. Karwacka, PhD. Operating billet heaters in hazardous conditions, working with dangerous machinery, handling heavy products in a warehouse.... Without a question, AI-controlled devices should replace us in some of these activities. It could prove difficult for us to get used to travelling in self-driving buses, although autonomous vehicles are already being gradually introduced into public transport. The rapid acceleration in the development of large-scale language models – with the high-profile ChatGPT leading the charge – has, on the other hand, led to a resurgence of discussion on the role of AI tools in university education. Everyone agrees on one thing, though: the model of academic education as we know it is undergoing a radical change right before our very eyes.



NO limits

IN THE CLASSROOM

Tomek Grząślewicz

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Agnieszka Nowak-Brzezińska, PhD, DSc, Associate Professor at the Faculty of Science and Technology of the University of Silesia, places a high value on the possibility of automating a part of her work using ChatGPT. After designing and entering an appropriate range of material, the tool is able to generate several sets of unique questions for a test, a class outline, tips for effective teaching, a report, and final grades suggestions in a split second. Although the results require further verification, the time saved is still significant. AI also has many other advantages.

'Platforms are being developed where teachers can monitor students' progress', says Prof. Nowak-Brzezińska. 'In a group of 25 students, keeping tabs on all the effects of their work is incredibly difficult and often simply impossible to carry out in practice. Whereas, the AI tool is able to detect if a person's writing style has changed significantly in a week and if their vocabulary has suddenly become exceptionally extensive.

The AI also traverses other limitations of the 'human factor'. Unlike academics, it works equally effectively in both the first and forty-sixth hour of operation. It is available 24 hours a day, without the need to make an appointment. Provides emotional comfort when a student suffers an educational setback. Evaluates their completed project in exactly the same way as the work created by their classmates. Offers additional assignments, extensive feedback, and many options to individualise learning. The researcher from the University of Silesia emphasises the latter aspect, drawing attention to the fact that modern education puts a strong emphasis on profiling.

'Traditional teaching methods are based on a uniform approach to all students. Nowadays, the attention begins to turn towards personalised education, i.e. learning process adapted to the individual needs and skills of each student. Artificial intelligence provides a personalised learning experience, tailored to different learning styles. In doing so, we need to remember that AI tools are meant to complement teacher-student interaction rather than replace it. The accessibility of learning materials is an important issue. A teacher who has recorded their lecture and plans on uploading it to YouTube has the option to add automatically generated subtitles for the deaf. They also have the chance to reach a worldwide audience through translation into one of the dozens of languages offered by ChatGPT.

As with other innovations, there are many questions and concerns surrounding artificial intelligence. There is an ongoing debate in academic circles as to whether AI tools should be used when writing scientific articles. And if so, then to what extent, and in such a case, should the aforementioned ChatGPT be considered a co-author of the text? Regardless of what the answer turns out to be, the scientist reminds that we still have the final say.

'A human being should always be the one deciding on issues that are important for our lives and conduct. AI can prepare a contract, but a lawyer must verify it. It can draw up a loan application, but a banker must approve it. The same holds true for universities: students should be made aware that an AI tool will bring them closer to a solution, but it isn't perfect and cannot replace a specialist – the lecturer.

A hundred years ago, the teacher was often the only source of knowledge for students. Nowadays, students acquire knowledge in many different ways, including through AI tools. They can also easily verify the information received in class. There is no way of stopping or prohibiting it. To retain their authority, the teacher must be progressive and open to the change in the approach to education that is happening right here, right now.

'Otherwise, a YouTube influencer who conveys knowledge in a more accessible and attractive way might become the only authority', Prof. Nowak-Brzezińska warns in conclusion. 'Poland is well equipped in digital technologies, but we still have a long way to go when it comes to the use of artificial intelligence in education'. It is said that there are only two places where you spend more time than it takes to complete the assigned tasks. These two places are school and prison. The educational escape room offered to students of Vytautas Magnus University in Kaunas, Lithuania, by lecturer Evelina Bendoraitienė, PhD, has something in common with both of them. You have to get out of it, but simultaneously, you can learn something new. The key difference is that the time spent there passes quickly and is associated only with positive emotions. Lithuanian students seemed to confirm this proposition, as they loved this form of homework, had a lot of fun, and learned a lot at the same time.



AS HOMEWORK



Małgorzata Kłoskowicz, PhD

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An escape room is literally a room you have to escape from used primarily for entertainment. This is well known to Evelina Bendoraitienė. PhD. whose company offered this form of leisure activity in five Lithuanian cities. Over time, she expanded her offer, proposing projects based on the escape room idea in various private and public institutions. While working at a university, she turned it into an innovative educational method she offered to her students. 'After completing my PhD, I knew that my future was in business. I didn't think I would be teaching at all. When the opportunity came up, I decided to try it, and it turned out to be a good decision. I love it! I enjoy working with students immensely, and I am happy to know they enjoy my classes. This motivates me to be creative. Hence the escape room', admits the scientist.

The first attempt to introduce the escape room method occurred two years ago. The students were divided into groups. One group prepared a scenario with tasks in the form of an escape room, while the other group had to solve puzzles their fellow students put together to get out of the room.

'What surprised me was that the tasks prepared by the first group were challenging. I asked afterwards why and they replied that they didn't want the second group to solve the puzzle too fast. The bigger the challenge, the more exciting it gets. It's not easy; you have to think and struggle a bit; that's the secret to having fun', she adds.

The students are responsible, among other things, for preparing the physical space in which the task is carried out. The first escape room resembled an aeroplane, and the task of the second group was to determine the landing coordinates so that the machine would not crash. 'I was also involved in the task. Students contacted me each time they discovered more pieces of this complicated puzzle', says Evelina Bendoraitienė, PhD.

Another challenge was to organise an educational escape room in a virtual space for a group of international students. There are suitable platforms to complete the task, although moving through real rooms provides greater excitement.

As it is a form of homework, in both cases, the students determine the time they work on the tasks. Their feedback is enthusiastic, and they get very involved in the activity. Other academics are also interested in the method itself, with whom Evelina Bendora-itienė, PhD, shares her experiences during workshops.

The most significant advantages of the educational escape room, she admits, are not only the information provided in a very creative way but also the opportunity to develop many competencies. These include: critical and logical thinking, cooperation and teamwork in general, effective communication, scenario building, and creativity. It is also a great tool to motivate students to become more involved in the classroom.

The most challenging task, the VMU researcher admits, is evaluation. She wondered how to evaluate the students taking part in such a project. This is a type of knowledgle that needs to be reviewed at the end. She asked each student in the class to evaluate the work of those in the opposite group. This included assessing the tasks in terms of their logical structure, attractiveness, and involvement. Students could also suggest changes that would improve the quality of the tasks in their assessment.

'I can recommend the escape room form to teachers looking for interesting educational methods. You have to try it at least once to see if such a method works for you, if you feel comfortable with it, if the students like it, and if it suits your classes. I will certainly return to it regularly, and this year, I plan to combine a real escape room with a virtual space' concludes the scientist.

The 'Life Escape Room' project by Evelina Bendoraitienė, PhD, was awarded in the international Innovative Teaching Award competition organised by the European University Transform4Europe. The study of adult attitudes towards education is a journey into the depths of human psyche to uncover the secrets of one of the most important aspects of our individuality. Why? Because attitudes are the central part of everyone's individuality; they keep changing and moulding all throughout life, in the development process of each person.

WHY SHOULD WE STUDY ATTITUDES? ADULT EDUCATIONAL BELIEFS AND THEIR SOCIAL SIGNIFICANCE

To use a metaphor: just as rivers shape the landscape, attitudes not only influence the personal development of the individual but also shape society as a whole. In a dynamic world where information is ubiquitous and change is rapid, education is becoming a key tool in the fight against prejudices and stereotypes, as well as with regard to meeting the fundamental and development needs of the individual and society.

Learning about and understanding adult attitudes towards education takes on particular importance when considered in the context of lifelong education, which involves continuous development of competencies and skills and is a response to the challenges of the modern world. Currently, it is not so much the level of education as the attitude of adults towards education that may determine their place in society. As Hanna Solarczyk-Szwec, PhD, DLitt, Associate Professor of Nicolaus Copernicus University (educator, and ragogy expert, and adult education researcher) points out, the attitude of adults towards education will determine their social inclusion or exclusion. Thus, attitude is crucial for active participation in society.

Understanding and exploring adult attitudes towards education is therefore essential, as they reflect societal values and influence future generations. Adults, who are role models for younger generations, have a huge impact on shaping the attitudes and behaviour of children and youth. Their involvement in the learning process includes not only the transfer of knowledge, but also sending a strong signal to stimulate the development of young people's minds. On the other hand, negative attitudes towards education can make it difficult to motivate the younger generation to pursue knowledge. Adults' attitudes play a linking role, connecting the generations, and their involvement in the learning process provides a strong example to follow.

In an era of globalisation, the ability to critically evaluate and acquire knowledge becomes essential. Having information is one thing, but being able to use it effectively in practice is a whole other issue. Technological developments and societal changes make lifelong learning a necessity not only to attain professional success but also for personal development. Adult education also plays a key role in combating social exclusion and discrimination. Through access to education, adults are given the opportunity to better understand diversity and build a more tolerant society. In this context, education becomes a tool that builds bridges between different social groups.

However, we have to keep in mind that adults' attitudes towards education are shaped by many factors, such as childhood experiences, social environment, access to educational resources, as well as personal beliefs and values. Negative beliefs and attitudes towards education can have a significant impact on society, both at an individual and structural level, generating a range of social problems. This phenomenon can lead to social inequalities, lowering the overall level of education in society. which in turn can limit its economic and social development. People who have a negative view of education may be less inclined to participate in educational processes and, as a result, contribute to the perpetuation of attitudes of withdrawal from professional activity and lack of commitment to personal development. This, in turn, leads to an increase in unemployment, the disappearance of a work culture



Photo: Fotolia



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and entrepreneurship, lower level of social trust, an increase in crime, and even deterioration in mental health. A lack of investment in education can result in more individuals with low social skills and lacking abilities to cope with difficult situations. Negative beliefs about education can inhibit the development of creativity and analytical thinking skills in society, limit the potential of individuals, and affect the development and competitiveness of society as a whole. Therefore, it is crucial to create a space where adults can develop positive attitudes towards education for their own benefit and for future generations, bearing in mind that investment in the education system is a key factor in the development of society.

Adult attitudes towards education are a great measure of societal values. They influence professional development, promote lifelong learning, and set a good example for future generations. By understanding and shaping these attitudes, we can strive to create a more informed, flexible, and engaged society ready to face the challenges of the future.





But we need the right competencies, the basic knowledge and skills to help us make rational and responsible decisions in a world where economics still triumphs over environmental concerns. We should start acquiring these competencies from the very beginning of our education at school (...). \rightarrow p. 14





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Cover: works by students from the Institute of Fine Arts of the University of Silesia created in 2023-2024 as part of the course Basics Agnieszka Just, Magdalena Andrzejewska, Maja Zylbert, Julia Szczęsna, Magdalena Wilczek, Klaudia Pietrasz, Eliza Zawadzka, Anna of Graphic Design, instructors: Łukasz Kliś, PhD, DLitt, Associate Professor and Sebastian Kubica, PhD, DLitt, Associate Professor: Kachan. Theme: present day dangers and paradoxes.