Educational Spaces 21.

Open up!

Introduction

EDUSPACES21

This publication has been elaborated as a part of the “Educational Spaces 21. Open up!” project implemented by the Center for Citizenship Education Foundation in cooperation with the THINK! Knowledge Society Foundation, the Gesellschaft zur Förderung des Hanseatic Institute for Entrepreneurship and Regional Development an der Universität Rostock e.V. and Rektorsakademien Utveckling AB, and funded by the European Commission as a part of the ERASMUS+ programme.

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“EDUCATIONAL SPACES 21. OPEN UP!” SERIES – WHO IS IT FOR?

Our publications are aimed to inspire and arouse enthusiasm among all those who are engaged in developing schools and new learning environments. We do not provide universal solutions that can be adapted regardless of the situation. Instead of this, we tried to present various points of view and real-life examples of educational spaces so that each educator or driver of change finds him/herself inspired in their own endeavours.

The challenges presented on the pages of this guidebook series are based on actual experiences of those educators who wanted to introduce positive changes in schools. These people put children first and decided that their learning environments require improvement. As exemplified by the numerous examples of schools and school communities, the solutions need not be very elaborate. What counts is courage, openness and an ability to approach a given problem from the perspective of a learner.

We truly hope that *Educational Spaces 21. Open up!* will serve its purpose and encourage you to modify your educational environment. Be brave and creative!

Enjoy the reading!

JUSTIN SISMEY
HIE-RO, Germany

Photo: Middle School no. 83 in Warsaw, Poland

Photo: Piotr Kozak

INFORMATION ABOUT THE PROJECT AND PARTNERS

The objective of the project Educational Spaces 21. Open up! is to develop solutions which would assist educational institutions in modernising learning and teaching spaces in the spirit of 21st century education. These involve the following three areas: architectural (design, user experience, infrastructure), virtual and technological (teaching and learning online, ICT) and social (school community, local community and links with the world). The project aims at assisting school principals, teachers, educational authorities, students and parents in creating innovative strategies to modernise schools in selected areas, and implement fruitful and creative changes which facilitate opening the school to new challenges and achievements of the contemporary world.

In the course of this project, we have elaborated a series of publications which contain hands-on solutions and good practices (to be) employed by schools in the above-mentioned areas. These include: **"Physical and Architectural Learning Environments", "Virtual and Technological Learning Environments"**, and **"Social and Cultural Learning Environments".** This introductory volume is an attempt at describing and defining all of these learning environments as a whole. Apart from theoretical pieces, we enclosed detailed descriptions of schools we chose as models for the implementation of the most suitable educational solutions. These places show informed, conscious choices concerning changes in all of the above-mentioned educational spaces. The following institutions from Poland, Germany and Sweden took part in the undertaking:

Foudation Center for Citizenship Education (CEO) is an independent educational institution and one of the largest Polish NGOs that has been working in the education sector since 1994. Each year, CEO collaborates with 3,000schools and libraries. About 400,000 students benefit from CEO's projects annually. For the last 12 years, in cooperation with Gazeta Wyborcza, CEO has been conducting one of the most renowned educational initiatives in Poland – *Szkoła z klasą* [School with class].

Think! Foundation (FT!) was established in June 2007. This NGO carries out innovative activities within the field of education and social communication. The mission of the Foundation is to support comprehensive development of youth and adults through efficient application of state-of-the-art ICT tools in order to share information, broaden knowledge and develop 21st century social skills.

Hanseatic Institute for Entrepreneurship and Regional Development at the University of Rostock (HIE-RO) conducts research into innovation, human resources development, assessment, concepts and strategies for entrepreneurial education and regional development. One of HIE-RO's working areas is the entrepreneurship training programme (project ROXI) addressed, among others, to high school students, in which participants develop their entrepreneurial skills, creativity, change management, team work, and, consequently, learn how to manage both their educational paths and professional careers.

Rektorsakademien Utveckling (RAU) is a company which supports leaders who want to modernise schools and organisations in order to better respond to the challenges of the 21st century and teach skills necessary for the future. Their aim is to support comprehensive development of educational institutions with regard to teaching and communication culture, pedagogy, leadership, as well as architectural and digital learning environments. In Stockholm, RAU organises the Sweden's largest conference on modern and innovative learning (SETT).

21ST CENTURY LEARNING ENVIRONMENTS

KATARZYNA GÓRKIEWICZ, PIOTR KOZAK
Center for Citizenship Education, Poland

Saying that the world is changing is not enough. The world is racing. If schools are to keep up, we need to consider what they are, and what they are for.

What is school? The easiest way is to think about school from the perspective of its physical location. The educational space consists first and foremost of the school building and the classroom – places where the learning process takes place. According to OECD, educational spaces include not only physical structures, equipment and tools gathered in the school, but also information resources and events happening outside the school in which students participate both in person and virtually.

But if we consider schools only in the context of physical or virtual spaces, we automatically take attention away from those parts of learning which occur in workshops, on sports fields, remotely, within the local community, or in various other informal environments. Therefore, we should not be asking what school is, but rather what is the environment in which we teach and learn.

Educational space is defined by OECD as "a physical space that supports multiple and diverse teaching and learning programmes and pedagogies, including current technologies; one that demonstrates optimal, cost-effective building performance and operation over time; one that respects and is in harmony with the environment; and one that encourages social participation, providing a healthy, comfortable, safe, secure and stimulating setting for its occupants."[1]

What is learning environment? In this publication, we adopt the broad meaning applied by certain researchers[2] and understand it as the general context in which the learning occurs. Learning environments are based on mutual interactions of four elements: **the student** (who?), **the teacher, the community and other learning professionals** (with whom?), **the content** (learning what?), **and objects, equipment and technologies** (where and using what?). Such a learning environment consists of three dimensions: architectural (physical space, equipment, infrastructure of the school), virtual and technological (teaching and learning online) and social (school community, local community, links with the world).

Architectural space

Schools across Europe are mostly similar to one another. They bear some resemblance to prison buildings in which education is trapped – the learning space is limited by walls, standardised (the same dominant layout of desks, a single board as the main medium) and left in the custody of the one master of ceremony – the teacher who is supposed to pour knowledge into students' heads. In our publication, we would like to present possible architectural and infrastructural solutions as well as guidelines for the modernisation of the existing infrastructure, i.e. ideas on how to better organise the learning space in every school, in small steps and at a low cost.

Virtual and technological space

Thanks to the Internet, the learning environment has expanded to include immeasurable knowledge sources available via increasingly user-friendly tools, also mobile ones. The Internet has changed lifestyles, the learning culture, modes of communication and the model of working. Right before our eyes the role of the

Covers of volumes of a series of publications *Educational Spaces 21. Open up!*

teacher and students' expectations are changing, together with the set of competences they require in their professional, social and private lives in the 21st century.

Yet implementing new technologies in the educational process is still approached with significant distrust, which is reflected in rigorously formulated internal regulations (e.g. school regulations) that hinder the development of modern education, such as the ban on using mobile phones in class. The web is not fully used as a resource also due to the lack of fast access to Internet and Wi-Fi network at school. However, the most important element missing is the idea of how to change teaching and learning methods in the classroom with the use of information and communication technology (ICT). This is why we have created a handbook with examples of effective and well-planned application of new technologies and the Internet in teaching and learning processes, as well as acquiring key competences in the 21st century.

Social space

PISA results (2012) indicate some of the challenges schools have to face. As many as 79% of the studied Polish 15-year-olds believe that school education is a waste of time. They do not believe in school and do not feel happy in it. Equally concerning are the results of the 5th research paper by PISA (2012), which assessed their problem-solving by presenting typical tasks which young people encounter in their everyday lives (e.g. buying a cheaper ticket from the ticket machine, bypassing traffic jams, etc.). Poland's results were poor, it received 481 points (when the average for OECD is 500)[2].

This is confirmed by research on unemployment – poor professional and social skills of the applicants are one of the factors influencing lack of success on the job market. Unemployment among people under 24 is still an urgent problem in the EU Member States. Studies conducted by universities, NGOs and employers reveal that young people acquire too few of the so-called soft skills (cooperation, communication, learning, critical thinking, etc.), which may be due to insufficient amount of project-based work. Lack of competence in the above-mentioned areas has an effect on young people's freedom of movement on the job market and on their flexibility. Our handbook suggests solutions which

will help students develop social and entrepreneurial skills.

Why teach?

Whenever we want to change the learning environment, we should ask ourselves why. Or, more precisely: what for? In other words, if we are to use the same pedagogical tools in new buildings, we only change the packaging. The content remains the same. If we want to change desk arrangement only to become more efficient in enclosing students in the old exam-based paradigm, we are not opening the school. We are merely changing its appearance.

What should real change be like? Pedagogy is the most important thing. It should be the beacon of change in educational spaces. We should also prepare ourselves for comprehensive changes as advancement in education cannot take place in one area only. For example, if we want to endow students with social competence, changes in the physical environment, such as flexible desk arrangement in class, should be accompanied by changes in the virtual and social environments. Students should be able to interact freely and work on joint projects. Social media should be employed alongside other methods. Otherwise our changes will only touch the surface.

Thus, when transforming schools, we should remember that all the three major areas – the architectural, social and virtual spaces – are closely interrelated. The most important move is to put forward an idea about the school: what we want to do and what kind of students we want to have at the end of the process. All other changes should be a result of this general vision.

Photo: Monika Walkowiak

HOW TO UNDERSTAND LEARNING ENVIRONMENTS?

A SCHOOL TO BE FUNDAMENTALLY CHANGED

The further we enter the 21st century, the clearer it becomes that schools must change. This is related not only to the general idea that education is not keeping pace with the development of the social media, new technologies and changes in the local and global labour markets, but also to the growing feeling that Europe and the whole world are experiencing a crisis.

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The optimism from the end of the previous century gives way to concerns that we may not be able to quickly solve the global social, ecological, economic and political problems. Democratic states cannot effectively control global economy in its current form; they cannot cope with economic and social inequalities.

Liberal democracy by itself is also weakened in many places; citizen participation rates gradually decrease. In the public life of many countries there is more and more populism and national, ethnic or religious radicalism. In many places, authority and political legitimacy crises deepen, which opens the door for dangerous populist politicians and parties, and for xenophobic and sometimes even fascist movements calling for violence against the "foreign" and for a way back to "strong-arm regimes." Faith in the power of the European community and the driving force of European institutions also grow weaker.

All these factors change expectations towards schools, which should now not only prepare for life in an organized world but also educate young people to be ready to reorganize it and face serious challenges. However, in many countries, including Poland, it is the young people who are the most susceptible to demagogic arguments and empty promises. This is often due to the fear for their own future, and to the difficult situation on the labour market which does not give a chance to start a (financially) independent life, with one's own home and family. These fears, and sometimes even desperation among young people are easy to use, inter alia, to build xenophobic, racist, anti-Semitic, anti-Islamic and, in some countries, also homophobic moods. This, in turn, does not help resolve the problem of refugees and immigrants in Europe, another manifestation of the global crisis.

How should the school be?

So what should the school be like in order to give its pupils real power to change the world? Which modern school deficits make it so difficult for teachers and students to redefine their role? How does the school help to solve real problems of people and the world, and how does it cement dysfunctions or even harmful attitudes among young people, ways of functioning in the communities to which they belong, within which they communicate and consume?

The answer to these questions is not easy. A thing that the majority of experts and practitioners of education in the world agree on is the belief that the skills needed for young people in the 21st century are very different than those taught in the 19th and 20th centuries. In 2006, the European Parliament and the European Council published a recommendation with the following preamble: "Key competences in the shape of knowledge, skills and attitudes appropriate to each context are fundamental for each individual in a knowledge-based society. They provide added value for the labour market, social cohesion and active citizenship by offering flexibility and ad-

aptability, satisfaction and motivation. Because they should be acquired by everyone, this recommendation proposes a reference tool for European Union (EU) countries to ensure that these key competences are fully integrated into their strategies and infrastructures, particularly in the context of lifelong learning." Eight key competences were cited:

- **communication in the mother tongue**, which is the ability to express and interpret concepts, thoughts, feelings, facts and opinions in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate and creative way in a full range of societal and cultural contexts;

- **communication in foreign languages**, which involves, in addition to the main skill dimensions of communication in the mother tongue, mediation and intercultural understanding. The level of proficiency depends on several factors and the capacity for listening, speaking, reading and writing;

- **mathematical competence and basic competences in science and technology.** Mathematical competence is the ability to develop and apply mathematical thinking in order to solve a range of problems in everyday situations, with the emphasis placed on process, activity and knowledge. Basic competences in science and technology refer to the mastery, use and application of knowledge and methodologies that explain the natural world. These involve an understanding of the changes caused by human activity and the responsibility of each individual as a citizen;

- **digital competence** involves the confident and critical use of information society technology (IST) and thus basic skills in information and communication technology (ICT);

- **learning to learn** is related to learning, the ability to pursue and organize one's own learning, either individually or in groups, in accordance with one's own needs, and awareness of methods and opportunities;

- **social and civic competences.** Social competence refers to personal, interpersonal and intercultural competence and all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life. It is linked to personal and social well-being. An understanding of codes of conduct and customs in the different environments in which individuals operate is essential. Civic competence, and particularly knowledge of social and political concepts and structures (democracy, justice, equality, citizenship and civil rights), equips individuals to engage in active and democratic participation;

- **sense of initiative and entrepreneurship** is the ability to turn ideas into action. It involves creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. The individual is aware of the context of his/her work and is able to seize opportunities that arise. It is the foundation for acquiring more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance;

- **cultural awareness and expression**, which involves appreciation of the importance of the creative expression of ideas, experiences and emotions in a range of media (music, performing arts, literature and visual arts).

All of the above key competences are interdependent and in each case the emphasis is on critical thinking, creativity, initiative, problem solving, risk assessment, decision-making and managing feelings constructively. This list was completed with media literacy and information referred to in, among others, the recommendation of the European Commission contained in the document "European approach to media literacy in the digital environment."

Primary School no. 41 in Szczecin, Poland. Photo: www.blogiceo.nq.pl

Numerous studies and recommendations in the United States show similar approaches usually mentioning 21st century skills like: competences related to learning and creative work (the so-called 4Cs, that is, communication, cooperation, creativity and critical thinking); competences needed in personal and professional life (including flexibility, openness to other cultures, leadership, effectiveness), information and media skills. These 'softer' competences, however, are not to replace all the 'hard' ones and should be built on a strong foundation of basic literacy and numeracy skills and a knowledge of major disciplines and topics that are important for the contemporary human being and the world.

The new vision of the key competences is the basis for new teaching and learning methods, grading methods, school and teacher evaluation, their professional development and, finally – the organization of school work and the design of the physical space of the building and its immediate surroundings, classrooms and school corridors... The educational systems in Europe and around the world are frantically searching for new working schemes. New ideas, theories and implementation tests are born. They are related to the three basic questions of modern education. How to teach and how to be a teacher in the 21st century? What do you teach in a changing world of new skills and new technologies? What kind of a social life institution should school be? Let us analyse the most promising suggestions.

The teacher as a guide, coach and personal counselor

Some recipes for change lean on a different definition of teachers in the learning process. Teachers no longer have a monopoly on the transmission of knowledge and should focus on supporting children in their independent work, in the search for passion and discovering the world through science. They are no longer 'walking encyclopaedias' but rather guides, mentors and coaches. A 21st century school must cease to be a manufacturer of 'standardized students' because the world and the labour market today are in an increasing need of people who can think critically and act in a driven and, at the same time, responsible way. People that are empathetic, like to spend time with other people, know how to communicate effectively, to listen to the opinions of others, understand what motivates them. If teachers are to help students to develop such skills, then they cannot be officials, just handing out exercises, testing the knowledge and finally delivering certificates. School may not be a bureaucratic certifying institution, it has to be a place for learning, for personal and social development, as well as for everyday life with others and for others.

School as a space for good relationships and positive emotions

Many theorists and practitioners – teachers and school principals – focus on changing the way you work in the classroom, putting emphasis on motivation, based on positive relationships and emotions, and on a completely different grading scheme. The latter is about evaluation-based assessment, that is to say, a kind that puts more responsibility for their own learning process on the students and provides them with tips on how to continue to work, and not only gathering grades from homework, exams or tests.

Studies show that we learn more and more willingly when surrounded by positive emotions, when we get satisfaction and pleasure from the acquisition of new skills, when we satisfy our curiosity and discover together with others how the world works. Contemporary schools tend to waste too easily the

largest educational potential – the curiosity and passion of young children just arriving at school. Fear of failure, of being compared with others that might get better results, as well as the increasing weariness with routine tasks, quickly turn positive motivation into negative motivation. An open school must create a good emotional atmosphere, build good interpersonal relations among teachers, students and parents so as to minimize anxiety and sense of helplessness. Studies on the effectiveness of learning show that boredom, frustration and fear induce our brains to function in a mode similar to the one that runs in response to stress, and this effectively slows down or completely blocks the ability to learn. An open school is a place with positive emotions, pleasure from learning, where adults know how to praise, how to see and reward effort, and not only a well executed task, where they can help the child in developing the belief that that they 'can do it', 'an error can help me find a good solution' and 'I am allowed to try until I succeed'..

As a team, because that is how the modern world works

There are a few teaching/learning strategies that help you work like that. One of them is the "de-individualisation" of the learning process by systematically organizing teamwork in the classroom and out of it, so that children can benefit mutually from their own knowledge. They learn not only from a teacher, a textbook or even from the Internet, but also from each other – in pairs, threes, small teams with a variety of members... Teams should be small to ensure authentic listening and an open conversation, to share tasks in a logical way, to see and know what others are doing and to be able to support each other and evaluate/appreciate the work of each individual and the group as a whole. Working in teams also forces a different setting of chairs and desks and allows the teacher to navigate between them and monitor the work. Team work and team projects typically require sharing the effects of the work, which, in turn, teaches concise presentation and public speaking. And, with longer and more complex tasks or team activities and pupil educational projects, new technologies result to be very useful.

On the benefits coming from the freedom of choice

Many researchers also indicate that the ability to decide on the pace of work in class, type of homework or kind of topic for an educational project increases not only the level of commitment and willingness to work, but also its effects and student achievements. Leaving the learner space clearly pays off. It reduces competition between students, prevents boredom and apathy that arise when tasks are too difficult or too easy, and it helps to adjust the benchmark for the children's needs and allows to raise it together with them. An open school prefers choice to constraint and appreciates the benefits coming from putting more weight and responsibility for their work on young people. This does not necessarily mean leaving the children alone with a task that is too difficult (even if they themselves chose it...). The teacher observes what the pupils are doing and how they do it, he/she supports them and, when it's really necessary, guides towards the right track or encourages them to try again.

Freedom and choice gain an exceptional meaning when it comes to social and civic action at school. Although a little encouragement to start can prove useful. Especially for teenagers as they do not get involved in something related with public speaking or being exposed to shame or embarrassment easily. But in the end, anything done forcefully is not pleasant nor does it result in civic competence, at most, it teaches subordination or pretending and opportunism.

Non scholae sed vitae…

This is another rule followed by open or opening schools described in our guide. Things pupils learn are related to the life of children and young people, which allows children to confront the acquired knowledge and expertise with problems they face in school, their town, Poland, Europe and the world. They are not afraid of talking about what it means to be a decent person, what is solidarity today, how to defend the weaker. They learn how

nature, mathematics, social studies or science can help them to make not only their lives better but also those of the communities to which we all belong. Media education allows us to understand how new technologies shape our view of the world and teaches us to become creators of content and social media, instead of just being their uncritical consumers. Smart global education shows how all people are interdependent and what kind of influence our daily choices have over the lives of people at the other end of the world – for example: communicating when riding a bicycle or participating in a social campaign for children without access to education. Good intercultural education shows how to understand others, how to talk to them and work together, and how not to fear them.

Feedback instead of grades

Such assessment becomes a tool for both teaching and learning, as it helps learners understand the purpose to be achieved and 'internalize' the criteria to be met by the products of their individual or team work. This assumes fast and precise feedback for the student about what has already been done well, what needs to be improved and in which direction to continue. Information given on an ongoing basis and containing specific instructions (written or oral) is more effective in supporting the learning process than a summary grade. Setting an impossible to change score-based assessment or grade often has the opposite effect – both adults and children treat the matter as closed, that is, one that is not worth dealing with. Hundreds of studies analysed by John Hattie show that feedback and formative assessment can clearly improve students' educational achievements.

Meta-level, or what am I doing here

Other researchers of education emphasize that a key factor for children and young adults to develop constructive positions is – outside of the school and during the whole life – for them to follow their own train of thought from a higher level, to choose consciously and critically value sources of information, as well as link various pieces of information, critically value, confront and generalize them, and

Lounge seating designed for learning in Orestad College, Copenhagen, Denmark. Photo: Marcin Polak

even transfer these thinking and acting models to other fields (e.g. grammar rules in language learning to coding), or to a different problem (how to plan an experiment, opinion research or a social campaign). Developing such self-regulatory mechanisms in children and young people, however, requires a different – one could say 'more open' – way of working.

Instead of giving canned messages, it is better to focus on building research, falsifying, and investigating skills, sifting important information and reject irrelevant data, communicate in the language of a specific field (e.g. physics or biology), but also in the language used by 'ordinary people', not only specialists (e.g. using metaphors, analogies or imaging models, such as the famous 'Schroedinger's cat'). This requires reflection at a meta-level, at a certain mental 'stop-frame', conceptual maps, as well as simple, but rarely posed questions like: 'what do we already know about this topic?', 'how do we know that?', 'how to prove it?', 'what don't we know and how to check it?', 'what mistakes have we made and how to correct them?', 'how did the others do it and how are our results different?', 'what conclusions can be drawn from this experience?', 'how to best show it to others?', 'what have we learned from today's class?', 'what do we have to further practice or investigate?', 'where to find further information and guidance?', 'how to get to the experts in the field?'.

Shape more important that muscle mass

Researchers in education pay more and more attention to the fact that in the modern world the amount of knowledge counts for less than the number of acquired pieces of information and areas in which we are fluent. Due to the universal access to information, and even an information flood, the weight of 'shape' becomes more than the 'mass' or, in other words, the structure of the information that each of us builds and modifies constantly in the course of their own learning is crucial. It is a kind of a 'backbone' on which new knowledge and competence join the existing concepts, ways of thinking and problem-solving algorithms. They join, and at the same time deconstruct them (e.g. when it turns

The building of School Complex no. 106 in Warsaw, Poland. Photo: Marcin PolakPolak

out that in the history of our town there are far unknown or forgotten events), strengthen (e.g. when you see the relationship between lifestyle and consumption in the richest countries of the world and the economic situation of the societies of the global South), remodel and complement them (e.g. when it turns out that light is both a wave and a particle). Such 'shaping' cannot, however, occur in a chaotic manner – analogies and metaphors make sense when students are fluent in the language and basic concepts of different fields. This requires systematic work with children whose cultural and linguistic competences are significantly lower at the initial stage. It is because of that that we are particularly keen to show our manual of good practices from schools that try to mitigate these differences and are looking for an idea on how to do it.

School as an open common space

In the 21st century, the school must be opened also in an architectural sense. In our publication, you can find examples of such innovative, and often not costly solutions. The traditional setup of desks

Main entrance to Orestad College in Copenhagen, Denmark. Photo: Marcin Polak

and seats in the classroom slowly disappears with the creation of 'teamwork centres', book shelves, playing corners, and meeting and talking corners for older children. Sofas and armchairs appear in the corridors, boards for games are drawn on the floors, the walls are filled with graffiti or exhibitions of student art pieces. This openness of the physical space fosters the overcoming of individualism, better communication and common efforts, and often even the formation of new relationships of students with teachers and students with other students. It encourages to move, to create group happenings and flash mobs, public activities, performances, meetings of local government, project group meetings and other kinds of gatherings. It is in such conditions that a democratic culture forms – there is a need for this kind of a friendly place and a few students circles – citizens deciding on class and school matters and with the same right-to-speak. If this is how democracy was created in the Greek Agora then it can also be formed in any other shared space, even a school.

On the other hand, architects and students themselves (usually with the help of adults) create the 'corners' and 'temples of the musing', where you can relax, 'chill', communicate using whisper. It is amazing how creative one can be with an old stor-

age room, a forgotten room in the attic or even a simple hole in the wall of a lounge. An open and at the same time diverse school space creates the opportunity to break down the rigid hierarchy and roles, building horizontal relationships, new friendships and deeper ties. It is best if these places are designed with a clear participation of students and teachers, then it is more likely that, for example, a rebuilt or renovated school will become more open, not only objectively, but also in the subjective perception of children and adults. That it will no longer resemble barracks, will no longer be deprived of atmosphere and history of a 'non-place', and will become a 'place to live'.

What is more, by opening to the children, the school usually at the same time opens up to the rest of the world: parents, neighbours, a nearby orphanage or a local museum. It is like a domino effect.

Parents at the school, or we are building bridges

Neglecting social matters in schools is all the more painful as in today's world parents pay less and less attention to their children, who spend less and less time on the playground, and outside in general, and a large part of their social lives is transferred dangerously towards social networking sites. Therefore, the responsibility for the process of socialization, building relationships and a democratic society that falls on the schools is greater. It is an enormous pity that the school does not meet these expectations. At the same time, it is worth noting that for many parents other things turn out to be more important: good grades, discipline, no hassle... A significant group of parents sees the school as when they were children themselves and dreams of a school, which will not only raise their child well, but will force them to exercise, to give kids good grades and this way open them a way to making a life and a career. Meanwhile, without the cooperation of teachers and parents the child's success is difficult and sometimes even impossible to achieve. An open school invites parents not only to school celebrations or field trips, but also often talks to them (with regard to younger children, daily, if only for a short while...). It does not use stereotypes of teachers that are 'too strict' or 'too mild', or parents that are either 'claim-oriented' or 'disengaged'. It makes an effort for each guardian to feel safe in the school and for them to know not only of the difficulties or trespasses of the child but also about their successes and unexpected interests. And this cannot be done during class meetings, it requires direct meetings and conversations (an email is not enough!).

A more civic school wanted

Civic and social education focused on developing empathy, respect for others, appreciation of diversity, teamwork, communication and joint action, even though eagerly declared, is usually implemented with carelessness and lack of systematicity. Priorities, at least in Poland, are usually different. There is a strong pressure on academic results measured with test grades and grades on reports. Young people put huge effort into getting better grades, private tutoring is common. The spirit is of individualism and competition.

A positive result of such an education, focused on measurable results and individual achievements mark a huge success of Poland in international studies. However, the price is high and those who pay are not only children and teachers, but also the society as a whole. The lack of readiness and ability to cooperate or self-organize in local matters, catastrophically low levels of mutual trust and low rates of membership in organizations are all markers of low social capital and are considered to be one of the main barriers to further the development of Poland.

The school could become an ideal place to build such a capital, but it would require for everyone, not just the education authorities but also teachers, parents and students themselves, to break out of the individualistic vision of education and career. Certain hopes arise from the criticism of the school 'rat race' in the public debate and the related discussion about the model of society, economy and State that we should develop in Poland. An open school

is a civic school, where students are treated with respect, where democratic principles, as for example freedom of expression, of taking decisions in matters important for the pupils, is practiced in class and after class, during breaks and trips.

The values that count or the ethos of school every day

Education toward values in Polish schools is in an ambiguous and difficult position. All official documents make reference to ethical values, including the law on the system of education, the core curriculum of general education and the educational recommendations within it. But all this does not translate into concrete forms and ways of working with students. Since the goal of moral education is the transmission of values and behavioural patterns, the actual behaviour of teachers and the principal become key as they show the values they actually follow, not just preach. It is this daily communication practice that shapes attitudes of children and young people more effectively than any formal statements or entries in the school rules and regulations.

The ethos of the school, the atmosphere, the attitudes of educators in such dimensions as: equality, justice, dignity, autonomy, integrity, honesty, civil courage or solidarity have crucial importance for value-based education. Many Polish schools and brave teachers are trying to teach this and coming out of the post-Communist scheme passivity, anxiety and conformism. But it is clear that the road ahead of us is still a long one.

Are we ready for a revolution?

Polish schools, although ranking higher and higher in international rankings, are still unable to meet the major challenges of the 21st century. In this publication, we will also show initiatives which bring us closer to the model of 'the school of living with and for others', where what counts is commitment and life goes by according to the rules of a democratic culture. We present examples that can help you break the conservative habits and expectations of central and local education authorities, schools themselves, principals, teachers, and even pupils and parents. We believe that everyone can almost immediately begin to implement such changes in their environment and their classes so that the child's school experience will be more relevant for the needs and challenges of the modern world. It seems, however, that at the national or European scale such partial changes may not be enough and we will need to change the paradigm of the school.

"We are not able – neither in Poland nor in other countries – to define the new role of schools and the new educational goals. We are looking for remedies in the institutional arrangements, we refer to the paradigms that once worked and we remain helpless when it turns out that the world has changed too much for a way back to the past to be a pathway to the future. We are on the eve of a Copernican revolution in education. In this new education, the focus is moved from the curriculum and the teacher to a subjective, self-steering person – a learner that in a world of demonopolized knowledge will move independently, but not alone. His support and mentor is a teacher who does not, however, take away the learner's responsibility for the process of learning about the world, developing skills and becoming a wholesome person and citizen. This education should not be easy, because the challenges we face are not easy. But it will have a profound, far from theoretical, meaning and a personal meaning for the learner. Will such education finally come? Oh, yes. It is already coming. If we are brave enough to undertake another Copernican revolution, we will become better[4]," says Robert Firmhofer, director of the Copernicus Science Centre.

ATUT School Complex Library, Wrocław, Poland. Photo: Marcin Polak

FORM FOLLOWS FUNCTION

The design of our schools is deeply rooted in our history. It dates back to medieval monasteries and a standard blueprint for the layout was firmly established during the expansion of public education: the classroom, with the teacher and a blackboard in the front and a corridor outside. This model has served us well, education is and has been the driving force behind the successful development of our societies so we might ask ourselves: Why do we need to change? Our answer to this is that form follows function: Since our schools of today and tomorrow need to respond to other demands than schools did a hundred years ago, we also need to examine the design of our schools.

ANTE RUNNQUIST
Rektorsakademien Utveckling AB, Sweden

Schools worldwide face a similar challenge: how to make the transition towards 21st century models for learning that focus more on skills and lifelong learning. This shift is visible in the eight Key Competencies for lifelong learning formulated by the European Union:

1. Communication in the mother tongue
2. Communication in foreign languages
3. Mathematical competence and basic competences in science and technology
4. Learning to learn
5. Social and civic competences
6. Sense of initiative and entrepreneurship
7. Cultural awareness and expression
8. Digital competence

One could argue that there is nothing new in the competencies on the top of the list, they seem to have been the bread and butter and the heart of public education for centuries. A closer examination tells us that these competencies have undergone a dramatic revolution in recent years. Just a few examples: communication in the mother tongue entails doing this in complex digital contexts and the 'mother tongue' in a globalized world doesn't necessarily correspond to the language spoken in school for many children. 'Foreign languages' are much more present in the everyday life of any child and the dominance of the 'world languages' from the last century is being questioned even in national curricula. When you look up 'mathematical competence', you will find an ever increasing focus on problem solving and critical thinking. One could argue that the lower part of the list consists of competencies that have been signs of great schools and successful teaching practices but hardly hallmarks of public education in general. We need to develop our learning environments in order to meet the challenges of our time and to close the gap between education and the reality our children face outside the school.

A framework for Learning environments

The development of learning environments depends on the understanding of several interdependent dimensions. We have chosen to work with three of them: social and cultural space, physical space, and virtual space and technology.

- **Social and Cultural Space**: Ideals and beliefs, attitudes and values. In the case of schools they are both explicit, as expressed in the curriculum or the unwritten 'ethos' that guide our actions. The socio-cultural environment is the 'feel' of a school and you can apply a whole range of tools to analyse and understand it. But not only culture inside schools plays a role, expectations and attitudes in the surrounding community and in families play an equally powerful role. Included in this dimension are methods and strategies we use to organize learning, pedagogy and organisation.

- **Physical Space:** 'The third pedagogue', the places and spaces used for learning. Recent studies[3] show that the physical environment has significant impact on learning outcomes. We are becoming increasingly aware of the importance of good audibility, air quality and lighting in schools, these are basic criteria that need to be met to have a good learning environment. Basic criteria are hugely important but not enough, the physical learning environment should create structure, be safe, offer identity and flexibility to pedagogy. Our handbooks have a focus on the physical learning environment but it is impossible to separate this from the other dimensions, when we design schools we have to examine culture.

- **Virtual Space and Technology.** The doors of our educational institutions have been burst open for the first time in history, digital tools and technology offer enormous resources, create new challenges for education. In the virtual space and technology we include all resources that can be used to foster formal and informal learning.

Great learning environments are coherent, there is a strong link between all of their dimensions. A simple illustration: the cultural learning environment in a Montessori school has its roots in the ideals and beliefs formulated by Maria Montessori; they have resulted in certain attitudes, strategies, methods and approaches for the intellectual environment which, in turn, demands certain solutions, and even aesthetics, in the physical learning environment and finally, in strategies for the use of digital technology.

We claim that the development of learning environments should go 'clockwise'. Culture and a solid understanding of the purpose of the school form the foundation of pedagogy, the physical environment and the use of technology. It can be tempting to go counter-clockwise: loading schools with digital technology or building eye-catching physical environments, but we have seen very few cases of this being a successful strategy in the long run. So, when we want to improve learning outcomes we need to address the learning environment as a system with interdependent parts.

All our case studies and guide books are written with this framework in mind and are designed to illustrate successful strategies used by professionals to improve learning environments in our schools.

Learning space in Vittra Telefonplan in Stockholm, Sweden. Photo: Marcin Polak

A GOOD SCHOOL CANNOT LIE

Understanding learning environments is a bit like listening to a jazz band. It will only take you a few moments to make the first judgement and it's often a good one, based on the beat, groove, on whether people play in or out of pitch, and if they seem to enjoy themselves. But a complete assessment of a jazz band requires both the understanding of the individual musicians and their ability to interact. We think of the Learning Narrative in a similar way.

JANNIE JEPPESEN
Jannie Jeppesen, Rektorsakademien Utveckling AB, Sweden

Creating a sustainable learning environment demands vision, multiple perspectives and a context, what we call The Learning Narrative*. The Learning Narrative is a concept for helping us understand the complexities of a learning environment. Organization, leadership, pedagogical methods and didactic choices need to be in tune with the digital and physical learning environments. If they are out of tune, you will find the school in a dissonance. This is something we see in older school organisations or buildings in which large societal changes knock on the door. Digitalisation is one example. What new demands concerning leadership, didactics and physical environments does digitalisation address? A new curriculum stressing collaborative, entrepreneurial and communication skills is another example of dissonance in the learning environment in a traditional classroom setting, with thirty students placed in a row of desks. What we know is that change is a constant and organising learning situations is a complex task. We need to understand the organism as a whole, look at it from a systematic perspective. The Learning Narrative is the 'whole story', culture, attitudes, methods, physical and digital environments that surround the learner. You need to have a holistic approach in order to succeed in changing your learning environment.

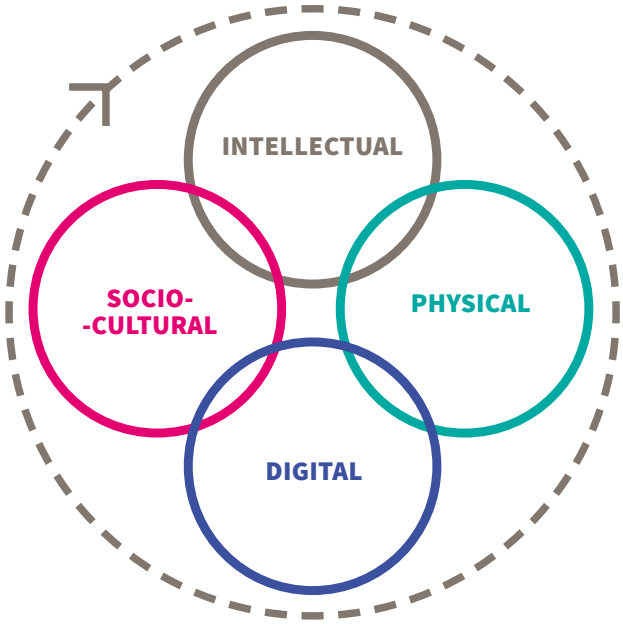
The Learning Narrative

A good school needs to be in tune and have a groove, a coherent narrative where different aspects of the learning environment support one another and add to the overall performance. The four perspectives of the Learning Narrative are:

Socio-cultural learning environment: Ideals and beliefs, attitudes and values. In the case of schools they are explicit, as expressed in the curriculum or the unwritten 'ethos' that guide our actions. The socio-cultural environment is also the 'feel' of the school and you can apply a whole range of tools to analyse and understand this, but it is not only the culture inside the school which plays a role, but also the expectations and attitudes in the surrounding community and families that play an equally powerful role. *This is the most powerful factor in building a successful learning environment with a high degree of resonance.*

Intellectual learning environment: The methods and strategies we use to organise learning, pedagogy and organisation. Great schools have explicit ideas and concepts for this, poor schools seldom do. The name of the game seems to be a deliberate variation: as long as teachers and schools know why they do what they do, and make conscious choices, many methods can, and will, work well.

Physical learning environment: 'The third pedagogue': the places and spaces used for learning. The school building and the classrooms have been a point of focus but we would recommend



a broader perspective: the hallway and school yard are just as important to a child and, ideally, we look at the whole community surrounding a school when we plan it. This is an area where decisions need to be well thought, since the consequences will "stay" over a longer time.

Digital learning environment: All the digital tools and platforms we use for learning as well as how the learning situations are designed. *This is the area where we have the quickest development in technology innovations, i.e. it stresses a need for an agile approach to this field.*

Resonance

When these four environments are in tune, they support each other and create what we call Learning Narrative Resonance, a coherent system aimed at learning. As a simple illustration, the cultural learning environment in the Montessori school has its roots in the ideals and beliefs formulated by Maria Montessori. They have resulted in certain attitudes, strategies, methods and approaches for the intellectual environment which, in turn, demand certain solutions, and even aesthetics, in the physical learning environment. We claim that the development of learning environments should go 'clockwise' around this model – an explicit culture and a solid understanding of the purpose of school form the foundation for pedagogy, for the physical environment and for the use of technology. It can be tempting to go counter-clockwise, loading schools with digital technology or building eye-catching physical environments, but we have seen very few cases of this being a successful strategy in the long run. So, when we want to improve learning outcomes we need to address the learning environment as a system with interdependent parts.

Dissonance

The opposite, Learning Narrative Dissonance come from lack of coherence and conflicts in the system. Learning Narrative Dissonance occurs when there are contradictions in the learning environment, something is out of tune and continues to be so. A dissonant learning environment can be very unstable. For example: we opened new part of the school three months ago and we already need to renovate, because the old problems seem to prevail. Or when teachers committed to project-based learning in a school have no physical spaces for collaboration. When a school with the motto "Learning with all the senses" has no learning environments outdoors or a school with "Entrepreneurship" as the theme has no real influence on pupils. "21st century skills" in school where kids sit in rows, listening to teachers? "Digital competence is important!": every child has a computer but the Internet is turned off during class and computers should only be used under supervision. Or for example an open-plan school with teachers begging "Please, give me a classroom!".

WHAT'S THE PURPOSE OF SCHOOL NOWADAYS

The purpose of school is to equip human beings with competences that will help them in their lives. It is a place that will help them get to know themselves. School is the space where they will safely test, try and experience – themselves and the world. Our own school experiences show that in teaching and bringing up children it is not always about words. Often, the places and situations we face are equally valuable as learning opportunities. Contrary to the traditional approach it is not the teaching curriculum that is the most important. The methods we apply are much more significant. Comprehensively planned and carefully selected, they will be the key to the school of tomorrow.

EWA RADANOWICZ, School Complex in Radowo Małe, Poland
KATARZYNA GÓRKIEWICZ, Centre for Citizenship Education, Poland

School as a space to live

School is a space that speaks to us in a variety of languages. It is not a place that has to prepare pupils to live but a place where pupils are living – here and now. It can be a good, safe, friendly place where people meet, face different kinds of situations and experiences. A space to get to know ourselves, learn who we are, what we like and what we dislike. What comes easily and what is hard for us, where to put more effort, what to work on. Sometimes it is a place to discover what is important to us and what we need in our lives. It is also a space to learn how to work with others and that we are responsible for what we do. A very important part of this is the experience of building relationships with other human beings, being part of situations where we feel good and also the opportunity to safely test those that are challenging.

School as a learning space

Without doubt the school is a place where education takes place. Education understood as intellectual development. It is a place where children learn to navigate the world of knowledge.

We are accustomed to thinking that the efforts of our work are recognized in the form of results: knowledge and skills acquired. Such an approach leaves little space for positive emotions and experiences. And yet, those are the things that give us a sense of security, recognition, and lead to a need of fulfilment. They often become the driving force for learning, awakening the desire to learn about people and the world.

It depends on us whether the school space has a cultural and culture shaping nature. We can arrange it in a way that serves social functions. Favour a wide variety of interactions, conversations, enable contact and activities. The school space can become a consciously used and shaped area. It can be part of the school concept, which will reflect our views on education as the communication of values, knowledge and ideas with which people live their daily lives.

In order to be modern and to develop student competences consciously, the school does not have to be 'alternative' or fight the system. You can reconcile the requirements that are imposed on such an institution with a bold and creative concept that the management and the teachers have. The teachers are those who will pay attention to shaping compe-

tences while following the curriculum. An appropriate choice of methods and forms of working with a child will assure the parent that the child is doing something important. You just need to plan the work in a comprehensive way and talk about ideas with the parents.

Where to start preparing for the change? With abandoning habits, beaten tracks and by opening up to new ways of thinking and new activities. The most important thing is that the teachers, thanks to the support from the management, believe that their work may result in the formation of not only academic skills but also living skills. That it is a beautiful, enormous task full of responsibility.

School as a place where dreams come true

Shaping space and organising work in the School Complex in Radowo Małe is a way that leads to fulfilling dreams. It took a lot of time, patience, different experiences, people and a combination of events to achieve this. The overall vision of the school was shaped by visits to different places and schools, the day-to-day school life, the teachers' willingness to introduce changes and a lot of determination. All this made it possible to implement bold ideas, not only in the area of teaching and education but also in terms of space and organisation of work.

What sets the Radowo school apart are its thematic laboratories and their role in the educational process. The question is not how to arrange elements in a classroom, a lab or a thematic area. It is more important to make it according to the needs of the students and teachers. To fill the space with objects and didactic aids that will be useful, practical. It is good to make an 'inventory' of human resources, people's capabilities and potential. Let's create unusual and unconventional solutions. They'll give us strength and faith in the possibility of succeeding. The change we will be making will be the result of real needs and expectations. It will improve our work methods, make their organisation better, and the school more interesting, and sometimes even surprising!

The school in Radowo Małe created a variety of conventional and unconventional elements and laboratories for everyone to use. Art rooms for stained glass painting, pottery, paper making, felting. Thematic laboratories for the implementation of project assignments, for example: clutter and antiques, everyday life laboratory, and three classrooms for education in action. Another one is in the making, the so-called individual work office. The solutions may be different. There may be as many as there are schools, people and ideas. Such a work organisation makes it possible for the teachers to conduct classes together and the thematic rooms allow them to break free from the so-called class templates and design original curricula and activities. The teacher's skill set is completed with new methods and ways of working. New possibilities of conducting school activities emerge – interesting, active and encouraging further action.

School as a place that shapes brave people

The Radowo school's curriculum was designed primarily with the student in mind. It is the student and his or her individual development that is the most important. Everything is concentrated around new knowledge becoming a tool for exploring reality.

The teacher's team wants to shape brave, self-aware people who know their worth. People who are confident in what they are doing, have the courage to do completely new things, are not afraid of making mistakes, do not give up and just keep trying. Such attitudes will be necessary in the world of the future.

In Radowo Małe students acquire knowledge in theme labs, e.g. the fairytale lab. Photo: School Complex in Radowo Małe

Photo: School Complex in w Radowo Małe

HOW TO OPEN SPECIFIC SPACES AT SCHOOL?

PARTICIPATION AT SCHOOL

For the school to change, we need cooperation. This, in turn, requires active engagement of all the stakeholders within the school community: students, teachers, the management, administrative workers and parents. In order to encourage them to cooperate and involve them in real co-decision processes, it is worth making use of a set of tools provided by participation.

KATARZYNA GÓRKIEWICZ,
Center for Citizenship Education, Poland

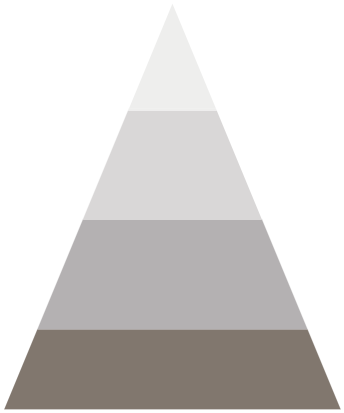
Participation, or in other words taking part in something, is a process that gives one the opportunity to have an influence – to be part of the events, decision making and making plans, all of which concern us directly. The purpose of social participation is not to replace those in power that are responsible for the decision making, but to get involved everyone that is concerned and will be affected by the results of the decisions to be made. This may take different forms depending on the degree of commitment on the part of the participants in the matters to be decided.

The simplest form of participation is **informing**, or in other words communicating, the decisions that have already been made. This does not require any form of activity on the part of the participants and puts them in a rather passive role of recipients that have no influence on the outcome.

Consultation is a more engaging form as it allows the participants to express their views on matters that are important and affect them directly. In such a participatory action, the participants play the role of consultants whose opinions are collected and analysed, but not necessarily taken into account. Both existing and planned solutions can be consulted, gathering feedback concerning the recipients' needs.

Co-decision is the next level on the decision-making pyramid. It is based on a partnership between the decision-makers and those affected by these decisions and consists in transferring some part of the decision-making power.

DECISION-MAKING PYRAMID



PARTICIPATION IN DECISION-MAKING	EXAMPLES
DECIDING: students make decisions on their own (without teacher/management participation)	choosing student Student Board representatives
CO-DECIDING: students make decisions together with adults (everyone has to agree)	applying for giving the school an official patron
CONSULTATION: students' opinion is taken into account in the decision-making process	expelling a student
INFORMING: students are informed about the decision that has been taken	adopting the school statute

Source: Student Board, Centre for Citizenship Education programme

The highest form of participation is **deciding**, that is putting part of the power and responsibility for some decisions in the hands of the participants. This gives them a real impact on matters that regard them directly.

The process of participation may be carried out by applying a variety of techniques. However, in each case the key is to identify the purpose behind the participatory process. The forms of participation described in the decision-making pyramid are a tool used in the decision-making processes carried out by the authorities, for example, local governments. Constructive participation of the citizens in decision--making requires a mature and active civil society.

We are still learning how to be such a society and the school space is a perfect setting to begin to give it shape. Participation is the perfect tool – it strengthens bonds between the participants, gives them a sense of agency and teaches responsibility.

To plan the process of participation properly it is advisable to carefully prepare each of its stages and to inform the participants that it is in course.

1. **PURPOSE:** We begin with a detailed definition of the purpose, answering the questions of why we are commencing a participation process, what the consequences of the developed postulates will be, and how they will be implemented.
2. **CONTEXT:** If we are planning participatory activities in a school, it may seem that their context is unknown to us. But let's try to gain the widest perspective possible and study all the previous activities (both successful and unsuccessful) related to the process in question, and let's ensure the legal and administrative conditions required for the decision-making process to take place.
3. **PEOPE:** People are a key element without which participation will not take place. It is worth considering who and how we want to engage in participatory activities. The following questions may be helpful:

- of whom does our school community consist?
- who within this community is not visible and often marginalized?
- whose opinion is especially valuable to the process and who is worth to inviting?

4. **PROCESS:** After the preparation and examination of the above areas we possess the knowledge that allows us to plan the whole participatory process. It is time to choose the technique, set a working team, look for allies, develop a detailed action plan and meeting scenarios. We inform all the participants of the process and we act.

In Radowo Małe students jointly decide on the rules concerning the use of new technology. Photo: School Complex in Radowo Małe

In schools taking part in "School with Class 2.0" students and teachers organise debates to work out Code 2.0, i.e. rules concerning the use of new technology. Source: http://blogiceo.nq.pl/szkola2zero/

5. **RESULT:** The participatory process does not end with the execution of the planned activities. Two more elements are necessary – evaluation and, what is probably most important, the implementation of the results.

Basic participatory techniques

You can participate in a variety of ways. It is worth searching for techniques that will best respond to the needs of our community and will be an effective tool to participate in the decision-making and planning. Below I propose some ideas.

Participatory budgeting

This method allows to co-decide on a school budget, or part of it. The scale of such an action may vary: from participation in the managing of the whole school's budget and its priorities, by creating a hierarchy of expenses, to separating a small part of the budget and putting it into the hands of the school community. You may want representatives of all groups: students, teachers, parents, and other school staff to take part in such an activity. The process consists of several stages. The first one is to familiarise the participants with all the disciplines the budget embraces (for example, by consulting experts). Then, through a voting mechanism, the participants prioritise and select those categories that are of the highest priority to them. The variant consisting of setting aside a part of the school's budget and planning how to spend it can be implemented following ideas from the execution of the participatory budget project in various Polish cities. Members of the school community can first submit their proposed changes and activity ideas together with a detailed plan and timetable of expenses, which is then consulted with experts and finally subjected to a vote. In addition to the direct effect of such participatory activities, such initiatives make sure that the funds are used in a way that actually responds to community needs. The use of this technique has also other, long-term results. One of them is building trust towards the school authorities and a sense of transparency in decision-making.

Charette

This is a technique supporting activities related to introducing changes and designing spaces, e.g. revitalization, renovation, reorganisation of the school building. It consists of bringing together, in the same place, specialists in various fields (lawyers, architects, civil servants, artists, school community activists) and inviting them to take part in a shared, moderated conversation. As a result, specific recommendations and proposals regarding the consulted matter, for example a specific school area, are produced. In the initial phase of planning this method allows to gather practical ideas and present different points of view. It also encourages the representatives of different groups that have not worked together before, to join the discussion and cooperate. Depending on the scale and the particular needs, a different number of people can participate in the process. Also, its duration may vary depending on the case. Nevertheless, it is always a cycle of thematic discussions. During the meetings, all participants have the opportunity to present their point of view and their needs, but also to get to know and understand the needs of others. They also work out recommendations for the project together.

Civic Café

Its aim is to debate a specific topic. This consists in gathering opinions and discussing them, while contributing to building relationships within the community. This technique is similar in nature to an informal me-

eting of 8-10 people. It consists of three stages: each participant expressing his own position, commenting on others' positions and a conclusion in the form of an open discussion. It is not a method focused on getting to an agreement or making a decision. Rather, it is focused on dialogue which is the goal in itself.

- During the discussion, the participants are to follow six basic principles:
- openness – listen and respect the points of view of others,
- acceptance – refrain from judging,
- curiosity – try to understand others' motives rather than convince them you are right,
- discovery – question the given knowledge and seek for new information,
- sincerity – talk about what is important to you,
- brevity – speak honestly and wholeheartedly but be concise.

When organizing a Civic Café we must above all properly arrange a friendly space. The most important element will be the table at which all the participants of the meeting will sit down together. It is also good to have snacks and drinks.

It would be best to invite all the interested parties to Café meetings, and if it turns out that there are many participants, you should consider dividing them in smaller work-groups or turning the event into a series of meetings.

The person responsible for the Civic Café (it might be a teacher or a student) starts the meeting by explaining the subject, form and duration of the meeting to the participants, and informing them of the six principles to follow during discussion.

In the case of problems with the groups' discipline, for example if the participants speak at the same time, you can use a small, symbolic object passed on from one to another as a symbol of having the right to speak. At the end, it is worth asking all the participants to say, one by one, how the discussion benefited them and what was most interesting.

The school community of Radowo Małe co-decides in matters related to the use of telephones. Photo: School Complex in Radowo Małe

Participatory assessment

This technique allows to have a broad approach towards the participatory process and its main feature is full commitment of the participants in defining the topics and extent of the activities. The number of participants when using this technique is unlimited, still the working method must be adjusted. The role of the initiator in the process (it may be a headmaster or a teacher) is limited mostly to being a moderator and to helping the participants with their activities. In this technique, it is very important to put part of the power in the hands of the school community. This gives it the possibility of having real influence: making a diagnosis of the context, identifying problems, generating solutions and planning future activities.

In practice, the method involves primarily visual and 'interactive' techniques that make going through all the process easier. The most commonly used tools include: mapping (e.g. the school building and its surroundings, favourite or dangerous places, groups forming the school community); setting priorities by prioritizing topics, problems and goals together; creative design and visualization.

A participatory assessment is based on several important assumptions:

- participation of representatives of all groups forming the community,
- defining a goal and agreeing upon it with all the participants,
- ensuring that each participant has the opportunity of speaking and being heard (thanks to rules set at the beginning of the meeting and using specific moderation techniques).

Radowo Małe school community. Photo: School Complex in Radowo Małe

The result of the team's work is the creation of a clear action plan in a given area of work, with information on the duration, resources and implementation costs.

Research Walk

This technique allows to create a map of specific places and space elements that require an intervention, and to examine the needs of the participants – the users of the space. It focuses on small group activities, preferably consisting of 3-4 persons. The key to understanding and applying this tool is to look at the space from the perspective of the user.

A research walk is an interactive, field work method consisting of talking to the users of a given place. It can be performed not only in an open space, but also inside a building. It is worth to use it in order to assess a place through the eyes of others or to gather ideas for new solutions for space planning. Recommendations from such consultations may be helpful in coming up with new solutions for school space and surroundings design, or in improving existing ones.

This technique allows you to easily engage the participants and to interact with them in a friendly atmosphere. However, it requires good preparation and competence from the person conducting it (from knowing the studied area to possessing the skill of asking questions and taking notes on the go).

- In preparation for the implementation of the research walk you must:
- determine the space you want to explore;
- define in detail the issues and problems that you want to diagnose during the walk;
- plan who will be the guide during the walks: it should be a person that knows the space well;
- prepare a detailed plan and route for the walk: write down in an order the points of interest on the route, assign questions to each of the points.

It is good to visit a given space at different times of the day – when the sun is up, in the evening under artificial lighting, but also, for example, in different weather conditions to see how the perception of the space changes in different circumstances.

The groups participating in the walk should be small, with only a few participants. In larger groups, it is difficult to walk and talk about the surroundings at the same time. During the walks, photographic materials or videos should be prepared.

Article based on materials from the website www.partycypacjaobywatelska.pl

CLASSROOM DESKS, OR HOW TO INITIATE THE CHANGE?

The classroom space is a place where students spend most time when at school. It may contribute to the atmosphere of working together and stimulate learning, but it may also distract, disrupt and weaken the motivation to learn. Why so rarely do we wonder if classroom space is properly organised?

MARCIN POLAK
Think! Foundation, Poland

According to the authors of the Educational Research Institute expert report,[6] "Improving and enhancing the functionality and comfort of the classroom space is possible if teachers introduce even only slight changes: modifications, supplementations, or improvements which are low-budget solutions." They encourage introducing changes: "When a school makes implementing such changes possible, it can perform the task of providing their students with friendly, safe and healthy conditions for learning and playing, individual and group activities, developing their independence and responsibility for themselves and their closest surroundings; it can provide conditions for developing artistic, musical, theatrical and kinetic expression, exploration, as well creative pursuits of the children." Although the report is devoted to early primary education, in principle this statement can be applied to all stages of education.

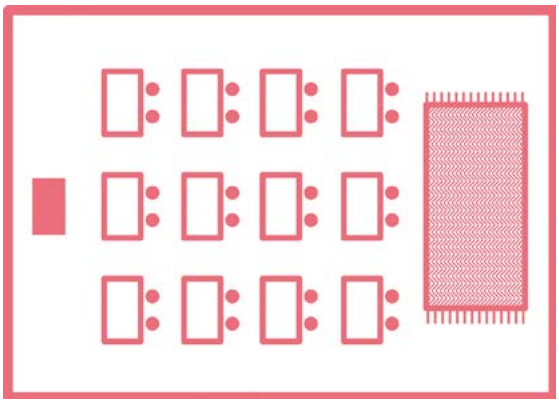
Where then should the changes in the classroom begin? If we feel that we should change something in the teaching style, but we are still wondering how to approach such a change, we should perhaps start from desks. The most important thing is to try out various solutions.

Of course, there is no universal layout of desks in a classroom that would stimulate learning in every situation. The learning process is non-linear and consists of multiple educational situations, involving various learners' activities. The organisation of the classroom space should be adopted to the character of the classes and fulfil educational goals in a particular situation.

Polish and international research shows that the place where students sit determines their classroom activity. For instance, the traditional layout of sitting places with desks arranged in rows maximises communication with students sitting in the front and in the centre of the room, but minimises contact with those occupying places on the sides.[7] Depending on the arrangement and the occupied place, also the role and the position of the teacher in the learning space changes, as does their influence on students.

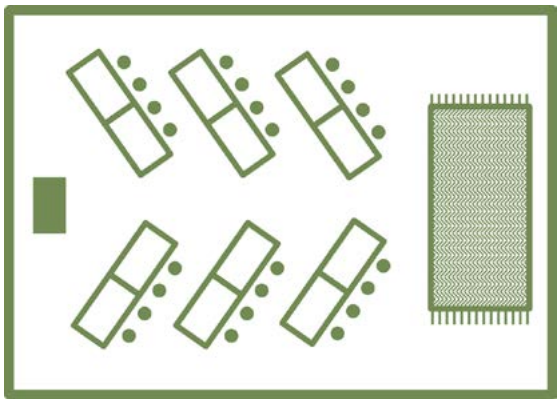
Let us not be afraid of trying out various configurations – at first the cleaning staff may be upset about 'the constant disarray', but we are learning here! Below you can find possible variants of classroom space organisation:

1. Traditional desk arrangement



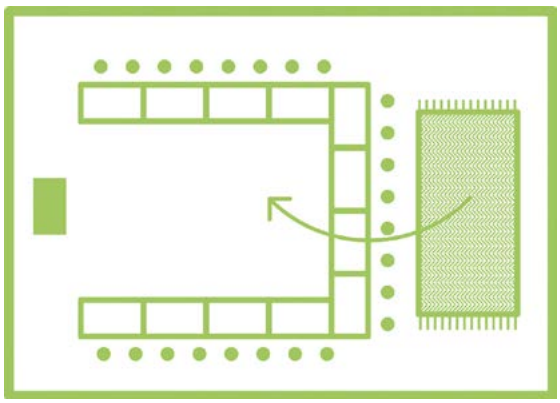
Desks arranged row after row, with one or two aisles to make moving around the class possible. The layout is subordinated to the teacher who is the most important person in the room in this arrangement, while students have an assigned role of passive listeners, diligently noting information imparted by the teacher. Students watch one another's backs, while communication and cooperation are hindered. In a classroom arranged in this way, there is only one place for students to make a presentation – next to the teacher, by the board/screen.

2. V-shape



If there are many students in the class, we can depart from the traditional layout by combining 3-4 rows at right angles to form a V-shape. Passageways are left along the walls of the class. It might not be the perfect arrangement (the teacher here is still in a privileged position and dominates the classroom), but it enables to decrease the distance between students, who have better eye contact with one another, and it is easier for them to talk during discussions or presentations of their work. At the same time, everyone has a good view of the classroom and can see presentations/films on the board/screen. This arrangement provides a good place for student presentations, from which they have good contact with everyone in the classroom.

3. Hyperbole/ horseshoe/ U-shape



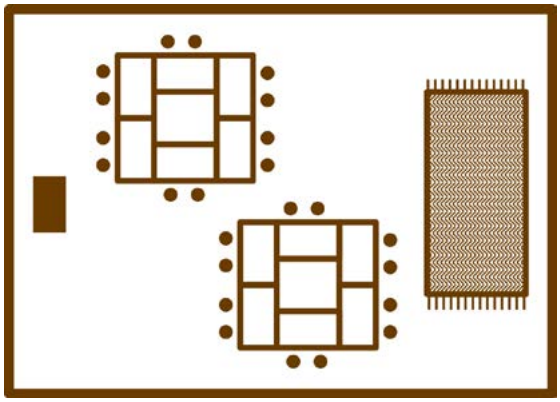
Desks in the classroom are arranged in a curved line which resembles a hyperbole, or the letter U. The centre of the class remains free for the teacher who has easy access to all students, can approach each of them, talk to them or supervise the progress of their work. The teacher can also demonstrate visual aids to students up close, or coordinate students' watching their works together. Didactic materials and aids can be quickly passed around. All students have a good view of the class, they see one another and the teacher well, easily watch presentations and films displayed on the screen or the interactive board (they also see the board with information written down very well) and conduct discussions. This layout facilitates working in pairs and groups of three. In such an arrangement, the teacher maintains control over the class, can remain at the board (thus taking a privileged and superior position in the classroom), but can also sit with students at a desk or join their desk with students' (they can also put their chair in the middle of the free space and conduct the lesson form there). A student can enter the inside of the horseshoe as well, and make a presentation of their work or a particular issue. In this arrangement, we need to secure passages, to that students have easy access to the (interactive) board.

4. Cross

It is an interesting and practical arrangement intended both for working in groups and the whole class together. In the middle of the room, we set up four arms of a cross (joining desks in twos, and adding more to the arms, if necessary), but we leave the middle empty in order to ensure that there is space between workstations. In this layout, we need to secure easy access to boards and flipcharts which students will be using. It would therefore be ideal to have more than one board, and add extra flipcharts. This arrangement is not comfortable for watching films and presentations together, as a part of the students is always sitting with their backs to the screen and would need to turn. The teacher can take a place by one of the arranged arms of the cross or circle between teams, giving information and consulting. The space left in the middle, between the arms of the cross, can be used for presentations of group

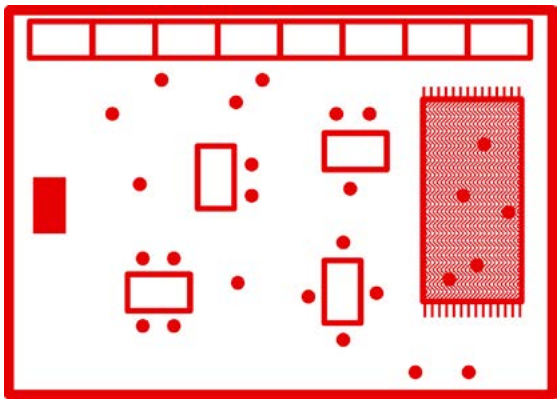
representatives (they can also speak from their seats, as the arrangement ensures good eye contact with everyone in the class).

5. Conference table



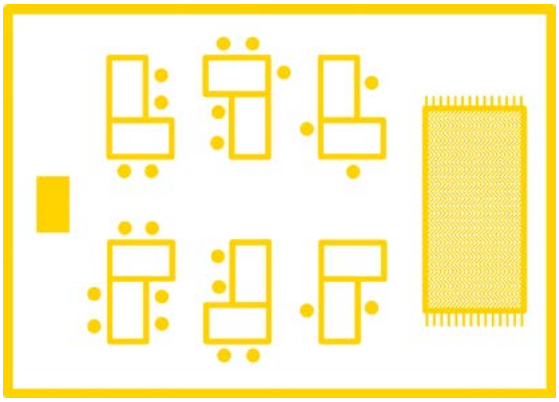
We can join all the desks in the classroom together to make one huge table, for all students to sit around it. In this layout, the teacher maintains control over the class; they can sit down either at the head of the table (a privileged position, like a 'leader'), or among students (a more democratic solution). They can also circle around the table, observing students at work, although contact is not as good as in the U-shape arrangement. In the conference table layout students have a decent view of the class, they can share materials and learning aids. Their view of the board or the screen is somewhat worse, so such an arrangement is not suitable for watching presentations and films. It is more suitable for exercising the ability to cooperate in a large group – training various communication skills, e.g. participating in a debate, or exchanging arguments in a discussion.

6. Club layout



Students seat in groups of 3 to 5 by the tables arranged around the entire classroom, with corridors in between them to enable students and the teacher to move around. This layout allows them to work freely in groups sitting by the tables. Team members can easily communicate with one another, and with adjacent teams. The teacher can approach each table, sharing information and observing the progress of the work (their function here is to support learning). In this arrangement, it is possible for students to work individually, at tasks assigned to each member of the team. If the teacher stays 'by the board', certain students may find it hard to communicate with him/her and must turn their heads and chairs to listen to instructions (this inconvenience is eliminated when the teacher stands between tables and conducts the lesson from this place). It is possible to modify this layout by arranging desks along the walls, which increases the space in the middle, e.g. for the teacher or team members to make presentations. With the club layout, it is possible to use a variety of places for student presentations – all the classroom walls can be used as well.

7. Segments



The teacher should not hesitate to choose such an arrangement of desks when the objective of the lesson requires it. In this case the opinion of the cleaning staff cannot be decisive. In the segment layout, desks are arranged in groups of four. They create a single large surface for group work (for instance, it is possible to spread large sheets of paper to perform assigned tasks) or an L-shape (they can be arranged in various ways, e.g. when the teacher first needs to make an introductory lecture). This

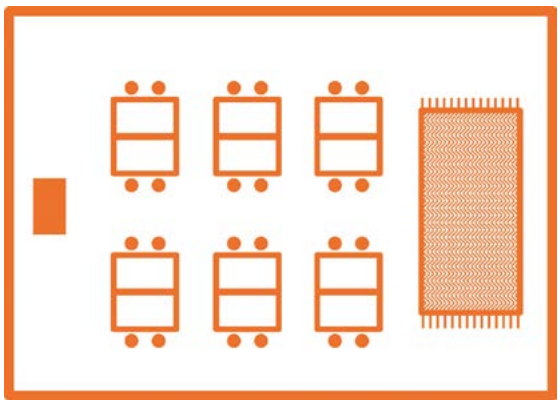
layout is flexible, as moving from one segment to the next requires moving only one desk and chairs. Depending on the needs, one segment can be occupied by up to 6 students. The layout ensures good communication within teams sitting at desks, and it makes it easy to observe collaborative work. Also, the teacher can freely move around and communicate with students.

8. Circle

In this arrangement, we leave desks aside and arrange chairs in a regular circle, with everyone facing everyone else. This increases interaction among students and their direct contact. In such an arrangement everyone is perfectly visible and no one can 'hide' behind a desk. The teacher can sit down together with the students, and thus becomes an equal member of the group. The layout encourages discussions and games, especially those which help students to get to know one another better. Since it is difficult to take notes, this layout is decidedly more suitable for conversations, sharing opinions, discussions or brainstorming (we can bring flipcharts). The optimal number of students in the circle is 20.

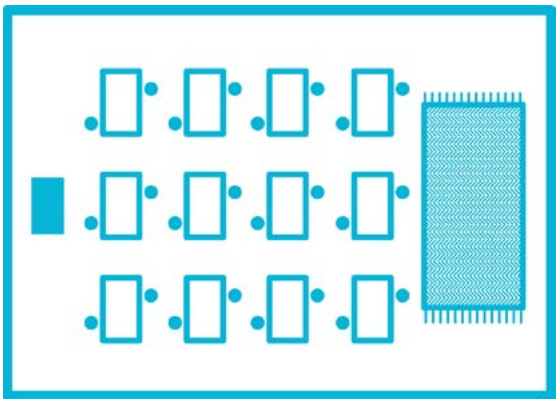
Another version of this layout – with desks arranged in a larger, external circle behind the chairs, gives broad opportunities for individual work. Students need only to turn their chairs around and they can follow teacher's instructions individually at their own desks. They can stop at any moment and turn back to face one another again in order to carry out a discussion.

9. Working groups



An interesting arrangement (especially when attendance in class is low) is to form 4 or 5 groups by joining two desks for each and place them around the room. The remaining desks are used to make the main learning table (or a U-shape) in the middle. Such a layout allows students to work in groups of 4 or 5 at their desks, but sit at the common table for the main part of the lesson (introduction, explaining instructions, discussing work, watching things on the screen or the interactive board.) Tables for group work should be far enough from one another so that one group does not disturb others, and everyone has enough space to work. The teacher should have eye contact with all teams and access to all working groups.

Laboratory



In the lab layout, each student should have their own working space. It can be achieved e.g. by a free arrangement of single desks around the classroom with spaces left as passages between them, and a pair of students sitting at each of them. Students are sitting on the two sides of the desk, diagonally from one another so that they are not in each other's way. If they are using the same device or a tool, they can sit on the same side of the desk. The teacher should have access to each desk, to be able to give advice and supervise progress.

Mixed layout (joined classes)

An interesting and innovative idea is a brand-new arrangement of the classroom space combining two classrooms into a single space used by two groups of students. In such a layout, the wall dividing two classrooms is demolished (or not built in the first

Maths in the kitchen in Radowo Małe. Photo: Piotr Kozak

place if the building is new) and instead of a permanent structure there are sliding partitions or screens, symbolically dividing the space into two areas: one for group and individual work, and the other for meetings and working together as a whole class. In this layout, tables in one part of the room are arranged e.g. in a U- or V-shape, we provide tools for audio-visual presentation so that the screen or the board is visible to everyone, and several (3-4) computer workstations for current use in class, as well as cupboards with materials. 'Behind the screens', there is a space in which desks are set for working in small groups, there are flipcharts and sliding boards for making notes and displaying results, and extra chairs (they can be folding chairs) or tables (also folding). This allows us to model the space according to our needs. In this part of the classroom there are also several computer workstations for the students' current work. Rooms are joined so teachers can conduct lessons together for a larger group of students, and the groups can mix according to the lesson plan. The advantage of this solution is the ease of using the 'ready-made' space (no need to rearrange during the lesson), but also the fact that teachers are working as a team, each tasked with a portion of the curriculum. It also contributes to the interdisciplinary character of learning if the subjects of classes are different. The teachers can freely move between the two spaces and be where they are required at a particular moment.

Based on: Designing Spaces for Effective Learning A guide to 21st century learning space design, Higher Education Funding Council for England (HEFCE) on behalf of JISC, 2006; Active learning spaces. Insights, applications & solutions, Steelcase catalogue; Organizacja przestrzeni szkolnej, platforma kursów e-learning Jaszczur, Uniwersytet Jagielloński, http://jaszczur.czn.uj.edu.pl/mod/book/view.php?id=8859, access: 29.02.2016.

Illustrations: First Class Teacher resources /Center for Citizenship Education programme/

The library can become a working and playing space.
Photo: Middle School no. 55 in Warsaw

OPEN RESOURCES AND COPYRIGHT IN EDUCATION

"Education based on open resources ensures equal opportunities for all in life-long learning processes, democratises knowledge, facilitates its acquisition and popularisation, develops civil society and social capital, and makes it easier to use a variety of financial, technical and human resources."

an extract of The Coalition for Open Education Mission

JOANNA SROKA
Joanna Sroka, Center for Citizenship Education, Poland

When thinking about modern learning environments, we have to take into account the rules of Internet use. Preparing materials and looking for information and resources online has never been easier than today. The use of the Internet is a great educational opportunity for both students and teachers. For this reason it is extremely important to remember about copyrights and the legality of such resources. There are multiple examples of original works used every day at school: photos incorporated in multimedia presentations, press articles, quotations, lesson scenarios, music pieces, videos and many others. All of them are subject to copyright and cannot always be used freely for educational purposes. Therefore, it is of utmost importance to know their status in the light of copyright regulations and how they can be used legally.

Any creative activity of individual nature, in law referred to as a work, is subject to copyright. A work may include, among other things, pictures, articles, books, films, advertising slogans, computer software and many more. Ideas, discoveries, official documents and simple press news are not classified as works.

A work is protected by copyright from the moment it is created. The author may individually determine the rules according to which they intend to make their work available to others – they can do it by marking the work with a ***copyright* © licence (all rights reserved)** or e.g. a selected ***Creative Commons* licence (see: "What are CC?")**. In certain circumstances, copyright law admits using works protected by copyright, too (i.e. works with all rights reserved). Such exceptional circumstances include ***personal fair use, educational fair use*** and the ***right to quote.***

What is personal fair use?

Personal fair use means that you may use a work for your own purposes (you may not publish it or present it in public, though) or copy it for your own or your closest ones' purposes. This means that you can e.g. copy a book for your own use but you cannot make it publicly available on the Internet, for instance in the form of a scan. You can also lend or copy a book, CD or picture and give it to one of your closest ones, like a family member or a good friend. However, making a work available to other people, i.e. distant acquaintances or strangers constitutes a violation of copyright. Therefore, e.g. people writing blogs that can be searched on the Internet should not publish works protected by copyright there but rather use resources shared e.g. under a CC licence or marked with a Public Domain symbol (CC0, Public Domain). A material with all rights reserved can also

be used ***within the scope of institutional fair use*** (regarding educational institutions, libraries, archives and cultural institutions), including ***educational fair use*** and the ***right to quote***.

What is and what is not educational fair use?

The simplest explanation is that it is a set of rules specifying how teachers, pupils or school libraries may use resources protected by copyright. A widespread belief that school, teachers and pupils are free to use any works they find (e.g. on the Internet) is wrong. You cannot do anything you want to with a resource protected by copyright and simply claim that this is educational fair use. By virtue of law, educational fair use is only a specific limitation of author's economic rights; these rights must not be entirely ignored – educational fair use gives you the possibility to use a protected work free of charge and without the consent of the author's economic rights holder, but only in strictly defined situations and under specific conditions.

Educational fair use – terms and conditions for using resources protected by copyright:

- Such resources may be used (copied, displayed, screened, presented, etc.) exclusively for teaching purposes - e.g. you may copy student books/ other books/pictures/images etc. and hand them out to your pupils for educational purposes.

- You can use such resources only within the group of people participating in a given educational situation. In practice it means that you must not distribute, share or present such a resource outside your pupil or student group – e.g. you must not publish on the web a lecture recorded with music playing in the background that is protected with copyright because it could be accessed also by persons it is not addressed to. Such a resource may be published e.g. on a school platform provided that only pupils who know the password will have access to it.

- It is forbidden to make any financial gains by using such resources – each replay, publication, screening, presentation, etc. of such a resource must be free of charge. Public presentation of a work during a school or academic event is only legal when admission to such event is free of charge and persons who perform such a work are not paid for it.

- Pursuing its statutory objectives, a school may lend and share its collection.

- The right to quote gives you the possibility to quote other works in part or in full, e.g. you may quote a poem or a book in your essay or analysis, use a graphical element or someone else's picture in your artwork; however, such an element or picture may not form the principal part of such artwork since that may raise a question of plagiary.

Educational fair use and the right to quote

The use of a work on the basis of ***the right to quote*** needs some further explanation.

The right to quote is the right to cite a work that was published before in part or in full. In order to use a work protected by copyright on the basis of the right to quote (in particular if the work including such quotation is to be published e.g. on a blog freely accessible on the web), the following conditions must be fulfilled:

- **the author and the source must be expressly provided** next to each quote (including a visual or audiovisual quote);

- **the quote must be distinguishable and clearly marked** – e.g. by quotation marks and a footnote;

- **the quote must have merely an auxiliary function** – it is to supplement or enrich a given work rather than substitute it or build its core;

- the maximum size of a quote allowed has not been expressly specified; however, **it must remain in such proportion to the work so that there is no doubt as to the auxiliary function of the quote**;

- **the quote must serve a specific purpose: it must have an explanatory or educational function, provide a critical analysis or fulfil special functions of a given genre** (pastiche or parody).

What should we do if we want to use someone else's work in ours and then publish our material online?

We definitely cannot choose works protected by copyright, i.e. with all rights reserved. There is a simple solution – we can **use the so-called Open Resources**.

On the Internet, you can easily find resources available under open or free licences you can use legally in a much broader scope. Such licences include, among other things, Creative Commons. Currently, beside the traditional copyright model expressed through the *all rights reserved* rule, there are also resources shared under other licences and on different terms and conditions as for instance GNU (General Public License – a free and open software licence). The most popular and widespread licences are Creative Commons, which can also be used in education. What are they and why is it worth using resources shared on the basis of such licences?

What are CC?

CC licensed works can be easily used and shared. They follow the *some rights reserved* rule as opposed to the traditional model of copyright following the *all rights reserved* rule. Thanks to that, with CC licences you can use resources (on certain conditions) without the need to ask for the author's consent; however, **the work must be always appropriately captioned** – information about the author and the licence under which the work has been shared must be provided.

Every licence consists of two basic elements. Those are "CC" (a mark indicating that we are dealing with Creative Commons licences) and "BY" (attribution). **Depending on our needs or possibilities (the materials we use may already be limited by some licences)**, we supplement those two elements with further conditions (each one has its own designation). Below you can find a list of all conditions you can use to build a licence (source: About):

What are OR and OER?

OR stands for Open Resources, i.e. materials available under free and open licences. The name ***Open Educational Resources*** refers to all educational resources (student books, exercises, online courses, syllabi, tests, class scenarios, multimedia, software and others) that are published in the *public domain* and under *free licences* – mostly *Creative Commons*. This means in practice that OER may be freely shared, used, modified, adapted, remixed, translated or distributed subject to the terms and conditions laid down in the resource license.

Why are OER important?

Why would anyone share their educational materials? It is no secret that the flow of knowledge and sharing experience are two factors driving innovation and development. If one person finds a solution to a problem and passes on their conclusions and difficult experiences to others, other people may focus on further problems and go one step further. This results in faster development and better solutions.

If your knowledge is not for free, the group of people who can acquire and multiply it is limited. Open Educational Resources help close the gap in access to knowledge and drive faster development. Free licences overcome barriers in transferring knowledge, at the same time respecting authors' rights.

What are the advantages of using open educational resources?

In the course of their professional careers, teachers collect an abundance of valuable experiences, pre-

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	**NC:** non-commercial use. Licensees may copy, distribute, display and perform the protected work and make derivative works and remixes based on it only for non-commercial purposes.
	**SA:** share alike. Licensees may distribute derivative works only under a license identical to the license that governs the original work.
	**ND:** no derivative works. Licensees may copy, distribute, display and perform only verbatim copies of the work, not derivative works and remixes based on it.

Note: If a resource you want to use, e.g. a picture has no caption at all, it is implicitly protected by copyright - you must ask for author's permission to use it!

If a work bears a © mark (all rights reserved), it must not be distributed further under other licenses, including CC licenses – it can only be used under personal or educational fair use or the right to quote. Alternatively, the author's consent for the use of such work must be obtained. In such a case, the work must include the author's name and bear the copyright mark.

pare their class scenarios and educational problems, develop their methodological skills and hone their technique. Those experiences constitute valuable capital. It is worth sharing them with others so that they become a common resource of Polish and global education. You can do it by sharing your materials as open educational resources:

- By preparing and sharing materials as OER, the author may reach a wide group of people, which brings countless opportunities; for instance, the author can effectively present their achievements and start an interesting cooperation or instructive discussion.

- A teacher who prepares, shares and uses open educational resources develops their skills and competencies and enriches their work with pupils.

- Owing to free licences, materials can be created that, being publicly available, are constantly verified and updated. This makes the educational contents always up-to-date and, more importantly, strictly related to the current state of knowledge.

Open Educational Resources may be also created by pupils. Working on a given subject in an attractive and interactive way may encourage their peers to broaden their knowledge about a given topic. They can prepare exercises knowing what would encourage themselves to do those, which boosts their chances to motivate their peers to learn.

Don't be afraid of sharing your materials!

A lot of teachers are afraid that their materials will be used illegally. But frankly speaking, this is the

risk you always take when publishing any contents, even those under the *all rights reserved* condition. Anyone can use the contents of someone else's material, idea or concept contained in a publication. If such a person fails to give the credits to the author or appropriates such author's achievements, they act against the law. However, if a person using someone else's material respects the copyright, they will ensure that while the material, also CC licensed, is used the name of the author is provided and the material is marked with a licence under appropriate conditions. **If a material is properly captioned, the recipient is often inclined to check the licence and to take a moment to think about using such a material.** In that case, the probability that the recipient marks the material with appropriate credits while using it or creating a derivative work goes up. In the case of works that are not captioned (thus, are implicitly protected by copyright), there is often no such reflection at all.

Create and share!

Now that you have learnt so much about copyright and licences, the time has come to share your knowledge with your pupils. Even if you teach the youngest ones in the first grade, you can tell them who an author is and that one must respect his or her rights. More complex issues may be introduced gradually in the subsequent years.

It is important to apply and practise knowledge related to copyright at school every day, e.g. check whether pupils caption pictures (e.g. used in multimedia presentations) and other works, and if they use legal sources. This way pupils will consolidate their knowledge and learn new habits of checking the licences and captioning works made by other authors as well as to respect other people's property, also intellectual.

Photo: Primary School no. 1 in Konstantynów Łódzki, Poland

Photo: Secondary School No. 7 in Kraków, Poland

The next step includes creating your own materials. Encourage other teachers and help your pupils. You can build a base of valuable open resources at your school. This will have a great impact on sharing experiences and strengthen cooperation within the school community – everyone will benefit from it. And, of course, remember to share your own experience and knowledge as it is the most valuable thing you can do for others.

Photo: Marcin Polak


MODEL
SCHOOLS
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B

ASSESSMENT HAS NEVER MADE ANYONE GROW
Evangelische Schule Berlin Zentrum in Berlin, Germany

The saying in the title of this text perfectly reflects the concept of education in one of Berlin schools. What is this philosophy about? First of all it is about abandoning a testing system that until recently was deemed effective. This philosophy also rejects the concept of control and subordination of students and it eradicates the culture of competition.

PIOTR KOZAK, Centre for Citizenship Education, Poland
MARCIN POLAK, Think! Foundation, Poland

Awakening schools

In 2007 an experiment was launched in Berlin. A school called *Evangelische Schule Berlin Zentrum* was created, which became a blueprint for other schools in the so-called awakening schools movement. Its headmaster Margaret Rasfeld managed to create a school that tries to move away from the existing culture of lecturing in order to introduce a culture of learning. She resigned from 45 minutes--long lessons and abandoned a traditional model of assessment. She believes that schools should first of all prepare students to live in a society and develop their sensitivity to other persons' needs. This cannot be learned from books, which means that effective instruction cannot take place only inside the school.

Founders of ESBZ are trying to establish a school of the future, with students as the point of reference. They want to create a space that supports all students. There are four pillars supporting the school's philosophy. Its foundation is learning, understood as the answer to the question: ***how to learn***. This school is not trying to convey knowledge, but to teach students how to acquire it. Second of all, this school is teaching how to act in order to make a change in the world. The third pillar is learning how to live together and how to take care of one another. It means that the school is trying to teach cooperation in the classroom and in the wider community. The last pillar is based on the assumption that a school should support students in getting to know themselves and becoming a part of the world around them.

The biggest change can be seen in the school's attitude to students and teachers. Founders of the Berlin school assumed that introducing a new culture of education requires cooperation among all interested parties: students, parents, teachers and principals. Additionally, all of them should be treated as equal partners in the educational process. It is not possible to prepare timetables without student participation; neither is it possible to create a school without parents. Awakening schools must make space for all the stakeholders to meet and talk with each other. A culture of dialogue, trust and respect constitutes the foundation of this cooperation.

How is the philosophy described above put to practice?

A day at school begins at 8:30. However, students do not go to their classrooms. Doors to all classrooms remain open. Students can freely move between the classrooms and choose whether on a given day they would rather devote the first 90 minutes to studying German, English or maths, life sciences or humanities.

There is no fixed timetable and students are not assigned to grades. In one lab (*Lernbüro*) a part

of the students is working on solving maths tasks. Others are watching videos on tablets. Another group is working on the 'literary' module. All teaching modules overlap and are based on original materials developed by the teachers' team.

Even though the students are given freedom to choose what they would like to study, the labs are quiet and filled with working atmosphere. If one of the students struggles with a task, in the first place he or she asks fellow students for help. "If there is something I do not understand, I usually ask other students," says Karolina, a student at ESBZ. Students seek teacher's help only when they are not able to help each other out. The teacher is expected to ensure that the school is functioning properly, but he/she is not the only person responsible for the teaching process. Learning is based on working in small teams. The teacher only gives an introduction to the subject matter and later merely observes his pupils at work. If it is needed, the teacher may also answer questions. Students are focused on solving and discussing tasks they were assigned. In fact, they autonomously work on the given topic. Later the teacher checks their progress. Do students who work individually have enough time to learn? Karolina's answer: "Usually I do not have to do any homework. Additionally on Fridays we have two hours of so-called independent work to catch up if we are behind with any part of the material."

Fears that children are not able to work autonomously are unfounded. It turns out that this system of work makes them more resourceful. It does not mean that students are completely left to their own devices; teachers can devote the necessary amount of time to every one of them. This school adopted a tutoring system. Every week students have meetings with their tutors. Teachers engage in interviews with individual students, during which they discuss learning progress and suggest what the students may want to focus on in the coming weeks.

The school cooperates with universities. Pedagogy students co-teach classes together with other teachers. For instance, during English classes student-teachers offer students conversations; in this way they do their teaching practice. Also sports or cooking workshops are organised.

Students are not divided into grades on the basis of their age. In each grade there are students born in three consecutive years; each grade is made up of 26 students and 2 teachers. Grade meetings are held once a week to discuss matters and problems that affect the entire group. One person chosen from among the students is responsible for moderating the discussion. Also the bond between students and teachers is very important. There is always someone in the teachers' room and students can go there anytime if they need to talk. There are boxes in the corridors, where students can leave anonymous questions and remarks. Once a week general meetings

Library and common working room in ESBZ in Berlin. Photo: Piotr Kozak

are held to discuss events and developments in the entire school community.

The fundamental methodology applied in ESBZ is project work. Every week, one day is devoted exclusively to project work. On that day students may fully focus on the topics of their choice and, if they wish so, work outside the school building. Students are working on projects in small groups; they choose the topics by themselves or after consultation with teachers. Every project must produce tangible results or it must end with an event. For instance, recently ESBZ students prepared an exhibition in Bundestag about the victims of the Holocaust. Karolina together with her friend prepared a project on the Polish National Army. As a part of this project they organised a trip to Warsaw, visits to museums and prepared materials on this subject.

Teaching responsibility is a very important part of this school's curriculum. For this purpose a course called "Responsibility" was created, during which students are supposed to develop pro-social behaviours. What is important is that students autonomously decide what they would like to get involved in. For example, they take care of children in kindergartens, visit elderly persons in care homes or teach immigrants foreign languages.

The curriculum also includes a "Challenge" course. In the framework of this course Karolina is planning a trip to Poland with her friends. They will be travelling for three weeks. Each group has a budget of only EUR 150. They need to spend this money wisely to cover the basic needs. Additionally, during the trip they need to carry out their own project. Karolina's group will investigate local minorities on the Polish-German borderland. The students are organising the trip themselves, and travel under supervision of pedagogy students. When asked whether she is afraid of the challenge, Karolina responded: "Not at all because I enjoy organising events and being independent." She also has a message to the teachers: "If children want to do something, they will do it, and it will be beneficial for their learning."

The school cooperates closely with parents. When a child joins this school, every family signs an official agreement with the school. For three hours a month family members must do community service at school. This involvement can come in many forms – from cleaning assistance to active involvement in the teaching process. It is also important to develop a bond with the school. Parents receive support from teachers and from the school. The principal also has a database of parents' skills, which allows efficient cooperation. For example, in one of the schools belonging to the Awakening Schools movement in Essen parents teach German to other parents. Parents also have direct insight into learning progress. Every week they sign a register that lists all activities that took place at school; this register also includes information about everything that their child learned in a given week.

ESBZ is managed by the ESBZ Foundation, which also cooperates with other schools in preparing educational materials. Many schools do not have enough educational materials to be able to teach through projects. Teachers from all over the country come to Berlin to discover how this school is functioning and to participate in preparing teaching materials. The Berlin school is not sponsored by any institution. In cooperation with a foundation set up by the school it makes additional money by co-authoring educational materials. It is a joint effort. About a dozen schools are working under the supervision of experts from ESBZ on parts of the materials that are later put together and edited.

In order to facilitate this work the school opened a communal workspace for individual school teams. This space is mobile and facilitates work in small groups. Every group has access to relevant materials. The communal aspect of work in small groups is very important. Every teacher can have insight into the work of his/her colleagues, which allows for smooth exchange of information.

Do it yourself

One of the problems that the school had to face at the very beginning was shortage of funds. The school

Atypical teaching aids selected by students, together with a concentration/reading space. Photo: Piotr Kozak

took over a school building similar to school buildings erected in Poland to celebrate the 1000th anniversary of the existence of the Polish state, but this particular one was in poor condition. Since there was not enough money for a serious investment, it was decided that renovation and reconstruction would be carried out with their own resources. Teachers, parents and students jointly participated in the efforts. This initiative brought a lot of positive results.

On the one hand, we tend to complain when we have to repair, improve or remake something at school ourselves. It is not fun. On the other hand, the "do it yourself" method may yield good results. Involvement makes everyone feel a little bit at home in the school environment. Every day teachers and students see a space that they have literally co-created. It creates a stronger bond in the community, as well as a sense of responsibility for the space. Joint reflection about the school environment allows us to plan it better. During our visit in the school the original "design" of classrooms and corridors often surprised us. Probably someone decided that such solutions would be beneficial for the learning process. This person was probably right.

I would like to share one more afterthought. As one follows tendencies in school design, one may come to the conclusion that the external facade and the structure is supposed to impress the observer. This is actually false. The interior is much more important, because this is where the learning process takes place. As we were approaching the building of the Berlin school we had an impression that this place was very neglected, austere and messy. However, the interior is completely different. It is not an example of cutting-edge architecture, but it makes a very innovative learning space.

Classrooms are functional – they may be arranged in accordance with the students' and teachers' ideas and didactic needs. The classrooms we visited do not follow a fixed pattern – there is a lot of freedom in how they can be arranged. Some elements of the spatial arrangement are common – computer workstations usually constitute extensions of windowsills. Every classroom has a corner (often with a comfortable armchair) for reading or relaxation. There is no teacher's desk. Teachers sit together with students and put their documents and tea on a small table. Study rooms are theme-based; each of them holds an exhaustive set of educational materials on a given subject matter or area of knowledge. At times such collections take up the entire wall. In every classroom there is a blackboard or a whiteboard. There were no interactive whiteboards. Probably they are not needed here, because if every student is supposed to be involved in active learning, a tablet that he/she brings from home or rents from the school is more handy.

WHAT MAKES A MODERN SCHOOL?

Steve Jobs School De Ontplooiing, Amsterdam, Netherlands

If we want to prepare our children for living in the 21st century, why do we believe that the best way to achieve it is sending them to a 19th century school?

PIOTR KOZAK, Center for Citizenship Education, Poland
MARCIN POLAK, Think! Foundation, Poland

Steve Jobs School in Amsterdam was born out of frustration. Even though it became clear that old teaching methods are not fit for a dynamically changing world, it was still widely believed that schools are supposed to communicate knowledge to students. Teachers often overestimate the importance of teaching, while learning is the crucial process. Children can find solutions more efficiently if they seek them by themselves instead of being presented with a problem and later with an explanation. The creators of SJS wanted their students to learn how to gain knowledge.

How may one develop an interest for autonomous learning? In SJS children were given the right to decide about their daily schedules. The students decide together what to do and study. Every six weeks, teachers hold meetings with students and parents to discuss the students' progress. Educational goals are set in accordance with students' individual aptitudes and talents. Only some of the classes are mandatory for all students. Most of the time the programme is adapted to students' individual needs.

"We do not label students in our system. Some students are weaker, some are stronger, but differences within a given group do not manifest themselves strongly; every student follows a different syllabus, has a different rhythm and activities. Every student is free to choose what he or she wants to study," says Teun Gautier from the Steve Jobs Schools network.

It is important to assess progress and set goals through dialogue. Parents do not have the final say in what their child will study. Three persons are involved in the decision-making: the parent, the student and the teacher. Students consciously choose their education path. If a student struggles with a given topic, we move on to the next item in the syllabus. Dialogue allows students to monitor their own progress: "There was something I did not know, and now I know it."

The school also supports various talents of its students. "We are flexible when choosing topics. We have the time to add new, interesting courses," says Teun Gautier. "For instance, students can participate in yoga workshops. Or in programming classes." Our offer is highly flexible. Students report their needs, and the school tries to respond to their ideas.

However, a side effect of an individualized learning programme is the lack of traditional, long holidays. On the other hand, students can take their holiday leave anytime. For instance, it is perfectly acceptable for parents to take holidays in May if they wish to do so. This gives a lot of freedom to both parents and teachers, and most of all to the students – it makes it easier for them to plan their learning time.

One cannot apply old methods to new technologies

Developing an individualized education programme for several hundred students constitutes a true challenge. New technologies come to our rescue. There is no reason why students' papers cannot be checked and assessed automatically,

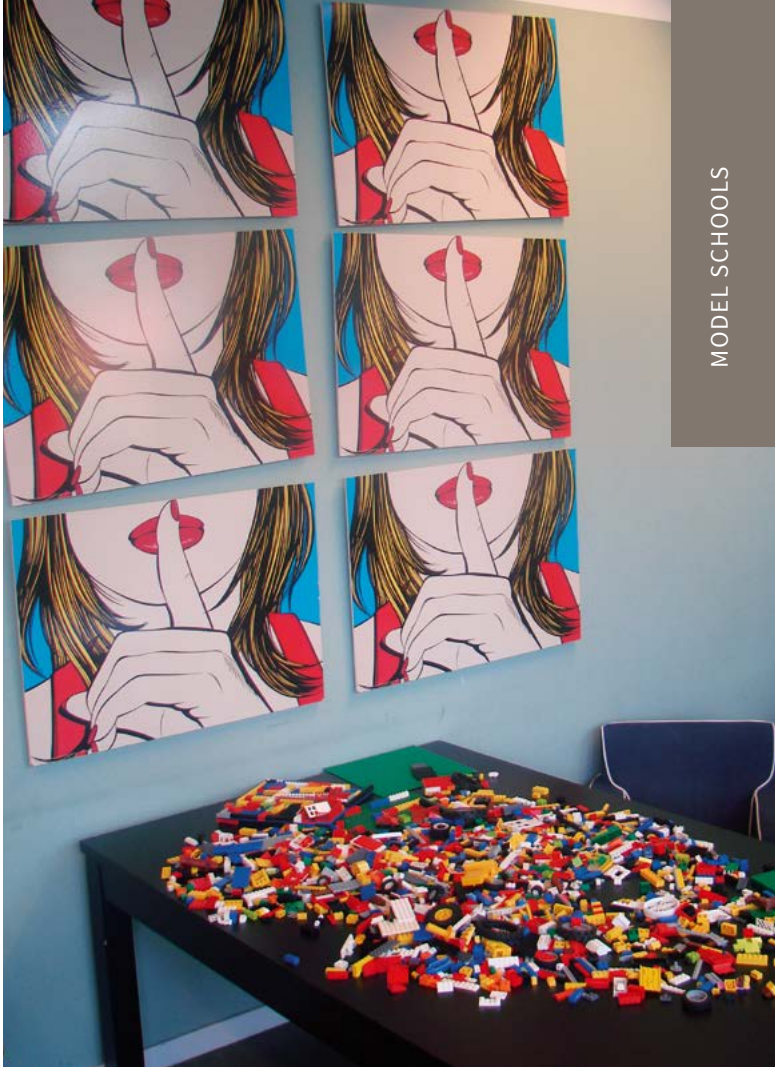
with the use of software. In this way teachers get more time to talk to the students about their learning progress. Data from learning analytics give the teachers access to information on how much time students spend working on a given problem and their success rate.

"All of us would like to have an individual approach to every child. Today's technology enables us to prepare a syllabus for every single child," says Gautier.

What is important is changing one's attitude. New technologies are not about substituting paper with e-paper. In SJS every child has his/her own iPad which he/she can also use at home. At school, they log into the school network where they have access to all the necessary tools and information. If a child does not log in to the network, he/she receives a notification that the school is 'awaiting' him/her. Software uploaded to students' iPads is adapted to individualized syllabi. Student's timetable, uploaded on the device, specifies learning activities for a given day.

Students also perform 30-40 percent of all school tasks using their iPads. There are applications dedicated to individual students that help them to develop their skills in a given subject matter. Those applications are partly based on gamification. The school uses educational applications available on the market. It also cooperates with the University of Amsterdam, which develops its own educational materials.

A remarkable advantage of new technologies is that these applications allow teachers to monitor their students' progress. They inform teachers about the number of completed exercises and their results. In this system tests are no longer required. On-going monitoring allows to respond to learning difficulties in real time and teachers do not have to waste their time on checking tests. This part of work has been automated and, as a result, teachers can focus on what is most important – supporting the learning process.



Maths lesson with the use of LEGO and simple wooden materials. Photo: Katarzyna Górkiewicz

Who needs a teacher?

One of the basic principles at SJS is as follows: responsibility for the learning process does not fall on the teachers, but on the parents. Neither is the teacher the main 'conductor' of knowledge; the teacher plays the role of a guide to the world of knowledge. His/her aim is to support the learning process instead of substituting it.

There are still about 30 students per teacher, but the students are free to work at their own pace. The teacher on the other hand must know almost everything about them – what their level at a given moment is, what their strengths and weaknesses are. This kind of monitoring would not be possible without modern technology. The teacher can decide when it is a good time for giving explanations. He or she is also free to choose the methodology. Teachers at SJS work 36 full hours per week, and 24 out of these 36 hours are spent on direct work with the students.

Results of anonymous questionnaires distributed among all teachers employed at SJS demonstrate that no-one is missing the "old" style of work. No-one would like to return to a 'traditional' school. A recurrent theme in teachers' answers is "finally we can work with children" or "finally we have more time for actual teaching." Teachers at SJS claim that they enjoy a high level of comfort at work. They are free from pressure and red tape, unlike teachers in typical schools.

SJS is also a school that is always open for parents. Parents are involved in learning process planning. They also conduct workshops and classes at school. Parents can also do their work in the school building. There are rooms dedicated especially for this purpose that allow parents to see their children when they work. It is important because in this way children can see that their parents are working together with them. It is a popular solution, in particular among those parents who have the possibility to work outside the office

Groups instead of age-based grades

Students at school are not grouped by age. Instead they are divided into groups of 30 students each. Age differences within a group may be up to three years. Every student follows his/her own syllabus (which is compliant with the national core curriculum). Learning at this school begins with an interview with the teacher and with a placement test. Next, students are assigned to various groups, depending on their level of knowledge.

"We know that a student must reach a certain minimum level of skills, but if he/she is very good at maths, we can give him/her a two weeks' break from this subject. In this way, we shift his/her focus to other activities, for example foreign languages or developing creativity," explains Teun Gautier. The student's level depends on his/her skills. "A student may reach level 4a in foreign languages, but 3b in maths. Good assessment of students' needs allows us to send him/her to an adequate course," says Gautier. Students who are doing very well at maths at a given level can be given the possibility to study more advanced material.

Dynamic class in a garden created on the roof of the school building. Photo: Katarzyna Górkiewicz

Maths lesson with the use of LEGO and simple wooden materials. Photo: Katarzyna Górkiewicz

Every day begins and ends with a group class (in total, it takes about one hour). Group classes are not about teaching; these are more of introductory and wrap-up meetings of a day at school. Every student follows his/her own individual programme. During the day students disperse among various labs and teachers. Workshops and individual work take about 5 hours each day. There are no breaks. Students simply move from one classroom to another.

Students always have a teacher nearby, whom they can ask for help. There are also other teachers in classrooms dedicated to specific subjects. Emphasis is put on student autonomy – students should first seek help from other students. In this way they acquire knowledge themselves and share it with their fellow students.

Flexibility is the key

Schools belonging to the SJS network are always created in existing buildings. Interiors must be adapted in order to meet the school requirements.

Flexibility and diversity are of key importance. Workshops, team work and conversations with students require a different kind of space than individual work and exercises (open space, silent area). During the day, even up to a half of students spend their time working in the open space on topics that are on their agenda on a given day. There is only one teacher-supervisor in this space. Workshops for students who need support take place in smaller rooms. On average, there are 9 students per workshop. In those classrooms teachers work with students who have similar difficulties with understanding a given task.

Also, individual classrooms are adapted for specific needs. They are fitted with numerous mobile elements, because the space should adapt to students and not the other way around. Mobile tables can be moved apart or put together, depending on the activity in which students are currently engaged. Sofas in several classrooms can be used for comfortable individual work. In every room there is also a special "silent work area."

However, the most important thing remains invisible. What is the difference between SJS and other schools? "It has buildings, classrooms, students and learning spaces like any other school. What has changed is the attitude to students," sums up Teun Gautier.

YOU WILL SUCCEED!

Essa Academy, Bolton, United Kingdom

"I believe that each of us is born with a particular goal to fulfil. I believe that each of us has a task to leave this world a better place than it had been when we came to it. And each of us has their own mission to accomplish," says Showkat Badat, the director of the Essa Academy in Bolton near Manchester. He adds: "we are not saying that each of our students can achieve success, but each will achieve success. A school where a couple of years ago only 28% of students passed their exams reached a 100% passing rate for the very first time in history just a few years after changes were introduced. Faith in students' success is visible in every component of the school's functioning. The philosophy known and shared by everyone, and the awareness of the purpose and mission are manifested by the entire community. I haven't seen such joy, satisfaction and pride drawn from attending, learning, and teaching at a school for a really long time."

WITOLD KOŁODZIEJCZYK
Think! Foundation, Poland

There were three elements which determined such an extraordinary success. Firstly, modern space with new functions and formal solutions. Secondly, universal access to educational resources possible via mobile technology. And thirdly, but most importantly, teachers aware of their impact and responsibility. If I were to list three values which laid foundations for this school's functioning, I would name democracy, cooperation and faith in the success of each student and teacher. All three are manifested in the organisation of students' and teachers' work, and in creating and using the space in which everyday teaching takes place with the use of modern technologies. Students attending Essa Academy come from families of limited means, often in danger of unemployment and exclusion. This situation was a concern for educational and local authorities. The lack of progress and results deteriorating each year have become reasons to look for new, more effective solutions. Determination, confidence in achieving success and consistency eventually led to a place where nowadays one needs an appointment to visit. There are hundreds eager to discover the secret of its success, not only among education professionals, but also representatives of business organisations.

Undoubtedly, there are many similar schools, but the unique trait of Essa Academy lies in the fact that its creators have a clear and coherent vision of the didactic and educational concept based on values. The objective is to provide conditions for each student to achieve success, develop their potential and discover their particular talents. The system of rewards and grades gives the students a chance to succeed in a domain of their own choosing. In this school, each student discovers their individual strength and their personal potential.

But how did the creation of this unique school begin? Each change, like the one in Essa Academy, begins with a single person. The principal of the school was himself brought up in an environment similar to his current students'. He started from telling educational and local authorities about his vision, and

only then did the work on creating the concept of the building start. Its functions were planned with innovative teaching and new challenges in mind. To my knowledge, it is the first school whose building was designed from scratch so as to take into account didactic and educational purposes. For every visitor, the most striking feature of the school is its modern shape, enormous spaces, pure forms, calm and quiet – even during recess. Most rooms are shared by both students and teachers. The design includes spacious classrooms, a library, classrooms for specific subjects, movie theatres, gymnasiums and multi-purpose sports fields. Lessons are attended by 50 students. Each of them is conducted by two teachers. Each day, every student is taught two subjects in 3-hour blocks divided by a breakfast and a lunch break. Classrooms rarely resemble the ones we know from our school reality. Attractively organised workstations, mobile tables, sofas, and large TV screens on the walls resemble a club, a café or futuristic office spaces, rather than a typical classroom. Even though the school does not have a single interactive board, and only a few multimedia projectors were purchased, digital technology is present in almost every place of the school and used in every class.

The success of the school was determined by a skilful combination of a well-planned concept, subject to the school's mission, with the organisation of the space and universal access to technology and educational resources as well as those created by teachers themselves. They constitute the strength of the school. Teachers are involved at every level of its functioning: management, didactics and education. The example of the Bolton school made me aware that the success is not determined by incidental actions of several teachers following technological innovations, nor by access to resources and mobile devices in selected classes, or by modern spaces in the schools designed today. All this is not enough because only the fulfilment of the school's mission shared by all, as the answer to challenges defined in the social environment, could guarantee Essa Academy's success. This mission has become the guiding principle around which the system of teacher selection, education, assessment, improvement, school

All photos were taken by Witold Kołodziejczyk

management and the use of modern technologies was created. Commonly determined values are expressed by particular behaviour defined by everyone. These factors determined the design of classrooms, their furnishings, the selection of particular technological solutions, and the use of educational resources.

I know about modern school buildings and excellent teachers using digital technologies. And yet, their schools don't change. They aren't changed by technologies, not by free access to online resources or committed teachers. The arrangement of boards or the amount of technology and digital resources do not matter. What is lacking is the basic answer to the question: why do we do all this, what goal do we want to achieve, which educational model is important for the particular community? Who needs the school in this particular environment? The existence of a higher purpose is the foundation of success in every organisation. The school still lacks passion, commitment and joy. What it needs is a clear concept and consistency in realising it. There is no idea for the school. No idea which would provide grounds for creating a mission and systemic solutions. I'm surprised at discussions about the advantages of one technology over another. I'm amazed at the boundless faith in applications and computer programmes as prime movers. There are no actions which would provide grounds for the creation of a systemic solution realising a clearly defined mission of the school. There is no reflection on the reasons for the lack of efficiency of the current educational system, and the limitless faith in the power of technology is very concerning. What becomes more important today is the answer to the question "What changes our students? What improves the quality of our citizens' lives and what to do in order for the local government to become more autonomous and respond to the real needs of the people?"

The success of Essa Academy is contained in the response of the principal, teachers and local authorities to the difficult situation of the local community around Bolton. It's the response to the low life quality of its inhabitants and lower than average life expectancy. Finally, it's the response to the question of what to do to ensure the children of the inhabitants are successful in the future. In this way, everybody is interested in being involved in the realisation of the goals. The teachers, the principal and the employees of Essa Academy are aware that they participate in something unique. They help their students to achieve real success in the future. A goal formulated in this manner allows every person involved in building the school system to 'touch the future' by taking part in the creation of a better world right now. It is certainly much easier to involve teachers in this way than by focusing on school rankings and preparing students for tests.

CREATING A SCHOOL: SPACE IS JUST THE BEGINNING

Vittra Telefonplan School, Sweden

As former principal of one of the most progressive school projects in Northern Europe, Vittra Telefonplan, I write two articles on the pedagogical models I used when we designed learning situations and were trying to stretch the boundaries of pedagogical practice. I will also give a background on the work and ideas behind the learning environments. Participation in creating a school, from the design of the learning environments to recruiting the staff, is a learning journey for all of us. I will exclude questions on the organisational sustainability. My thoughts on what we achieved are focused on the time I was in charge of the school, the first three years. This is my story about how to lead a school that aspires to educate our children for future demands, and aim to explore new pedagogical opportunities and challenges in a rapidly changing world.

JANNIE JEPPESEN
Rektorsakademien Utveckling AB, Sweden

Vittra Telefonplan is a new elementary school in central Stockholm opened in August 2011, with children and pupils from the age of six up to eleven. The school looks like nothing else. In the centre, there is a large blue mountain seating one hundred children. Inside the mountain you will find a movie theatre which makes it possible for students to watch films, the news or show their own digital presentations to their peers. The open learning environment of the school is flexible and consists of unobvious elements, such as a four-metre-high tree with a garden beneath it for play or assemblies, or The Island – a large green laptop sofa shaped as an island to create a varied and stimulating learning environment. Chairs and tables are available.

The idea behind the school was to implement the pedagogical methods Vittra already established in their 25 elementary schools throughout Sweden. As digitization made its entry into the schools, a need arose to further develop the learning environments and, above all, the didactics of instruction. Digitization provides completely different challenges concerning how one can and should work at schools. It also points to the need for other kinds of learning environments. Does the didactics of reading and writing demand a different take today when we know that children interact with image and text-based online communities even before they start school? What happens if we start from the innate communicative momentum, throw the traditional ABC book away and replace it with the moving image and sound, chat, games, blog and community? How does the society look like in 2025 when our children graduate and what do they need to be prepared for? These were the questions we asked ourselves and they resulted in a learning environment and an educational practice that has received considerable attention around the world. We wanted to plan our environment as well as our pedagogical

activities around how learning takes place, not how we have organised learning so far.

Pedagogical platform

With my background as a media educational developer, in a municipality located south of Stockholm, I had experience working both theoretically and practically with digital skills and thus had realised that digital literacy is a complex skill and requires solid work and continuous mastering, i.e. designing learning situations to develop skills. The definition of digital literacy as presented in EU's key competencies for lifelong learning, I thought was widely held and I wanted to find a simple model that could be translated into educational practice. I needed a model that would be more fruitful and at the same time would be considered to have credentials by educational professionals. I found the Melbourne University KSAVE model in which they carefully define different areas of 21st century skills and embody every ability, tools and attitudes in matrixes associated with each ability. It was a concrete way of tackling such complex tasks as e.g. defining creativity. As an evaluator in the Swedish part of the 21st Century Skills Innovative School Programme ***, I gained a valuable introduction to the evaluation questions to assess how well the teacher's tasks actually developed future skills. The tool I created was a simplified version, a version that would make it easy for educators to evaluate their own practice. With my model, I also developed a matrix of digital literacy and its different competencies, and a way to asses that the educators were doing the right thing in the classroom. The youngest children, aged 6-9, the children aged 10-12 and the oldest children aged 13-16 had different competencies to attain on a progressive scale. Sweden introduced a new curriculum in July 2011, a month before we started our school, where digital competencies and skills were stressed more than in the previous curriculum. A concrete matrix for the digital skills the children would obtain at a certain age, and a simple assessment tool for teachers to measure the learning situations they designed would definitely take us to the next generation of learning. Together with the incredible learning environment, especially designed according to the principles we constructed, we couldn't see any obstacles ahead of us.

Educational space of Vittra Telefonplan in Stockholm, Sweden. Photo: Marcin Polak

Educational space of Vittra Telefonplan in Stockholm, Sweden. Photo: Marcin Polak

Planning, evaluating and designing the learning process

As a part of modernizing the Vittras pedagogical model, I used the 21st century skills spider I constructed, inspired by Microsoft's innovation programme and by the Melbourne KSAVE model.

The spider consists of four legs; Creativity, Digital Competence, Relevant knowledge and Collaboration. The legs are questions you ask yourself as you design a learning situation. I will exemplify with one of the most common tasks given in schools. The activity of this question in a traditional math book: 1+1=? This is a well-known type of question given in schools. There is one correct answer to it. If I ask questions based on the Spider, we will see how well we give the student a chance to develop 21st century skills in this procedure.

- **Creativity:** In what way is the learning individual engaged with her own thinking, i.e. asking questions, solving problems?
- **Digital Competence:** To what extent is the learner using or understanding digital technology and its impact on our society?
- **Relevant knowledge:** In what way is the operation connected with deeper learning and understanding? (Learning how to learn).
- **Collaboration:** Does the task provide communication and collaboration within a group inside or outside school?

These questions show us that if we would only design learning situations like the above in maths we would not offer the students possibilities to develop the skills we want. If instead we give another task: We write a number on the whiteboard. 2. This is the answer. And then we ask the students to work in groups and find as many ways as they can to come up with questions that have that an-

swer and then present them in class, we provide opportunities for deeper learning in several of the spider's legs..

Vision based leadership

The vision for the school was key to building a strong sense for what direction and what goals we set up for our school. We had a strong belief that teachers are professionals and must be given freedom to design, and design their teaching together as a team. As the principal, I did not dictate a particular methodology or a set of didactics. I believe in people's innate creative force and know that motivation is one of the strongest drivers of change. The only requirement was that you as a teacher would be able to describe your practice based on how they were designed to develop children's abilities. To be able to verbalise your practice is key to evaluate the results and make adjustments, as well as try new ideas and experiment. In order to make that happen we needed to create an atmosphere of trust between colleagues and design structures for collaborative learning. A lot of time and effort was put into working with a team of teachers with a vision, as this gives direction, and the team needs to have a joint understanding and interpretation of what we want to achieve. One way was to live as I learned, being a role model in my leadership and take advantage of the opportunities to use digital tools and forms of expression to describe and portray the vision and thereby strengthen it. We made a movie for teachers, but also parents. The film shows the environment, describes why we want to work with the future in mind and depicts the social expectations of the school. This way of communicating the vision of the school proved to be very powerful and triggered the teachers to experiment with different digital tools. The vision itself was more like a declaration of how we want to operate in an ever-changing world. To be brave and continue to ask questions for your own practice. We wanted to be the lighthouse of school development..

Five cognitive principles supporting learning environments

The idea of learning environments has been largely inspired by David Thornburg's Campfires in Cyberspace. We devised a tool consisting of five different learning environments, each one based on distinctive cognitive processes as well as a physical and digital learning environment. There, he presents four different cognitive principles of learning and how these can be translated to the online context. We found the principles interesting and valid also for the physical learning environment. We do have knowledge about how different cognitive principles affect learning and how they need to be facilitated, but it doesn't show in how we design learning environments. Schools and their classrooms are an organisational and historical heritage so strong that you barely question their existence.

A practical example is the activity of reading, one of the core skills in the educational system, hardly visible in reading is a process and an activity that is not best suited at a table, on a chair, with thirty peers in the room. In order to be able to engage in deeper, reflective learning or activities you need to be able to cave yourself in, with the help of the environment, or have the ability to shut out the surroundings. We wanted the environment to answer the question how we learn and how we can facilitate learning. We lacked a principle in Thornburg's model so we added one: The Lab.

- **"Campfire"** situations are characterised by communication flowing from one or few to many, requiring a space that can accommodate a certain number of people in a group situation, where everybody can focus on the person talking or presenting.

- **"The Watering Hole"** is a place where people come and go, and a learning environment where you can gather in groups of different sizes. The communication is informal, many to many and based on sharing.

- **"Show-off"** situations are where one person communicates towards the rest of the world, showing what he or she can do or has done, requiring a physical or digital space for display,

Photo: Kim Wendt, Rosan Bosch

exhibition and feedback. The communication is one to many and feedback is essential for learning.

- **"The Cave"** is where no extra input is needed, requiring a physical frame that furthers seclusion and contemplation.

- **"Laboratories"** are places where the students can acquire hands-on experience, working physically and practically with projects in a societal and experimental context. Communication in Labs can be in any form but there is always hands-on experience. This environment is not part of Thornburg's original model, but something I wanted to add since it was missing.

When we were developing the pedagogical principles of the learning environment, both physical and digital, we worked with the Danish interior designer Rosan Bosch who was commissioned to design the five pedagogical principles. The assignment was to design a physical environment which would give way to digital practice and be appealing to children. The result was a colourful and inviting environment in which playfulness is evident[5]. A comment from a seven-year-old student illustrates its success: "My school is better than an amusement park!" Even more illustrative is an eleven-year-old student, with experience from traditionally built schools asking me as he saw the large tree area for the first time:

"What rules do you have for the tree? What are we allowed to do?"

It is a statement that displays the power structures in schools, between teachers and students, but also how the environment becomes a part of it.

Metacognitive learning and professional development

A couple of months after the school opened we came to a point where we thought we did everything wrong. We underestimated the impact the learning environment had on our pedagogical practice. The confident teachers I hired, most of them experienced and known for wanting to work with school development, felt like they were the worst teachers ever. Their professional self-confidence was blown away. "The things I used to do don't work anymore" or "I don't know if the students are learning anything." Parents started to wonder if the kids were learning anything because at home they said that they were just having fun. As a principal I needed to change my focus. The teachers' learning curves were steep and we needed to shift the attention from student learning to the learning curve the professionals were engaged in. This included sharing the feelings of incapability and creating awareness of how difficult and painful it is to learn because when you learn something it means that there is something you don't master and it creates a lot of anxiety. Embracing the feeling of not knowing and try to approach it with curiosity and finding ways of analysing the pedagogical situations and required leadership from a professional point of view. The challenges were huge. A school without walls controlling the whereabouts of the group, laptops in every student's lap and students not used to the new way of working. As a principal I had been engaged in the pedagogical matters concerning student learning and needed to revise it, and I did it by applying the models we worked with on teacher development and learning. I used the five pedagogical principles and asked myself 'How do you design different learning situations for your teachers? How do you create opportunities for your teachers to learn how to learn? An answer is our pedagogical platform.

From control to motivation- leadership in the "classroom"

The new learning environments made it painfully obvious to us that the environment is indeed a major influence on what kind of leadership is needed. The environment did not help us supervise or control students and their activities. The teachers needed new leadership tools. They asked themselves the question of what gave the kids motivation and how we can, together with the kids, visualise their learning so that they become more aware of their own progress. They considered gamification and translated it in to a simple model for student involvement and evaluation. The skills they focused on were their own learning, the ability to collaborate, to keep focus and to have courage in their learning, to dare to leave their comfort zone. The new take gave effect right away. The teachers summarized the challenges they were facing by saying that we needed to shift from control to motivation. The environment forces us to construct meaningful tasks and work in transparency with the children; the learner must understand the value of every task. The environment, both the physical and the digital one, does not allow us to be pedagogically lazy and fall into our traditional way of educating based on control. It forces us to develop pedagogy. Later that year, when it was time for National Tests and we followed the instructions for organizing the testing situation by closing down the Internet, and tried to fix seating at benches for every student, we realized again how unique our school was. Our school is not built for testing, it is built for learning.

SELF-IMPROVEMENT HAS NO END

Wanda Łyczkowska Elementary School in Ostojowo, Poland

Among all the schools functioning in Poland there most certainly are those that are special as far as their teaching environment is concerned. Schools like that are active in the local community, they work towards the development of its residents, both young and older. It looks like the elementary school in Ostojowo in Poland is one of those schools.

MARCIN POLAK
Think! Foundation, Poland

It is a small public school operating in a rural environment nearby Suchedniów, approximately 25 km from Kielce, the capital of the Świętokrzyskie province. There are around 150 pupils taught by around 20 teachers. The managing body is the Suchedniów District. The school consists of three interconnected buildings (the oldest part built in 1913 was rebuilt in 2006, the other two buildings were added to the original one in the 1960s and 1990s). The school building has two floors with classrooms both on the ground and the upper floor. From the architectural point of view the school space was initially similar to the classic school design – halls with classrooms only on one side. Because of the actions taken by the management and the teacher board the school's teaching environment was transformed in a way that it fosters a comprehensive and versatile development of the pupils.

The school respects the local environment – it is strongly connected with the local community it is part of. One of the opinions published on its website states that not only its 150 pupils, but also their parents, guardians and grandparents "with wise minds and rich hearts" unite and work together for the school. They are the ones to shape the school's identity and the quality of the environment in which we all, to a greater or lesser extent learn (thanks to the broad offer of extra-curricular and other activities described below).

Hear what you are thinking

This school cherishes silence. Usually in a school, noise is a major challenge. In this one silence is maintained both inside the classrooms and during breaks. "Only when in silence you can hear what you are thinking" is another reflection related to the learning environment in this school. You will not hear bells announcing the beginning of a pause – this way both teachers and students have time to "close their thoughts." The lesson ends with the teacher saying "thank you for your attention."

At this school one's own time and others' individual time are respected. Students have special time only for them "to profit as much as possible – lessons are 45 minutes each during which one can become richer in new knowledge, which is so important for their development." The school subjectifies the pupil, teaches them to take responsibility for their own lives and learning process, to solve problems and face challenges. The principle followed is to "present the problem that brings you here, give three options to solve it, I [the teacher] will help you choose the most effective one." This allows to manage working and learning times effectively. As the principal, Joanna Piasta-Siechowicz, stresses: "a mutual feeling of creating quality together results in a shared responsibility and the strengthening of self-esteem. In teacher-student,

superior-subordinate and worker-collaborator relationships an essential thing is working time management."

School kaizen

The key to understanding the transformation of the Ostojowo school space is the concept of work the school has. It comes to three aspects: human being, methodology and space. All those three aspects are developed in the spirit of the *kaizen (continuous improvement)* philosophy. According to the author of the school work model, the principal Joanna Piasta-Siechowicz, "the use of an unconventional concept of implementing changes in education in three dimensions in parallel: the human being, teaching methods and learning space allows for a full development of pupil's key competencies" (as expressed in the position of the European Parliament and Council 2006/962 / EC)[9].

In this case, change in the school is perceived as a continuous development of the educational institution with its daily users in mind. In the work concept of the school in Ostojowo the human being is what is most important – he is the foundation of the development that occurs through the interaction of two areas: space and methodology. The human being is understood in a broad sense in the school as: pupil, parent, teacher and every one of the school's employees. "Uniform targeting of teachers, school staff and parents for developing pupil's key competences strengthens the chance of individual success in society. And success is the development of a young person achieved thanks to the actions we take," says Joanna Piasta-Siechowicz. For the human being to be at the centre of attention of the school a sustained dialogue between the participants of the change making process is necessary: the pupil, parent/guardian and teacher. That is why the school introduced the concept of Assessment Through Dialogue – the teacher is in constant contact with the student, gives him feedback on the current grades, explains, and also involves parents in this process. Assessment by grading is only the formal end of a long process of dialogue that pro-

The building of Primary School in Ostojów (front part and main entrance) – a modern, open school not necessarily needs an outstanding outer appearance. Everything depends on the school concept and its implementation.
Photo: Marcin Polak.

Mural created by the students in one of the classrooms. Student figures made out of cardboard are a symbolic representation of the fact that students are co-hosts of the school and important members of the school community. Photo: Marcin Polak

vides the student with many data necessary for his/her development. The importance of the grade itself, however, is weakened: compared to the feedback received by the student about their learning process it becomes obsolete. Assessment Through Dialogue has a strong impact on the social dimension of the learning environment – this assessment process also involves parents as there is a dialogue on the pupil's progress between the parent and the teacher (meetings devoted to this assessment method are compulsory for parents; in this way, parents become familiar with the principles and make plans to work on the development of the child together with the school).

Such dialogue is possible due to the fact that the school opens up to parents. It invites them to participate in shared educational and cultural events and allows the use of the school space for adult learning. The school in Ostojowo is an institution that is hyperactive within the community. It does not stop at its current teaching activities (with a very wide range of extra-curricular activities for children), but participates in a significant number of projects and events.[10] The school's website contains a schedule of events and activities that shape the social dimension of learning and are led in cooperation with parents.[11] Thanks to that the learning space extends to the entire local community and affects the harmonious development of student citizenship. Projects like Comenius or Erasmus+ stretch the borders of mutual learning. Discussion Thursdays in Ostojowo bring the local community together with conversations about regular cultural events, for example "Entangled in history" about the characters of the movie "Ida" by Paweł

Pawlikowski or "Recreation with tuning forks" are just some of the local projects. The school tradition is to: plait wreaths on the octave of Corpus Christi, bake bread on Christmas Eve, or share stalks of grain on the eve of Easter. School community activities are focused on tradition and the challenges of modern civilization.

Functional and elegant

While working in Ostojowo the physical space is as important as the social one. It is there that the learning process takes place. A symbolic recognition of its importance to the education of children is one of the classrooms where an original mural was created. Students cut out the contour of their bodies in different poses out of paper and decorated them according to their own idea in order to say something about themselves. Then each image was fixed to the wall, which in a kind of symbolic way of emphasising that I – the student am a part of this school, but also that we – the students are the most beautiful ornaments of this school, our interests are proof of how rich the school is...

The importance of the educational space was phrased by Joanna Piasta-Siechowicz as follows (focusing on the pupil): "The workplace – the atmosphere of the working life, requires colour tones, geometric order and displaying only the important elements, all elegant. The space must be filled with YOU. You are the actor on this scene hence the decorative elements have to be justified by means of colour, geometry and tactical placement. The learning space is a place for teaching and it has to have space for sun, light, movement and above all an actor for the creating process, that is a student/teacher." The School in Ostojowo is characteristic with its minimalist wall decorations. There are only a few decorations in the hallways. The occasional exhibitions are placed on easels. The floors often become exhibition spaces, for example for mandalas (with colour and symmetry symbolism), timelines (e.g. showing events that led Poland to independence: "Do not step on history"), or the school mascot (made of, for example, dots to celebrate the International Dot Day).

"The school space should give an unquestioned sense of elegance," says J. Piasta-Siechowicz. Classrooms must be functional, they must foster learning. "On the other hand, functionality might be found in such an organization of the didactic space in which on the opposite walls of the classroom there is a subject-related library, building the atmosphere of having contact with knowledge through books, and a direct contact through an interactive whiteboard, a projector, a laptop, Internet – that is technologies and multimedia that are a bridge for the flow of knowledge. The effective use of multimedia provides a bridge for the knowledge to flow, to use it effectively in the process of self-improvement. Each laboratory meets the principle of aesthetics and functionality, and is a place to create yourself (…)," [12] she adds.

The change in the quality of school education may begin with a free setting of the seats in the classroom, depending on the needs of the teacher and the pupil. [13] The school in Ostojowo is proof that in order to implement effectively the concept of working for the school such a change is absolutely necessary – after all we learn foreign languages in a different way than our mother tongue, or biology, or computer science, we need a different setting in an art classroom, etc. In the classrooms we will find various configurations of seats, and there is no set model – the desks 'travel' around the rooms if there is such a need. After the class the chairs and desks are not set back in rows – the cleaning staff was also provided with some lessons themselves.

The physical space in schools must be as diverse as possible. The school takes care of the pupil's educational experience by diversifying the school recreation rooms (four profiles: musical, artistic, reading-relax, analytical and logical and a separate room with animals and plants that can be considered a fifth recreation room – nature-themed), and adding home furnishings – sofas, rugs, pillows in places where students spend time. [14] In early education classrooms big armchairs are another furniture element. Their presence in the classroom is associated with the

promotion of reading. If the teacher reads to the children (or a pupil reads to his colleagues), he/she sits comfortably in the armchair and those listening sit around. In this way, a kind of reading ritual was created. The locker rooms were also given some thought – they are bright (white walls, white furniture), and at the same time colourful, because they are decorated with a map of the world – after all, education is also a journey).

Students share responsibility for the school space, they understand that it is a place where they can blossom. That is why they take care of the area adjacent to the school, the plants in the courtyard in front of the school, the flowers and trees. Also exhibitions of sculptures created by students are organised there. Teaching art is also a measure aimed at shaping the human environment and the dissemination of culture in the local community. Students' work under the guidance of teachers leads to creating pieces that embellish the space in which they spend their time. Examples of such activities is the International Children's Day celebration focused on the work of Romero Britto.[15] The desire to explore the talent of the Brazilian artist resulted in the pupils creating sculptures to decorate the school courtyard during important school events. Such endeavours contribute to shaping social attitudes and implementing joint projects, the effect of which is cooperation and a shared responsibility for the results.

Modern technologies are an essential part of the learning process as they grant access to excellent educational resources that enrich students. The technological space of the school in Ostojowo is under development – the basic tools have already been achieved. Thematic classrooms are equipped with a computer, a projector, and an interactive whiteboard. It is also worth noting that special platforms that make it possible for the youngest students, in classes I-III, to use in-

Colourful monuments made by children are used as school yard decorations during important events.
Photo: Marcin Polak

teractive whiteboards were introduced (many schools do not pay sufficient attention to this). The Internet allows constant communication with the world. Technology is regarded here as a tool of the modern teacher and it is transparent. It is used everywhere where it can become a valuable part of the learning process. The school takes part in projects to raise teachers' and students' digital competences. It is planning a new didactic approach to teaching with the use of new technologies, for example by teaching programming (Masters of Coding).

The Ostojowo Elementary School is an example of a school that consciously builds its educational space with students and parents in mind. It creates a modern learning environment through a harmonious combination of elements of physical and social space, while taking into account modern technologies which also have an influence on the quality of learning. Thanks to the established concept of *kaizen*, improving education does not end here.

LEARNING THROUGH COOKING AND PERFORMING
School Complex in Radowo Małe, Poland

Radowo Małe is a small village in Łobeski district in West Pomerania. It takes 8 hours to drive there from Warsaw. Sports fans may have heard of it, because this is the birthplace of Władysław Stecyk, one of the best wrestlers in the world at the turn of the 1980s and a silver medal winner at the Olympic Games in Moscow in 1980. However, Radowo is famous not only because of sports. About 10 years ago a local school in this village was one of the worst in Poland in terms of student performance. Currently not only has the school lost this inglorious claim to fame, but it has also become a place visited by teachers from all over the country who want to learn how education in Poland can be improved.

PIOTR KOZAK
Centre for Citizenship Education, Poland

Wardrobes and trumperies

From the outside the school does not look like a place of an educational revolution. It seems to be a school just like any other in Poland, although it has an impressive yard appreciated by the students. In that school complex the primary school is in the same building as the middle school, which allows the students to get to know each other. It decreases the number of conflict situations at school and allows for a better integration of the school community.

However, at the very doorstep of the school it becomes clear that this institution is different from other public schools. In the corridor there is an aquarium, old wardrobes with sculptures, and the ceilings are decorated with wooden branches and birds made of stained glass. They are the results of students' projects or of the teachers' and headmaster's passion for collecting interesting objects. Also, students at this school are somehow different. During the breaks children are walking on stilts or playing store.

The school's interior is cosy, but well-organised. The corridors are spacious, and furniture is put in safe places, allowing nearly 400 students to move freely about the building. In the main hall there is also a space where students can meet and hang out. Large tables serve not only communal learning, but also foster everyday communication and help to build a good atmosphere at school. Sofas in the corridors, niches and nooks also help to improve the general mood. Everyone can sit on them and take a rest from bustling school life.

Classrooms are decorated in a similar manner. They are different from traditional Polish school interiors where the space is dominated by a whiteboard (traditional or interactive). In this school the space is arranged in a variety of ways. There are sofas that can be used by students at all times. Desks are arranged dynamically, which means that it is possible to change classroom organisation at any time. For most of the time students are working in groups. Several students are sitting at one table, working jointly on projects. However, it is not a rule. Classroom organisation is adapted to teachers' needs and expectations. The variety of classroom arrangements gives the students possibilities to work in groups or

individually. In various nooks with sofas and armchairs students can relax (if they need it) or focus on individual work.

Classrooms are filled with bric-a-brac, including students' artistic works, chests and trumperies. However, no single item was put there by chance. Chests are used as aids in geography projects. Students use them as props in educational games. Visual works document students' artistic endeavours. Solids are teaching aids in maths. Every detail was carefully thought and has its place and purpose.

More does not mean better

The school's headmaster, Ewa Radanowicz, emphasised that design is the least important thing because it is merely a reflection of teachers' ideas about the school. New ideas appeared in Radowo Małe several years ago.

"A new draft curriculum gave me some space to open a discussion in our school on what we would really like to do, and what methods we would like to apply in our work with children," remembers headmaster Radanowicz. "Together with a group of teachers we sat down to re-evaluate our work. Young children like to play, they come to school curious about what the day holds in store for them. We thought that if we prepare classes that resemble games (that would be related to some serious topics that may be of interest to children), we will be able to get students involved in learning in a natural way." The school is public. This means that it must operate in the framework of a certain curriculum and national legislation. However, Radanowicz stresses that it is not an obstacle, because one may teach traditional content using non-conventional methods.

What is really important is to have a vision of the school. In this case it is fairly simple: "More does not mean better. Better means first and foremost different," emphasised the headmaster. This school does not strive to increase the number of extracurricular activities (contrary to other Polish schools). They believe that a large number of various activities puts a heavier burden on the students – and often also on their parents. At the school in Radowo Małe all courses, including extracurricular activities, end no later than at 3-4 pm. Emphasis is put on making classes more attractive.

Teachers matter

Reinventing the school was not easy. "We have come a long way," says Radanowicz. "First of all we had to change ourselves and start to think differently about our everyday work. We had to convince teachers that ready-made solutions available on the market were not always the best option for us and for our school.

Learning by having fun. Photo: School Complex in Radowo Małe

Atypical educational situations. Photo: School Complex in Radowo Małe

It was not easy," she adds. "It is important to have a vision of what we want to achieve, or to find a leader at school – a creative person who thinks differently, and together with him/her develop ideas on what our school may become," says the headmaster. "Be prepared for criticism and occasional failures. The process requires a lot of patience. However, if we believe that what we want to achieve is right and that it will yield positive results, we should not get discouraged."

Ewa Radanowicz managed to convince her teachers' team. They started from working on their own, creating original teaching programmes (syllabi) adapted to the needs of the school and to the students' social background. There is no one-size-fits-all solution or a universal program that would suit all schools; every institution is different.

Preparing teaching programmes demanded a lot of work, but it was worth it. As teachers themselves admit, their own programmes are much more convenient and easier to work with than those offered by the publishing houses.

Theme labs at school

Changes in Radowo Małe gave the teachers an opportunity to pursue their own passions. This led to creating various theme labs at school, including a cooking space, traveller's space and a theatre studio. These labs are by no means usual. You would be mistaken to believe that in the cooking space one may only learn how to cook. Labs are spaces where the students can immerse themselves in the world of science. What does it mean? It means that, for example, maths can also be studied in the kitchen, together with preparing one's favourite dish. Geography can be taught by travelling through a fantasy world, and the Polish language – through writing fairy tales.

Children can have a taste of everything. In the pottery lab they can fire pots. In the bookbinding lab they can produce their own paper. Most importantly, they can touch everything and enjoy first-hand experience. This makes them emotionally engaged in the learning process, and the process itself runs more smoothly.

Teach different

Two teachers usually teach classes in labs. This makes preparing and teaching classes more efficient. Teachers can support and inspire each other to come up with new ideas. Children are learning mainly through project work. What is important is that the projects are interdisciplinary. For instance, during life sciences classes students are creating

a “Nature observer” encyclopaedia. Working in groups of six, they jointly prepare materials about endangered species. They learn how to seek information in books and online, using the classroom computer. The teacher merely prepares information boards, brings books and assists students in autonomous learning instead of substituting them in the learning process. This model of work allows the students not only to gain knowledge about the world of nature, but also to develop relevant digital, intellectual and social skills. Most importantly, however, this teaching method makes learning itself more interesting. “I like learning, because it is a cool thing to do in life,” says Gabrysia, a student in the primary school in Radowo Małe.

Let us give you one more example. How to make children discover Ignacy Krasicki’s fables? Instead of assigning obligatory reading as homework, followed by a comprehension test, ask students to present the fables in the form of a puppet show. This also opens up possibilities for students to write their own fables and practice their language skills. There are plenty of ideas.

Children at school in Radowo Małe usually do project work for two hours, three times a week. They do not sit behind their desks to study maths; instead, they bake number-shaped cakes. They discover obligatory readings through staging theatre plays and travelling around a classroom filled with suitcases. In this way they develop many skills at the same time, and they also learn team work (grade 1 and grade 2 students carry out projects together). This solution helps first-graders to adapt better, while second-graders have a special challenge – they need to take care of their younger fellow students.

Like any other school, this one is not free from conflicts. However, this school has developed a support system. It was created jointly by teachers and a therapist. It was consulted with students and their parents, and its principles are included in the school’s statute. Joint effort on developing this system made everyone feel more responsible for the school. As a result, parents perceive the school as safe and children-friendly.

Can this way of teaching be reproduced in every public school? Ewa Radanowicz believes so, provided that teachers are able to find their own way. Fitting a school with colourful wardrobes and creating even the most beautiful labs is not enough. You need to start the change from yourself.

We learn to cooperate. Photo: Piotr Kozak

THE SCHOOL AS THE HEART OF THE VILLAGE

Elementary School in Podmokle Małe, Poland

The village of Podmokle Małe is at the end of the world. Literally. Its German name is the equivalent of the proverbial Wąchock and many people in Germany still cannot believe that this place actually exists, while German TV stations go there to shoot satirical programs. However, the town does not only exist, but it is also a place where one of the most interesting educational projects in Poland is carried out. If a change in the Polish education system is ever achieved, it will certainly begin at the end of the world.

PIOTR KOZAK
Centre for Citizenship Education, Poland

At first glance, the school in Podmokle Małe does not stand out. The school is quite small. It educates 67 students in classes of maximum 15 pupils. The pupils are mostly children of local people. The architecture of the building is Also similar to what can be found in many Polish towns. But those are only appearances. The most important changes are those that are not immediately visible to the eye, as you cannot see the heart that beats in this organism. The school in Podmokle is actually the heart of the village.

How to change the world, or at least its surroundings?

The idea for the school was conceived more than 10 years ago by Elżbieta Ryczek, the principal. In her words the school she went to for work was no different from others. It has the same grey walls and the same apathy that is characteristic of many Polish schools. She decided to do something about it and we can see judging from the results that her goal was achieved. The idea was very simple – to change the world, or at least its surroundings.

However, to change the world good intentions are not enough. You need an action plan. This does not mean that Elżbieta Ryczek had one. The plan was created on the go. The beginning was one educational project that resulted in a success. Others followed later. Consequently, in the last decade, the school has completed more than 60 social integration projects with the use of national and EU funds. “The most important thing is not to be afraid and just start acting,” says Ryczek.

The school gives priority to cooperation. On many levels. Teachers cooperate, pupils cooperate, the local community cooperates. Students work following the project method, the main method of teaching and organising at the school. Always bearing in mind that the school covers only stages I and II of education which means that the projects are carried out by children aged 6 to 12 years. The school’s Code of Conduct includes a provision stating that each student must create their own educational project, and one day a week is dedicated to designing them. Each project takes about 16-20 class hours and teachers help to write each scenario. The groups within the project include pupils of all ages with no class year divisions.

The projects themselves vary in topics: social, civic, scientific, linguistic. In the framework of the projects pupils participate in events such as bicycle rallies following the trail of the Podmokle shrines or create family trees. As the school principal says, the

effects of such activities are very positive. Students are more involved in the learning process because they are emotionally connected with the project. They also learn responsibility and work organisation. “We should move away from working methods relying only on books to work with projects,” says Ryczek. Children appreciate it. “I really like going to school. I recently described my family history with my Grandma. It was very cool,” says Kasia, one of the students.

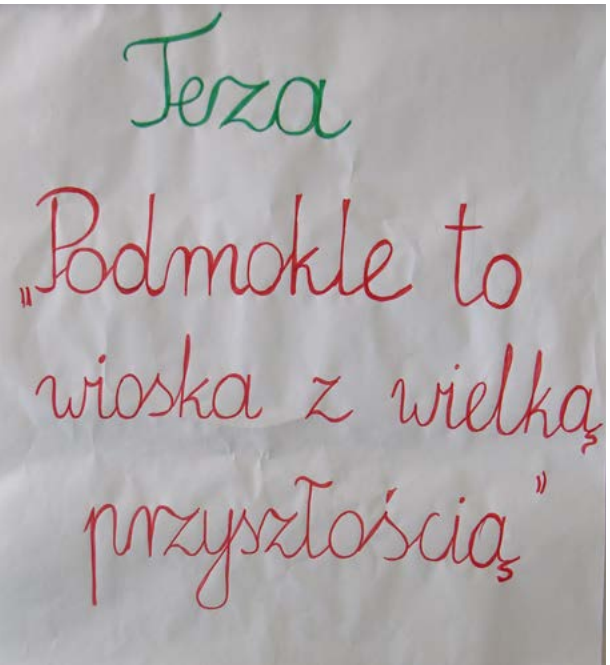
An important part of teaching, next to the projects, are research and experiments. Children do not memorize information but learn how the world works in practice. That is why in Podmokle the projects “School promoting the scientific movement,” “Podmokle night of Astronomy” (in cooperation with the University of Zielona Góra) or “Podmokle festival of science” (in cooperation with the Copernicus Science Centre) were initiated. In cooperation with universities and science centres, the school shows how exciting science can be. In 2014, representatives of the school attended even the Science Picnic held at the National Stadium, organised by the Polish Radio and the Copernicus Science Centre. The end of the world went to Warsaw.

Learning does not necessarily have to take place in school buildings. Eventually, the children will leave their schools so they must first learn how to live outside their premises. An open education is an education that is not closed inside a school building. How is this achieved in Podmokle? Biology lessons are taught in the field and in the woods. “Math too can be learnt everywhere,” says Ryczek. Children learn to add playing sports or during a visit to the museum. As part of the school activities they also go grocery shopping where they have to buy groceries for a previously fixed sum. They learn by playing and have fun learning. “Some of the children were in the store alone for the first time and it was their first independent purchase. They were initially reluctant but all managed great. The only problem was with the lady clerk, who had to sum up all the students’ virtual shopping,” says the principal.

Are there conflicts at the school? Of course, like in every school. The school, however, has developed a model of cooperation with parents in resolving conflict situations. The latter favours good cooperation between parents and teachers. Having a school student ombudsman, a teacher chosen by the children who represents their interests is an interesting idea.

The second pillar supporting the school work are the teachers. “Without good teachers-artists change would be impossible,” says Ryczek. A good teacher, however, should be invested in. And it is not only about financial and training issues. A good teacher should be appreciated and given the opportunity to act. You should also change the way of thinking about the role of the teacher – says Ryczek. In the world of the Internet the teacher can no longer be the sole trustee of knowledge. Wikipedia has more information than the best teacher. The latter may, however, be a guide to the world of knowledge. As a result pupils in Podmokle teach the class!

The school combines tradition with modernity.
Photo: Piotr Kozak



Students are authors of educational materials.
Photo: Piotr Kozak

A real bread-making stove can be found in this building. Children learn how to make traditional bread here.
Photo: Piotr Kozak

The school as the heart of the village

What usually goes unnoticed in Polish schools is, firstly, the fact that the school community is created not only by teachers and students, but also by their parents. Secondly, that no school is an island. It is part of the local community. If we are to change the world, it is only together.

Cooperation with parents is carried out on different levels. First of all, parents share responsibility for the school. School documents such as school assessment system are created jointly. School celebrations are also shared. Parents are also actors in school plays organised for the children. Nevertheless, this was not enough for Elżbieta Ryczek. "I wanted parents to be part of the school," she says. As a result, parents are involved in the process of teaching and learning. They do not stop at working on projects with their children, but also study. "We noticed that pupils' problems with English often arise from the fact that their parents do not speak the language. So we decided to teach the parents," says Ryczek. As part of the collaboration, children and teachers teach parents English. This has the advantage that the student gets to know the topics better once he/she becomes a teacher. On the other hand, the parent can help the pupil in the learning process. In addition, the school offers children and parents classes with a native speaker.

It is not without reason that the school is called the heart of the village. The association "Przyjaźń Podmoklom" (Frienship with Podmokle) was established in the school and it holds meetings of the farmer's wives association and the firefighters. The "Active senior club" plays a special role as it involves senior citizens in the educational process. The idea was simple: "I realized that we were using the knowledge and experience of older people to a limited extent. They know a lot because they have lived a lot. It is worth sharing this knowledge with our pupils," says Ryczek.

As part of the club's activities, senior citizens show, among others, the games they played in their childhood. In turn, children teach them modern games. In addition, handicrafts workshops or button sewing classes are organised. The cooperation between elderly women and students is going so well that the school is thinking about opening a senior volunteer programme next year.

On the other hand, the school also has a lot to offer to local residents. It hosts the rural library in its buildings. There are also courses offered for residents in: first aid, computer skills, makeup. Residents can also practice

their music performances with the Podmokle band. The school has a resident training centre. It is open for everyone from morning to evening. It hosts courses and trainings. Residents can borrow books at the library, and most of all, they can ask for free consultations with teachers and other school staff. "If anyone needs help to use a computer or send an email, you can always enlist to request the help of our teacher," says Ryczek. The centre also invites guests from other organisations. Specialists teach, among others, playing folk instruments. There are concerts for the residents or health-related events in the school, like: "Stop cancer among children." All of this creates a bond between the school and the local community, enabling fruitful cooperation. Villagers are more motivated to devote time to the school if they see that the school has something to offer back. "If you want to get something from the locals, you have to give them something first," sums up Ryczek.

Acting locally and globally

The school wants to educate pupils who will be responsible not only for their local environment, but will also think with a global perspective. Its students, still children, take part in the municipal council meetings. Together with their parents and teachers they develop ideas on what can be improved in the municipality. Successfully. Last year, three of four projects postulated by children were implemented. Thus children can change the world, even if they do it in small steps.

The school also wants to sensitize students on what is happening outside their place of residence. The whole school community adopted virtually a child from Zambia and it made a commitment to partially finance his education. In return, the children receive letters from Africa. They feel needed and see the effects of their involvement.

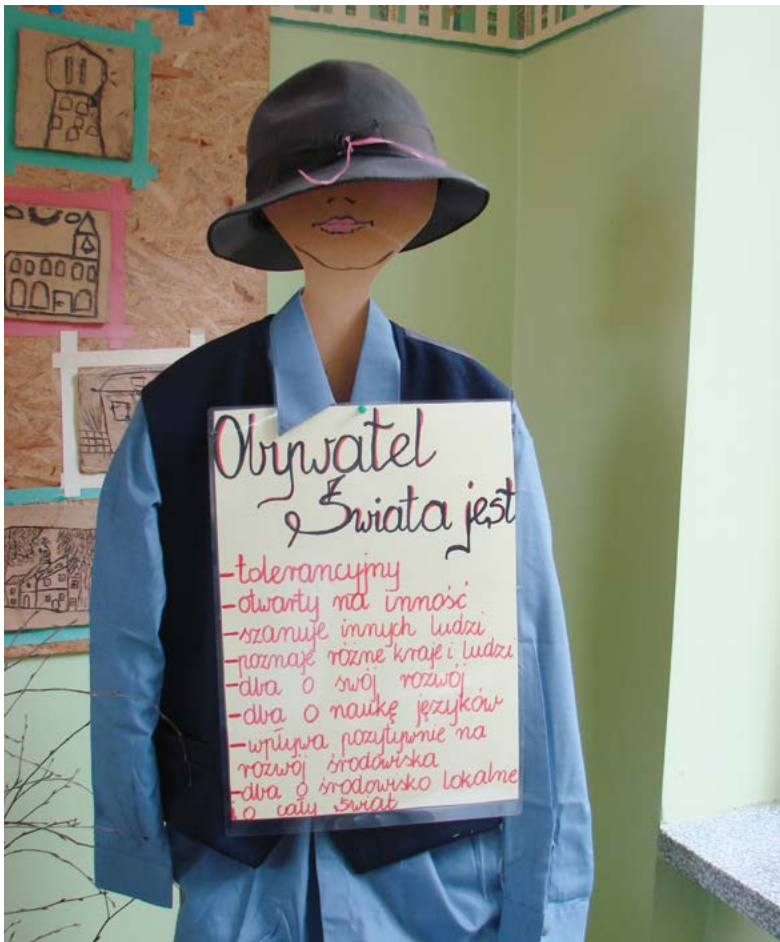
School of memories

Cooperation with the local community is a much broader concept for the school than cooperation with the residents. It also means caring for the local memory and history. During the school day, older residents can share their experience with younger people – but this is just the beginning. As one of the projects the school built an open-air museum! It sounds complicated, but the realization of this idea was very simple. The area adjacent to the school was made available to the residents who put old agricultural machinery there. The oldest horse carriages are from the nineteenth century. The museum also owns a twentieth-century windmill. The museum hosts biology and mathematics classes. It is also open to all residents and school trips.

The school also has a Chamber of Remembrance dedicated to the founder of the school and the local hero Franciszek Sarnowski, the creator of the first Polish schools in the Lubuskie region. The chamber is filled with exhibits donated by residents and the Sarnowski family. With the creation of the Chamber of Remembrance a timeless bond between generations was established and the town itself creates its own history.

Is it enough to change the world? Perhaps not the whole world, but certainly a part of it. Moreover, it is not difficult, and the recipe is quite simple: "The school has to be interesting and inspiring for both students and teachers. Make your teachers and students proud of their school so they go there with joy every day," sums up Ryczek.

Photo: Piotr Kozak



BELIEVE IN THE STUDENT

Primary School No. 81 of the Heroic Children of Łódź, Łódź, Poland

The Heroic Children of Łódz School is a surprising place. Its every element, even the smallest, is well thought and planned by students, teachers, parents and the management. At the same time it is a place in a constant process of change. Discussions and works on making this place as good as possible never end.

KATARZYNA GÓRKIEWICZ,
Centre for Civic Education, Poland

School without bells

The matter of bells ended when by the decision of the School Board the break bell was eliminated. It bothered students and teachers, abruptly cutting their concentration and ending work, so everyone gladly accepted this change. Half a year earlier a school project on noise was conducted. Students, as researchers, made noise measurements at school and, among other things, examined the volume of noise in the bell ring. After that, quite spontaneously, they ran to see the principal and requested for the bell to be eliminated. Their arguments were that it generated 140 decibels of noise, which is comparable to a chainsaw. The level of 140 may damage your hearing and they did not want to take the risk. So the bell was abolished overnight. The principal bought clocks and the students hung them in the locker room area, the hallways, and other places so that everyone, regardless of where they were, could control the time and arrive to class in time. Additionally, the students prepared timetables which they hung under the clocks. Everyone was curious to see how this would change work. It turned out that the lessons begin far more punctually and teachers who used to extend the lessons in the past, are now more disciplined. A change also took place in the students – they are calmer, less excited about breaks and they stopped shouting. Breaks are much quieter now. In addition, everyone learned to read a watch perfectly!

Building on mistakes

The generation of today's students lacks patience. They are not used to any processes: for them, a reaction takes place immediately after pushing a button. They want to get everything immediately. The school strives to teach them perseverance and that you cannot do anything well when in a hurry. First, one needs to celebrate failures and learn to draw conclusions. If any mistake or failure is analysed with skill, one can draw conclusions and then have another try at it. Each following attempt will be more successful. "The whole human civilization has been built on mistakes. Everything worthwhile is the result of humans trying and making mistakes. Therefore, we should learn to appreciate the value of a mistake instead of condemning it," says principal Bożena Będzińska–Wosik.

Change began with the introduction of formative assessment. Teachers were trained in this method, they took the necessary courses and began to apply it in their work with students. What is most valuable in this method is feedback. It must be professionally prepared – with double praise and appreciation. Of course, one should not ignore the errors, but mention them always showing how to correct them and what to work on further. The teachers agree with the parents individually on the frequency of written feedback received in addition to the regular one given

at the end of the semester. Students receive verbal feedback on a regular basis. Written feedback may be prepared even for the youngest pupils, with no need of use of stars, emoticons or any other form of interfering with internal motivation. As a result, students learn for the sake of learning, it brings them joy and satisfaction.

Giving students the initiative

The students in the second grade decided to organise a class library. However, they did not fill it with books brought from home, instead they wrote them themselves. Some of them drew comic books, others just wrote and then illustrated their own works. They also visited the school library to learn how the system of lending and borrowing books from the catalogue works. Then they organized their own collection. By themselves! You have to agree to give children the initiative and, on their own, they will have the most wonderful ideas.

All school events are coordinated by the students themselves, based on their own ideas. There are no school assemblies and festivities are celebrated according to concepts developed by students among themselves. Thanks to that teachers gain freedom, then only supervise that everything is done in a safe way. For example, the Constitution Day of May 3rd was celebrated by taking a group picture of the school community wearing national colours – white and red. Students agreed that children from classes 1-3 would dress in white and the rest of the school in red. It was their own idea and they were happy and proud to execute it.

The use of phones, tablets and computers is allowed at school and the students are the authors of the rules regulating it. Since they created them themselves, following those rules is natural and they are not treated as an imposed system of dos and don'ts.

What to do to find the courage to agree to give the responsibility to the students? Responsibility for what is happening in the school and in the classroom, for their own learning process? To make this possible, you have to change your mindset to that of a student. Lower to their level and talk to them. Not as a professional, but simply to listen and talk. And, what is most important, you have to believe in the student. Of course, this kind of changes do not happen on their own. They are a slow process led knowingly by the principal. Sometimes they consist of rules introduced from the beginning, as for example making reference to the Children's rights code and respecting their dignity, or a prohibition of shouting at children. It is only when the teacher does not resort to violence that he/she will get the chance to communicate with the student.

When the school had a vacancy for a Polish teacher and educator the recruitment was carried out by the entire school community. The candidates conducted sample classes with the group they were to be the educators of, and they were observed by a commission consisting of representatives of teachers, parents and the management. Then they had to answer questions from the students and the commission. The decision on which of the candidates to hire belonged to the students and the commission.

You could consider it to be a relegation of responsibility by the principal, however, Bożena Będzińska-Wosik stresses that there is a need to make a division of what is a principal's personal responsibility and the fact that the whole school community is responsible for the life of the school and its corresponding decisions.

Talking to the students

Once a month a meeting of the Student Council with the principal is held. The council is formed by representatives of all grades, but its composition is

Photo: Primary School no. 81, Łódź, Poland

not fixed – each class delegates someone different for each meeting. During those gatherings topics important for the life of the school are discussed followed by the students giving a report on the meeting in their own groups and discussing them with their classmates. Such an open form of communication gives us the chance to know what the students are experiencing, what is important to them and what they find difficult. It also gives us a chance to get to know their problems.

The principal's office is open to students not only for previously appointed meetings. It is always open, which is confirmed by a wide open, inviting door. The students use this invitation freely – popping in to the office to share what is important is the most natural thing for them.

In each classroom there is a chair with the words "I want to say something." If any student has a need to share something important or exciting, they may stand onthea chair and say it. Children talk about a variety of things and thus learn to express their emotions. It also teaches listening.

Opportunities for conversations can be created at a common table. All classes eat lunch together on a daily basis, often preparing them together before. Using such simple, everyday rituals builds a shared space to live side by side with others and trust.

Building a teacher team

The beginning was not easy. The principal was the initiator of all sorts of revolutions which were not well received by everyone. At the beginning she gathered a small circle of teachers that wanted to pursue a change in the school together. Other teachers watched their efforts and slowly, month by month, they were convinced of the value of the new ideas. Such a slow taming of a new approach, expanding didactic and pedagogical knowledge and introducing changes brought results. Time and complete lack of obligation were important elements. Educational meetings during which teachers acquired new knowledge were open and voluntary. It turned out that more and more teachers had the desire and the courage to try new things with time. Today the team includes most of the teachers and they begin new activities, share experiences and acquire expertise during different training sessions. One of the forms of support among them is visiting lessons and watching each other work. For most teachers it is a difficult situation they would rather avoid. It brings inspection and assessment into mind. However, in an atmosphere of cooperation and trust it can be an opportunity to give constructive feedback, be a great tool for development, inspiration and mutual support.

Invite the parents

The school must be open to the parents for them to want to get involved in its life. The main goal of school work is that all decisions concerning the school community are taken together. If something important is to be changed then all the representatives of the community are invited to sit together and work on those changes. It is not an easy task and

Photo: Primary School no. 81, Łódź, Poland

Photo: Primary School no. 81, Łódź, Poland

the management is still struggling with the challenge of what to do for the parents to be more involved. However, step by step, they are encouraged to co-operate by being told that they have a common goal – the best possible preparation for future life. And this does not only mean the children's lives, but also the adults' as we can always live in a better, happier and smarter way.

Thus, teachers prepare workshops for parents as part of the meetings. They talk and learn, for example about online safety, how a child's brain develops and why lunch at school is so important.

A good method of encouraging parents to cooperate are school debates with all the representatives of the community – students, parents and teachers. They discuss important and difficult issues and thus learn from each other and break the ice.

Another opportunity is celebrating achievements together. Sometimes we forget about celebrating the joys and we accept successes in silence. However, for children it is very important. A ritual of Celebrating Good News helps learning to acknowledge joy and pride and gives them faith in their own abilities.

Making decisions together

A School Council meeting is held every 6 months. It is an opportunity to review the work done and to plan for the next semester. The council is formed by representatives of the teachers, students, parents, and the management. They work in small teams that issue recommendations which apply to all the important areas of functioning of the school community, for example, changes in space, codes governing the operation of the school, planning school ceremonies or other important events. All that the Council comes up with is a framework for management activities.

Principal – the visionary

Bożena Będzińska-Wosik agreed with the teachers that they should pay attention to all the little things. Because these seemingly small things, reveal old, bad habits, you need to work through and resolve.

The principal should have a clear vision for the school she wants to manage and try to make it reality. Only in this way can they effectively make changes.

I want everyone who comes to our school to know that the ruling principle is one of mutual respect and trust. We do not accuse or blame anyone, instead we sit down at a table and solve problems. Together. This is the school of my dreams and I am trying to slowly create it – is the motto of Bożena Będzińska-Wosik.

TAMING SPACES. SMALL STEPS METHOD.

Teodor Bolduan School Complex in Wejherowo, Poland

For change in a school to actually happen you need to engage as many people as possible and make them work together and pursue their goal consistently, despite any difficulties and unforeseen obstacles: the principal should have a broad vision and think how to make the work of the whole institution more effective, while the role of teachers is to develop their own skills and involve students in everyday school life. Together, following the small steps method you can get really far.

MARTA PUCIŁOWSKA
School with Class Foundation, Poland

The space belongs to the kids

I knew that the school principal and the teachers form a good team, I also knew that the school was built in the 1950s, nevertheless I imagined that the concrete blocks hide modern interiors and a wide range of amenities. I ended up in a place gradually updated with the small steps method, creating a random architectural effect (quoting one of the teachers). To the right a new playground, behind it an old, concrete pitch, waiting for an investment that will allow to replace the pavement. New lockers for high school students, for the youngest – old boxes. I remember them even from my times of attending primary school. But in the school in Wejherowo there is one consistent thing that one feels immediately after crossing the entrance: this difficult space belongs to the kids who know it and feel good there.

There is always something to be done

The school complex is attended by both the youngest (six-year olds and primary school students) and older students (high school). Two completely different worlds. All come together in the locker room, in the basement. The staircase on the right leads to the part for the younger kids, older students go to the left. Theirs is the top floor of the building. The principal's office is located on the first floor, in the part for younger students.

The door is open – it is really always open, which we are told by Mateusz, a talkative eight-year-old who asks everyone a thousand questions, especially the principal himself. He is my guide from the beginning until the end of my visit to the school.

The principal, Andrzej Gredecki, follows the method of small steps in his school. If he has the means to improve any aspect of school life he immediately uses them. That is the reason behind the school resembling a patchwork with some parts new, some old. Some of the chairs were replaced with colourful and ergonomic ones, other furniture will have to wait.

New technologies are especially close to the heart of the principal. The school uses a system that allows gathering all relevant school documents in the cloud, with the level of access defined for each user (the free access school photocopier is integrated with this system), in addition to the computer rooms the students can use a mobile tablet lab (apple of the eye of the principal who dreams with having more tablets) and the kids can use a network dedicated especially for them. The parents also take an active part in school life, and after a training they use an electronic class record keeper on a daily basis. The principal was so effective in convincing them to use the system that now he has trouble responding to all messages and answering questions. What is more, parents frequent

the school quite often. They teach themselves – they read books to the kids as a part of actions promoting reading or they attend lessons as guests and talk about their work. But they are also welcome to come to school and learn something – for example computer programming. After all, their children have contact with programming on a daily basis so it would be good for them to know some basics too.

Principal Gredecki knows that the world is changing and the school must try and keep up with the change. That is why he always has something to do. He wants the teachers to be up to date with new technologies and pedagogical trends. Therefore, he invests in his team but he does not close the door to the school, just as he does not close the door to his office. He trains other principals, talks to them and shares his knowledge. He also invites other schools to visit. He attends conferences, listens, learns and then comes with that knowledge to Wejherowo..

You can always find space

How to deal with a difficult space of a 100-year-old school? I have two conclusions from my visit to Wejherowo. The first: put it in the hands of the children. The second: never give up in the search for spaces that can be adapted to their needs.

The children in the school in Wejherowo are happy, no one tells them to leave. In the dining hall there is a group of boys, some of them reading, some talking, others playing or checking their phones. They took over the space on the floor besides the table and the chairs. On the table there is a tureen and a stack of plates. Next to them there is another group playing with a rope. The children also make decisions about the space that is around them. On the same floor as the dining hall there is a Bright kids room (took its name from a blog written by the children). You can see it right away because each group could give a name to their space at school and put it on a sign at the entrance.

Weronika Adamska, the school counsellor and teacher for smaller kids who is my guide together with Mateusz comments that the biggest challenge for the school is the lack of space. The school in Wejherowo is a district school so there are a lot of children, and there are going to be more. So the teachers and the principal try to constantly seek places that may be not obvious. Every storage room, every corner, every utility room or a room previously full of unnecessary objects can be used by the kids. This way, when it seems that nothing more would fit into the school, they are able to magically come up with some space. You need to know your school to be able to move around it. I would most definitely not be able to get to many of those places by myself.

The school in Wejherowo is proof that a space may be unfriendly and difficult but that does not mean that it cannot become a place that feels like home to everyone. It might be the energy that was invested in taming the space, befriending it, that is the basis of the good ambience among the team. The 100-year-old school from Wejherowo is for the kids and the staff that works there, not the other way around, and the people that use the space every day found the way to constantly expand it and adapt it to their needs.

Student-friendly space in the classrooms and around the school. Photo: Marta Puciłowska

WHERE'S MY LECTERN?

Elementary School, Fjällenskolan, Sweden

Ask somebody you know to describe a teacher. Or just ask Google. Make a quick search for the word teacher and see what hits you get. Yes, the majority of pictures will depict a woman standing behind a lectern and a small antique blackboard in the background. It's easy to laugh and think that this does not reflect reality, but the fact is that this picture of the mediating teacher behind their lectern perfectly captures the image of school that has persisted for many decades, even if many schools now have interactive smartboards instead of blackboards. Change does not come of its own accord; it is almost always driven by external pressures brought about by the fact that the organisation no longer functions in a satisfactory manner. That schools have not changed more over the last hundred years is due to the fact that until now they have functioned reasonably well, both structurally and substantively, by doing what they have always done

FRIDA MONSEN
Retorsakademien Utveckling AB, Sweden

A school without the pressure for change

All this began changing as digitalisation began to permeate society to a greater and greater degree. As information became available everywhere and communication became possible in the most unexpected ways, the school as a mediator of knowledge began to creak at the joints. The logic in the transmission of knowledge from teacher to pupil as a one-way street began to be questioned along with whether the traditional classroom was really the most effective way to organise teaching in schools. Suddenly there was that pressure for change that had so long been missing from our schools.

The digitalisation of the school

Åke Grönlund, in his book *Att förändra skolan med teknik – Bortom en dator per elev* (Changing schools with technology – Beyond one computer per student), divides the digitalisation of schools into five phases:

Phase 1: Procure computers

Phase 2: Technical teacher training, IT teachers

Phase 3: Trial teaching

Phase 4: Organised educational development with defined overall responsibility

Phase 5: Tried and tested methods, knowledge bank, unified digital teaching environment

It is relatively simple for a school to accomplish the first phase, even if it demands a growing level of expertise on the part of those implementing it as the choice of digital tools also affects the type of teaching methods they will be applied to. Even Phase 2 is made easier as the level of technical competence among teachers and students alike increases given the fact that the day-to-day use of technology in society as a whole becomes more widespread. At present, the greatest challenges for schools are therefore to be found in the later stages of the digitalisation process. It is here that ingrained structures and attitudes are put to the test. Merely transferring traditional teaching methods to the new digital tools is not in itself a major change and in all probability will at first lead to deteriorating results. It is for this reason that the socio-cultural learning environment is crucial at this stage. This environment must provide support for practical exploration in which

allowances are made for personal and collective failure. This is a precondition for taking the necessary steps toward a more organised pedagogical evolution where new roles and structures can be defined that meet the requirements of the new methodology. Based on current tendencies and my experience of developments in schools I would also like to add Phase 6: adapting the school's physical environment to the working methods developed during phases 3 to 5 of the digitalisation process. This should be a parallel process implemented alongside the other phases. A well-thought-out physical learning environment can act as a strong incentive to change teaching practices. Based on this, I will describe Fjällenskolan's evolution, including both set-backs and advances in its ambition to provide students with the best possible prospects in a digitalised society.

One computer per student

Fjällenskolan was a relatively early adopter of digitalisation. By 2011 they had already equipped all of their teachers and students in years 4-9 with laptops. The school has been in existence since 1984 and is situated in Järfälla Municipality around 20km north of Stockholm. It is the largest school in the municipality with almost 1000 pupils. The traditionally designed school building nestles in a socio-economically prosperous area of suburban houses. As the school had a good reputation with a strong parents group and stable student base, there was no outside pressure for change. The parent group was satisfied with the relatively traditional curriculum on offer and the faculty was competent and engaged. The head teacher at the time, the driving force behind this visionary investment, committed considerable resources to promoting an understanding of the new digital investment program and the changing approach to learning. A number of teachers were trained and charged with dispersing their new knowledge and supporting their colleagues through this pedagogical evolution, and external training resources were also employed.

Gradually, the base level of technical competence was raised and a number of teachers progressed further by making use of the GAFE (Google Apps For Education) platform which was introduced the following year. GAFE quickly provided everyone at the school with a common digital learning environment and a culture of sharing soon began to blossom within the school.

Between two leadership stools

A couple of years after the introduction of computers the head teacher responsible for the initiative decided to leave the school and it immediately became clear just how important leadership is in the implementation of any major change process. Those teachers who spearheaded the process were no longer given the feedback and encouragement they had received previously regarding their development efforts and many began to wonder whether the new pedagogical methods had actually had any positive effect on the students' results. This, according to Grönlund, is also common when schools find themselves in Phase 3 of the digitalisation process and it becomes apparent that technology is not the sought-after universal panacea. In the vacuum left by more visionary leadership, the traditional ideal began to regain ground. The classroom's traditional layout in the form of straight rows of desks signalled that a studying tradition in which students sit in silence, working on individual tasks after the teacher's initial briefing, was somehow desirable. This was most definitely not the situation the school had hoped to find itself in two years earlier when the computers were introduced.

"What I really wanted was to try other things, allow the students to take a more active role and discuss among themselves, but at the same time there was a certain amount of uncertainty as I was worried that it would lead to an unruly classroom. One was wary of colleagues passing by and seeing a commotion, nobody wants to be that teacher, the one who can't maintain order in class," says Ingrid Palmqvist, Swedish language teacher.

However, during the spring of 2014 the new school leadership began to settle into the job and realised

Photo: Kim Wendt, Rosan Bosch

that there was a need for structure and fresh impetus for the development of the new pedagogical process.

"I had so many ideas about the organisation and how we could make it easier for teachers to implement major projects, in which they could fully exploit the computer's potential and collaborate more closely with one another, but nobody would listen. I could see that the teachers were under stress but we had different opinions on the causes and solutions. Whereas I believed that we could plan and organise teaching in such a way that they collaborate to make each other's lives easier, with longer teaching shifts making the day less fragmented, the discussion became much more focused on limiting time and cutting back on teacher's tasks to avoid them burning themselves out," says Jessica Blomqvist, deputy head teacher.

Any school that attempts to drive through changes within the existing framework and structures will eventually find itself in an impasse. Jessica and the new head teacher Per Nilsson say that the things that they would like to see happen are not happening. Certainly, they still have a stable school with competent teachers but on the whole the majority of staff continue to conduct relatively traditional lessons.

The dream classroom

In order to break the impasse that the school found itself in the leadership came up with the idea of holding a competition among the classes. They set aside a budget of SEK 100,000 and offered each class the opportunity to describe their dream classroom.

"The idea was to investigate whether a change to the learning environment would make teachers more inclined to change how they organise lessons," says Jessica.

Ingrid Palmqvist and her class, then in the 7th grade, immediately leaped on the idea and the school leadership were impressed by their sketches and ideas regarding the classroom. At the beginning of the autumn 2015 term, as the newly employed development manager I was given the task of collaborating with the class and their teacher to look at how we could realise some of their ideas. It quickly became obvious that it is hard to think outside the box when one has no idea about what might exist outside of it. The changes one saw were primarily of a cosmetic nature, such as new curtains, more comfortable chairs or coloured walls. A working group was therefore formed consisting of pupils and teachers who (together with myself) visited Skapaskolan, a school renowned for its awareness of the importance of the physical learning environment. The meeting with the teachers and pupils at Skapaskolan opened our students' eyes to a new schooling reality where rooms were organised for various types of learning activities and in which the school's core values permeated the entire working process. The teachers there seemed not to have the same need to physically control the room as the students knew what was expected of them and the assignments contained a high level of motivation--driven content. Both the teachers and students

from Fjällenskolan liked what they saw, even if there was a certain wariness as to what it might mean for them to change their own classroom.

"How will we take tests if not everybody is sitting at a desk?" asked one student. "It will be easier to look over someone else's shoulder for the answer."

In this way the discussion soon came around to education and learning in itself.

It proved to be a challenge to fit so many different areas into one classroom and we realised during the process that it would have been ideal if we were instead able to develop a number of different rooms that complemented one another. However, in June 2015 the room was finished and ready for inauguration. There were mixed reactions from the school staff, although most were cautiously positive:

"We'll have to see how it goes, maybe I will have to move my lessons to another classroom. It's difficult to see how they will have room for computers and books as well as writing in their books," says Sune Stridfeldt, mathematics teacher and one of the classes' two mentors.

Sune is aware that he prefers things somewhat simpler and although he did not initiate the changes, he has great belief in the class and their ability to adapt to a new environment. Throughout the process, he also participated by giving suggestions and followed developments with great interest.

"We previously had set places and the pupils are used to this, but they themselves have expressed a wish to dispense with this and have more freedom so, to begin with at least, we will see how it goes, otherwise much of the purpose of the classroom's design will be lost," says Ingrid, the classes' other mentor. Sune agrees with this.

"I believe that they can cope, we have talked a great deal during the process regarding the need for them to take responsibility and the increased demands on them to maintain a tranquil, good working environment."

In parallel with the design of the classroom, the school also undertook an active pedagogical program to develop digital competence and 21st century skills. Together with me the teachers planned and tested various models of ability-based teaching that to a great extent took advantage of the students' own experiences and motivation to learn. The support given to project-based working methods had the added effect of changing the attitudes of several teachers to the school's organisation. Many of them now requested both longer lessons and the opportunity to collaborate with other teachers in order to augment their own subjects with the support of their colleagues' competencies and the varying knowledge demanded by other subjects. Many teachers found the new classroom exciting and completely in line with the positive developments flourishing at the school.

Where's my lectern?

It is now August 2015 and the new term has just begun. Ingrid and Sune's 7th-graders are now beginning life in the 9th grade in a classroom that sticks out from the rest of the school with its high, slender stools in turquoise and green, a corner lined with soft beanbags, a sofa and table for group discussions. The class are extremely pleased but their teacher is frustrated. Teaching in this new classroom is difficult and many of them describe the same situation:

"I feel so exposed, almost suffocated by the new classroom," says one of the new teachers at the school who did not previously participate in the process. "Firstly, I don't know what to do with myself, where am I supposed to be? And some of the students just lie in a beanbag. How will we find time to get through everything we want to do this term? We shouldn't be experimenting on a 9th grade class

that will soon be getting their final grades," she sighs resignedly.

"Well, it really isn't working out. I find it difficult to know where I should be when they are spread out and all working," says one of the experienced teachers who was previously extremely positive about the learning environment project.

As a part of our developmental work on both the physical and digital learning environments, one of our senior teachers, Anna Gentula, was given the task of investigating events in the new classroom. She will both teach in the classroom herself and observe others' lessons. Anna is an experienced and proficient teacher who is used to undertaking developmental work but even she found the new learning environment a challenge at first. When we met for our first briefing she was dejected and negative. Anna felt that the students lose focus and take a more slapdash attitude to lessons than she was used to. And where should she stand to teach? We decided that she should try making a few adjustments based on the same learning environment principles on which the classroom design was based. For example, her position should be based on the situation at any given moment. If the learning situation implies Campfire, none of the pupils should be lying in a beanbag. They should all be together in one place. Anna also attempted to plan the lesson so that more of the various learning environment principles are activated and the room is used to greater effect.

After a run-through/Campfire, a laboratory exercise followed which then led us to exercises in pairs. These allowed children to move around in accordance with the Watering Hole principle. After only a few occasions Anna was already far more comfortable with the room and believed that she could see the students' creativity being positively stimulated.

Ingrid also noticed positive effects after a couple of months:

"The students are comfortable and feel that they are more involved in discussion now than previously! I also feel that my own relationship with the students has improved, encounters in the classroom have become more personal now that they are no longer sitting in rows."

How did it go for Sune and his maths lessons? Just as he believed, the vast majority of students behave responsibly, using the room in the manner best suited to the teaching of the subject. For those pupils who may fail to do so he has found a solution himself. This week, on Sune's initiative, they will go to IKEA to purchase tray tables, so they can make better use of the entire room.

Lessons learned and the way forward

Either the learning environment comes first (as for example at Vittra Telefonplan), creating pressure for change for teachers to challenge their methods as the old ones cease to function in the new context or, alternatively, we attempt to change education to such an extent that we instead create pressure for change on the learning environment as is the case with Fjällenskolan. The second option is a considerably slower process but one that brings with it the same challenges although in micro-format. It is not possible to pull down the traditional structures, seated as they are in the walls of the school, without replacing them with new structures. For example, many teachers allowed their leadership in the classroom to be undermined by the students' desire to decide entirely for themselves where they would sit, even though the teacher felt that this was not conducive to a successful lesson. The teacher's leadership must be even stronger in this new environment, though aimed at making the student aware of their own learning process and those choices and actions that contribute to a better or worse result. Another thing that became apparent in conversations with the students was that things that the teacher sometimes saw as a problem (that a student always chose a particular seat in the classroom) were not seen as a problem by the pupils themselves. Rather, they had simply found a place that worked

Photo: Fjällenskolan, Sweden

well for them. Working actively on the teacher's metacognitive understanding of the environment in terms of learning environment principles was also a factor in our success. As the leader of this process I was constantly required to emphasise that the room in itself did not constitute positive change, but rather it was the educational interaction between the teacher, the student and the physical environment that would hopefully give the intended results. Here schools have much to gain by following Fjällenskolan's lead in working intensively on the change process itself and on their teachers' willingness and courage to challenge themselves to begin learning new skills even before the physical environment has changed. In this, leadership is the decisive factor in what impact the work will have. As teachers, we are professionals when it comes to working on other people's learning and development, but it is only when we begin to understand our own need to learn, and are challenged to do so, that the real magic happens.

SUMMARY

Our intention was not to write a typical guidebook. Our purpose was not to deliver ready-made solutions which could be implemented in every school. This was due to the fact that we strongly believe changes cannot be imposed on any school. Each school is different and there is no single solution for all of them.

We did not want our guidebook to provide a collection of recipes for modern education. What we wanted was to give you some inspiration. Our goal was to show the readers that not only are changes at school possible but also necessary. Over the last 25 years we have experienced plenty of changes, from social and economic shifts to technological revolution. If education is unable to adapt to new developments, it will become an unnecessary burden. If teachers were still to play the role of mere transmitters of knowledge, they could easily be replaced by machines. The traditional school model needs to change or else it will cease to exist.

We wanted our publication to resemble a tool kit. In this volume, we present you with participation tools you can use to identify needs and design changes in your schools. We also write about open educational resources you may exploit during classes with your pupils.

But above all, our main goal was to show you that changes can be introduced to a school only if we bear in mind whom, what and how we want to teach. Thus, we present several examples of European model schools. At a renowned school in Berlin, changes in educational environments resulted from the belief that the fundamental goal of education is to teach children to take responsibility for themselves and the world around them. At Steve Jobs School in Amsterdam, school spaces are subjected to the idea that education must wisely use the technological revolution. On the other hand, changes at the Public School Complex in Radowo Małe were driven by the belief that school is not a place where we are supposed to get prepared for life but rather a place where we spend a great part of our lives.

In the next volumes we present some examples of good practices that we have gathered on the basis of focus group interviews, a few dozen study visits in Poland and abroad and many years of experience of the institutions involved in the project. Our objective was to give inspiration. Therefore, the changes we describe are mostly cost-free and relatively easy to implement at your schools. We also made efforts to present such practices that provide answers to general challenges faced by schools nowadays. We are convinced that you have experienced at least some of those challenges at your facilities.

We divided our volumes into three categories. **Volume 1** describes changes that have been observed in architecture. Among other things, it presents the example of the 1st Maria Skłodowska-Curie Memorial School Complex in Sopot where pupils were responsible for designing the learning area. We also use the case of Primary School Canning Street

Photo: Marcin Polak

ATUT School Complex Library, Wrocław, Poland. Photo: Marcin Polak

in Newcastle upon Tyne to show how we can promote cooperation among pupils through architectural changes. Furthermore, we argue why school benches are so important and how even the slightest change can bring unexpected positive results.

Photo: Fotolia.com

Volume 2 focuses on good practices in the virtual and technological spaces. It presents, among other things, some ways of how a school network can be created and how to ensure safety on the Internet. Taking the 13th Commission of National Education Memorial Primary School in Olsztyn as an example, we describe how to effectively use tablets in education. We also show the educational potential of social networking tools.

The last volume is devoted to social and cultural spaces. It concentrates on shaping relationships among pupils, teachers, parents and the local environment.

Photo: Michał Kniewski

The Educational Complex in Podmokle Małe provides an example of a school where even the youngest ones can decide about local matters. Plus, we present how senior citizens can be encouraged to come back to school. On the basis of some Swedish experiences we also demonstrate how we can teach children responsibility and co-operation through project-based work.

Of course, not all solutions can be just copy-pasted to your schools. Yet we hope that you find at least some of them inspiring for further action. We hope that drawing from others' experience, together we will be able to initiate the process of change at our schools. Isn't it the best that an education-related publication can offer?

Enjoy the book!

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