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**School as a Space of Learning, Teaching and Living**

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**School as a Space of Learning, Teaching and Living**

**ABSTRACT**

This paper will explore the significance of the space in the process of learning and teaching. The first part of the paper will explore some of the theories and pedagogical and architectural in the context of space of living. The second part of the paper will offer illustrations of projects that realize of the concept of school as a space not only for learning and teaching but also for everyday living. We will consider the impact of space on learning engagement as well. And finally we will conclude that the concept and practice of pedagogy of space contributes much to the ongoing debate about the meaning and future of democratic and modern education in the 21<sup>st</sup> century.

Keywords: space of school, relationships, democratic space, innovative flexible space and furniture, multipurpose spaces.

## **Introduction**

The space is this particular reality where we are all equal, it is egalitarian, does not divide people into good and bad. This is one of the basic functions of our mind. So we can speak of space as a psychological phenomenon, a kind of process, or an entity's ability to record, store and playback a variety of stimuli. In our article we consider the concept of creating multi-functional spaces that permit flexibility, agility as well as professional development supporting resources and tools that support in lieu of restrict creativity and innovation. Some of researchers recognize a space as a third teacher. Not only should school buildings be durable and aesthetically pleasing, but they also need to be functional and fit for educational purpose.

How to talk about the space and not to trivialize it, to interested young man in the twenty-first century? Perhaps the answer to this question will be the pedagogy of space. Nowadays the formula of the space in pedagogy is extended as a broader educational process, which is aimed at educating active and creative an attitude towards threats to democracy, especially such a phenomena as human rights violations, racism, xenophobia. The pedagogy space is not a fully structured in terms of the content and terminology field. Therefore, it is difficult for a single definition, which would clarify the nature, objectives and the content of this form of education. Learning by doing is the best way to experience all important aspects of educational and architectural issues relates the space of classroom. Most of the benefits of teaching and pedagogical method brings education projects and workshops. The project means a program based on the action plan and the division of tasks, the aim of which is to prepare a specific product, for example the physical space of class. This type of education is focused on practical activities, while learning conceptual work and team. Educational projects fit into the concept of the space pedagogy, because all of them are involving young people. Youth educational project connects formal and non-formal education as well. Workshops require working in groups, engage all students, creative thinking and creative problem solving. Project's method teaches youth how works democratic and civic society as well.

That is why we invited young people to imagine own class and then to build it. Thanks to common design of the space of the class, youth will develop of the perspective of living in a democratic society and other important skills: presenting various views to a wider audience, listening to the opinions of others, discussing, and joint search for alternative solutions.

## **The Public, Private and Intimate Space of One School**

The public space requires specific forms of behavior, clothing and language. There is a hard floor, a teacher's desk in the middle, a blackboard, national emblem, religious symbol, porter leaders, and potted plants as well. The classroom is a strange theatre where the students perform the role of

spectators and they are accounted for by the actors (teachers) and sometimes thrown out of the theatre ("go out the door!"). They must sit and be quiet - the best is if they do not ask anything. The traditional arrangement of benches, one behind another, and the desk in the middle of the class does not encourage cooperation and relationship but rather confrontation.

The private space is the only place where we learn and we only learn when we engage our motivation. To transform a public space into private space is a condition of a teacher's didactic effectiveness. Private space creates personal relationships between teachers and students. The teacher-student relationship is the most important axiom of Jesper Juul's pedagogy. Juul is a Danish internationally renowned public speaker, author, family therapist and educator with activities in more than 15 countries around the globe. Juul clearly explains how he understands relationships with another person, a student, a teacher, a parent. In his opinion "the competence to build relationships involves the skills and the will to take seriously the thoughts and feelings of the person facing the opposite"<sup>1</sup>. Polish pedagogue Bogusław Sliwierski emphasizes that personalization approach in education accepts every student as a person who is involved in the process of socialization, education and upbringing. In the modern school we have to permit the teacher to follow the needs of the students. Above all, however, we must educate teachers to be the professionals in relationship to the building - the space of class where he or she work with students.

The last type of space of school - intimate space - is the most mobile of all types of space and most subjected to oppression. We know that the each student has to have a piece of his own and intimate space. That is why we decided to set up for each of student one piece of intimate place in the form of a locker located around the carpet in the middle of class.

### **Let's Start from Architecture Workshops**

"The learning process is a bit perverse: you look back at the history and tradition to go to the front; you can also look down to go up. A pause of a judgment may be used as a tool by which our subsequent judge will be more forgiving. This way we can learn from everything"<sup>2</sup>. But who of today's young people know about this, and many other creative ways to thrive? What kind of experience you can learn from Polish school? Unfortunately, very often the stereotype of the teacher and the school is a reality with which the students have to face.

It seems that there is no connection today with an informal and formal education. Diversity of classes, showing the greatest range of activities and disciplines are beside the school. Young human beings who finished their education they don't know what they want. Youth don't have the opportunity

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<sup>1</sup> Juul, J. 2014. School Crisis. What can we do for pupils, teachers and parents, 28.

<sup>2</sup> Venturi, R., Brown, D. S., Izenour S. 2013. Learning from Las Vegas: The Forgotten Symbolism of Architectural Form, 18.

to decide, based on their own experiences from school, in what they are more or less interested in. It is important to shape the awareness how the world look like and what surrounds us now, and what will probably be in the future e.g. after finishing college. So we need a large variety.

On the other hand, it is equally important that young people were not only aware, but also co-responsible for where they are living or learning. They should know what surrounds them physically - nature, architecture, but also socially - people and their stories. Moreover it will be perfect if they want to work and create something together and be eager to develop themselves. The aim of the modern school should be "creating" just such people. Example?

During a school year 2013/2014 in the Hipolit Cegielski's Middle School in Murowana Goslina were prepared architectural workshops for the interdisciplinary class. Why workshops on architecture? "I do not remember from elementary school art lesson. With every other subject I have some memory related. I remember the jars with preparations [...] I remember Polish literature and its emotion, I remember crazy geography teacher [...]. I even remember what I cooked for practical-technical classes. But not for the world can find in my memory of what happened in the arts lessons"<sup>3</sup>. Philip Springer, author of the book "Bathtub with columns", in a very literal way represents the reality of aesthetic Polish. Raises issues of ubiquitous advertising, "the higher the better" fences, gated communities, the architectural kitsch or pastel settlements. Fortunately, public consciousness of these problems is nowadays increasing. However, public are just conscious but no co-responsible. According to a study of Centre for Public Opinion Research <sup>4</sup> from 2008 to the question of who is responsible for the aesthetics of the environment, more than half of Poles said that local authorities, architects and planners, but only twelve percent believe that home owners or members of housing cooperatives<sup>5</sup>. We do not feel co-responsible for the space in which we live, so unfortunately, it often becomes increasingly uglier.

Going back to Springer thoughts- "I tell myself it's why we live in such an ugly country. [...] I, however, cannot even remember how the door to the art class at my school looked like. Or maybe this class just was never there"<sup>6</sup>? There is no question in school about architecture, urban, ruralistic, ergonomics, functionality, aesthetics and social aspects of coexistence. There are no classes in the art lessons, on which youth can find answer to above question. Therefore, in response to such a significant lack, I chose architecture with everything else it connects, as a subject of the workshops with the interdisciplinary class. How it looks like?

One of the first workshops was focused on the comparison of architectural styles and epochs in the literature, with immediate giving concrete examples of

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<sup>3</sup> Springer, F. 2013. *Wanna z Kolumnadą*, 7.

<sup>4</sup> Centre for Public Opinion Research (Centrum Badań Opinii Społecznej CBOS) is an opinion polling institute in Poland, based in Warsaw. Originally established in communist Poland in 1982, it has operated as a non-profit public foundation created by a special law since 1997.

<sup>5</sup> *Ibidem*, 141.

<sup>6</sup> *Ibidem*, 7.

styles in the nearest environment. Further activities focused on mapping method the piece of three-dimensional space by drawing the perspective of a modern house. Simultaneous use of a multimedia projector and whiteboard allows to draw on displayed image of the house. This support learning the principles of plotting and makes it much easier to understand and remember. Eitherit directly realizes the essence of perspective drawing.

Very significant is also to talk about specific cases and problems related with architecture. It is important to present the stages of preparation and learning what you need to take to become an architect. Show youth how nowadays the project are made, what is important during choosing an apartment or house, but also to ask them where they wanted to live, what is bothering them and what they like? Check whether or not they mind on the issues connects with functionality and aesthetics. It is appropriate to sow the seeds of uncertainty and understatement, so that the thought process of the space surrounding us last as long as possible.

After some time, when aware of the architectural will rise among young people, we should together create something tangible, material, so that the effect of the work will be physical, appreciable. It is necessary to give the opportunity for self-realization, and check own beliefs by each of the workshop participants. In the case of an interdisciplinary class the idea was to make the interior design project of the room where youth have lessons. Frameworks of this project assumed to developed inquiry with questions regarding the pros and cons of the class, preferences and features that can be found in there, colours, materials, or use of its individual zones. Then, after analysing the inquiry, several participants made, based on responses, full project, which included projections, examples of walls and visualizations, that in the end been put to the open discussion. The culmination of the workshops will be the implementation above-mentioned project. This will directly allow each of participants come in contact with physical nature of creating space. Not everyone had the opportunity to paint a wall, drive a nail, screw or drill something. Such skills among others also broaden horizons.

"Promotion of architecture, in addition to the supporting function of the development of the identity of the city and its inhabitants, has other very important task of shaping our minds as to what we want of architecture, and thus what we want the city and the lifestyle in this city"<sup>7</sup>. Lifestyle depends on what will the city look like in the future and remembering what they once were certainly succeed in better shape them later. Quoted opinion also confirms that architecture is a very good theme of the workshops or projects that we can weave in education. Also, it is essential to promote knowledge related to these topics among the youngest if we expect a gradual improvement of the reality in which we live as well as greater civility and openness of youth.

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<sup>7</sup> Happach, M., Komorowska, M. 2012. Promocja architektury w mieście blokowisk. In *The Glory of the City*, 177.

### **Educational Activities in Murowana Goslina<sup>8</sup> – The Local Context**

Our educational activities focused primarily on building the identity of young people living in Murowana Goslina with respect for tolerance and respect for cultural and religious diversity. We were looking for inspiration in the multicultural history of the town where three communities lived together: Poles, Jews and Germans. The connection of multicultural and architectural education through formal and informal activities through the implementation of educational projects, international youth meetings and pedagogical innovations is an opportunity to strengthen the social competences of young people, develop their passion and curiosity of the world.

### **Cooperation, Participation, Responsibility**

The class is a place where teachers and students spend most of their day and is a place of learning and teaching. It is here that the student makes friends, discusses ideas and, makes decisions. Class is more than a place of the transference of knowledge. The class transformation process requires common decisions, finding consensus and sharing work. It also requires the participation of many people who will help realise the project in which the main goal is participation of young people to strengthen their creativity and to become open-minded citizens in a democratic society. Pupils, teachers and school principals participate in a collaborative process in which commitment and responsibility are critical and germane to the immediate environment. For that reason we invited an architect who taught architecture and drawing. The youth designed the class, taking into consideration their own needs and dreams.

### **Steps Involved in Our Work to Create a Space to Learn, Teach and Live**

Firstly we wanted to explore the needs of our students. That is why we spoke with them and we prepared for them questionnaires with several questions. The first task of the team was to reflect on what the dream class might look like. By working on the project method, team members discussed what changes were possible to create and which of them should become the focus of the team. It was important to take into account both the needs of the students and the teacher. At the same time students reflected on who could get support for making classroom changes and also identify who should be included in the decision-making process. The next step was to blueprint related activities and implement plans. The entire process of making changes was documented on a regular basis with photos. After that we invited one group of students from the interdisciplinary class to imagine of own space of the class

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<sup>8</sup> [https://en.wikipedia.org/wiki/Murowana\\_Go%C5%9Blina](https://en.wikipedia.org/wiki/Murowana_Go%C5%9Blina).

where they would like to spent lots of hours during ten months of learning. So the design of the space of interdisciplinary class is based on and drawings of students and answers. This democratic way of thinking about space of the class helped us to make new design of class fits to all of them. There is short description of view of this physical space of class in the middle school. We have just chosen three drawings of our students and we will shortly describe them.

### *Drawings and Their Interpretation*

Thanks to drawings we got to know some important elements for young people: functionality, usefulness to learning, fun and relaxation, variety and comfort.

#### The Drawing 1

The classroom has three main functions:

- learning and educational space with democratic access to knowledge (there are books ordered by categories invented by the youth which could be borrow by students without library (bookshelf);
- relaxation space created by colorful puffs and pillows;
- pragmatic space: plants, colorful blinds and mobile tables (folding).

#### The Drawing 2

There are four important issues of space:

- educational: functional walls (painted with special paint) as a space for posting helpful information and educational materials;
- democratical: one wall as a space to express students' feelings and needs yourself (there are peace sign, unicorn, snail on the picture);
- relaxing: space for balls and mini basket hanging on the wall;
- pragmatic: giving a second gymnastic wooden ladder by painting them in their own way and treating them as a decorative element of the interior; there is also a checkerboard with colored boxes for storage different things.

#### The Drawing 3

There are three important issues of space:

- relaxation: replacement of traditional school chairs by comfortable cushioned chairs and hanging puffs;
- pragmatic: replacement of traditional tables on wheels by installing mobile students' desks; there are water dispensers and cups; care for the comfort and the contact with the green by setting the pots with plants;
- design: creating spot lighting for different parts of the class depending on the function.



### The Drawing 4

There are four important functions of space:

- relaxation: replacement of traditional chairs by comfortable sofa and hanging puff and small, mobile, rotating stools; in addition, there is a table setting with two chairs set in front of each other - space for face to face conversations; there is also a carpet in the middle part of the class, which enhances the acoustic comfort of the class, and also gives you the opportunity to rest;
- educational: there are bookshelves, walls painted with special paint to allow students to express ourselves;
- design: there are small boxes ceiling suspension on the wall with cables attached where each person can fit personalized message for another person.

### **What Did We Do?**

#### *Hipolit Cegielski's Middle School as Example of Multipurpose Spaces*

In our class we decided to combine three spaces: public, private and intimate. Firstly, there is soft carpet in the middle of class and wood instead of a hard floor made of stone. We gave "hygee"<sup>9</sup>/coziness into this place. Secondly, we discarded the teacher's desk and re-arranged the tables. Now, we have mobile single tables that can create different configurations. Most often we set them in form of circle so that each person can see everyone else. There is no one central place what promotes equality between students and teachers in the class. This is a good beginning to building a 'partnership relationship' in the space of school. Depending on the type of work done, students can create a variety of ways of sitting: side by side or facing one another. There are many wooden boxes in the middle of the class in which each student has his/her own personal items and can store anything he/she wants. There are also comfortable blue pillows on boxes. Students use them, for example, while watching movies or if they need to rest.

The physical space of class is based on rectangular shape in dimensions of 7 meter by 14 meter and 3,2-meter height. There are two entrances situated on the longer wall with double doors to make the indoor of class more quiet during lessons. There are windows on the opposite site with white shutters. The space of the shorter walls are prepared for students' works and any information. The whole of floor is covered by oak parquet. This wood comes from local forest situated around the town (circa 50% of space of district of Murowana Goslina is forested).

One of the first need of students was to make the interior of class more warmer and comfortable. Together we decided to choose wood as a main

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<sup>9</sup> DOI= <http://hyggehouse.com/hygge>.

material to cover walls, make cupboards, students desk, shelves for book and window sills. We painted walls white colour the class to became brighter and fresher. One of the wall is very important for students - it seems to be like a hydepark. They are invited to express themselves and everything what they wanted to say to anybody. Everyone can draw, write or paint all what is important for him/her on wall. For example students created the mural showing their faces. They cut off in paper the shapes of their faces and then painted the contours of faces on the wall. Concluding this aspect of the view of class we could say that the wall is the space of freedom. The next wall offers the space to pin some educational materials prepared by students and teachers. There is the main wall in the central place of the class as well. It provides two functions – it serves as a big board and a screen. Thanks to special magnetic white paint we are able to write using special pens. This is also also the place for showing movies and others educational materials There is an interactive whiteboard on another wall - an important tool in learning and performing creative tasks.

Teachers, students have ready access to a variety of resources so that students can demonstrate learning in different ways. Multimedia and ICT are sophisticated, diverse and readily accessible to multiage, flexible groupings of students. This includes projection devices, digital cameras, scanners, printers, hand held devices and interactive white boards. The design of school environments allows schools to use a mix of media andmlocations, flexible student and teacher groupings, and improved access to resources. The capabilities and confidence of teachers and students are central considerations when dealing with technological and cultural change. Therefore, school design must incorporate ICT as key learning and teaching tools. There are two multimedia projectors, a printer and five speakers in different parts of the class. The potential of utilizing technologies for creative learning and innovative teaching cannot be ignored. Technological tools are far from being fully exploited for creative learning and innovative teaching in the classroom. It is a pity but the potential of social technologies and media for education remains a relatively untapped resource. Technologies could be used to support interaction or dialogue between teachers, pupils and parents. Online platforms could provide parents access to pupils' learning materials and tasks, which would help them to understand new learning approaches and support their children at home with their schoolwork.

Spaces can be easily reconfigured to accommodate different size groups from large to small to one-to-one. These spaces can also be used for parent and community interaction at different times of the day. The capacity to divide up the spaces is enabled through operable walls, mobile trolleys of resources such as laptop computers and mobile furniture.

The main architectural and educational assumption of the class was to make it as much as possible movable and multifunctional space for various activities. During lessons, workshops and other activities the most important issue is to have possibility to change the configuration of space of class. That is why we divided the space for three parts.

The first - educational and formal part includes white and very light chairs situated in front of students' desks – everyone in easy way can move them

anywhere. There are students' desks in the class. They are small, light and personalized to each student. The countertop of desk is made with plywood. This allows students to write or draw what he or she wants to express. Sometimes this is a tool of communication between students. This possibility of expressing of own feelings makes a creative history. The legs of tables are metal and turquoise. After white and wood colour, this is the third colour of class. This one made class more modern, fresher with a new spirit. All tables and chairs are placed in U-shape configuration.

The second part of the space of class consists poufs. There are eight long poufs made with plywood. The top of each of them are made using soft sponge and covered in material of turquoise colours. This construction has an additional space inside where can be storage books and other useful students' things. Poufs together with tables and chairs create the U-shape. This configuration allows to be in more personal contact with students and easier way to divided them into smaller groups.

The third part relates the middle of the class. Everyone would like to have a comfortable, big, white carpet, on where during breaks or movie nights can lay, rest or have fun. It is very easy intervention in the shape of the class and makes a huge difference in the climate of this educational place.

The space of class is very important for students and teachers to make also a place for relax and free time. We built kitchen annex using plywood. There are refrigerator microwave, coffee maker, fridge, stove and sink in the kitchenette. This last one was made of granite stone and its long flat with big bottom surface which allows to wash dishes by few persons. Students have their own mugs and favourite teas. They also prepare cocoa and toast. Our class is the space where we live and create positive relationships.

Together we created an innovative flexible space and furniture. Within one space students are able to engage in a range of activities at one time. Ready access to resources is available so that students can demonstrate learning in different ways. The opportunity for working alone, in a small group, or large group exists.

### **Instead of the Epilogue**

The design of new learning environments should enable teachers to work together differently, to learn and practise new skills together, and to readily access resources to support the teaching and learning relationship. We strongly believe that the friendly relationship between the educational and architectural design is a key to build the better understanding among teachers and students, especially in the space of school. Our schools must be open for change to build the space of freedom and interaction between students and teachers. Creative participation of young people in the essential life of school and beyond will develop their responsibility and cooperation. We need more space for informal interaction between teachers and students, where they can learn from each other without being limited to curriculum content. This is the way of building

hope for better a world without borders on earth and without borders in our minds.

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