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The Theoretical Foundation of the Concept of "Architecture and the Built Environment Education"

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Abstract - It is necessary to investigate, develop and promote architecture and built environment education in order to increase the civic responsibility towards the built environment and to create a functional, sustainable and aesthetic environment.

This type of education can and should lay the foundation for social responsibility but for this, we need to make children and young people understand what being responsible mean and that the city is the result of the involvement of all its inhabitants.

Forming such citizens that are able to understand the idea that active involvement and prospective thinking is the first step towards a sustainable transformation of society is a complex and lasting process, which is why it has to start from an early age.

Keywords - architecture and built environment education, education for sustainable development, "new education" programs, traditional education system, "tree of ideas" method

1. Introduction

Architecture and built environment education is a complex field, which enriches the general knowledge of students by aiming to familiarize them with key notions in order to better understand the urban and rural environments in which they live, as well as increasing the civic responsibility towards their communities.

In other words, it is necessary to prepare them for the various challenges of present and future society, to contribute to their formation as responsible citizens who want to understand, protect and rationally use the built and natural environment as promoters of sustainable environmental development. [2]

If we take a glimpse of the built environment, one can say that it is necessary to change the paradigm of the architectural and urban culture in Romania, and the first step is to change the mentality, the vision of all the stakeholders of the architectural act, because there is a need of a higher standard of quality in the built environment and, at the same time, the protection of the existing architectural heritage. [4]

Changing this architectural paradigm can and needs to be done starting with the education of children and young people, a change that has to be made in all forms of education - formal, nonformal and informal - an important role being played by opinion makers - parents, teachers, architects, civil engineers and so on. [3] [4]

The desire and motivation to research and promote this part of education starts from the need to familiarize as many students as possible with concepts and issues related to the built environment, given the imperative need to make younger generations aware that there are realities which must be changed in our built environment and they are the ones who can make these changes over time.

Another strong impetus for approaching this type of education among students was their desire and curiosity to decipher the built environment in which they live in.

2. THE INTERPRETATION AND FRAMING OF THE CONCEPT OF "ARCHITECTURE AND BUILT ENVIRONMENT EDUCATION"

Architecture and built environment education is not found within the traditional education system, but we can include it in the field of the "new education" programs, which are integrative, cumulative and correspond to various social and pedagogical needs. [7]

These programs are defined in the UNESCO programs, which have been adopted in the last decades as a response of the educational systems to the imperatives of the contemporary world in matter of political, economic, ecological, demographic, sanitary issues etc. [7]

The specific content proposed from this perspective can be integrated at all levels, fields and forms of education.

They are presented in terms of pedagogical objectives aimed towards: [7]

- environmental education:
- education for sustainable development;
- education for international understanding;
- peace and human rights education;
- education for participation and democracy (education for citizenship in a democratic society/global citizenship education);
 - education in the field of population;
 - education for a new international order;
 - education for communication and media;
 - education for change and development;
 - nutritional education;
 - modern home education;
 - leisure time education;
 - intercultural education;
 - civic education;
 - economic education.

Related to the "new education", we can say that many of them contribute differently to the foundation and development of the concept of architecture and built environment education, along with the traditional education components: [7]

- intellectual education:
- aesthetic education;
- moral education:
- physical education;
- technological education;
- professional education;
- religious education.

This approach reflects the fact that architecture and built environment education is a trans disciplinary field with links to traditional education as well as the "new education", a connection through which several values can be promoted and complex notions can be approached.

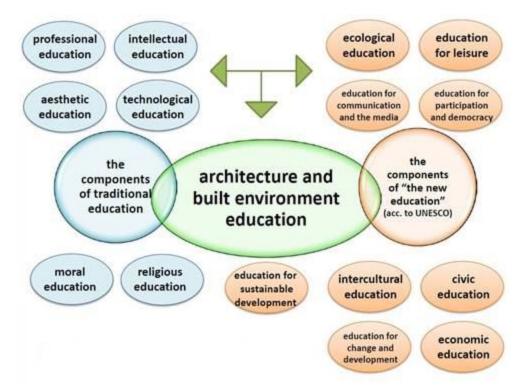


Fig. 1 The correlation between architecture and bult environment education and the other components of education

Architecture and built environment education targets some of the themes and issues from the types of education mentioned above, and through its versatility and variety of approaches it can contribute substantially to developing the concept of education for sustainable development.

It is necessary to highlight the link between these two types of education, architecture and built environment education and education for sustainable development.

We could say that architecture and built environment education plays an important role in the sustainable development of society, as the purpose of this education is to help today's students understand tomorrow's necessities in terms of sustainable development of their society. [2] [4]

In other words, taking into consideration our field of activity, we can say that the target of this type of education is to provide students with insight of the basic concepts and phenomena that are related to the creation of a high-quality built environment, as well as the protection of the existing architectural heritage.

The concept of sustainable development emerged at "The Earth Summit", a United Nations Conference on Environment and Development (UNCED), a conference held at Rio de Janeiro, Brazil (3-14 June, 1992). [5]

On this occasion, environmental and development issues were brought to the forefront, with a new development strategy, under the name of sustainable development.

This Summit was unprecedented for a UN conference, in terms of both its size and the scope of its concerns. Twenty years after the first global environment conference, the UN sought to help Governments rethink economic development and find ways to halt the destruction of irreplaceable natural resources and pollution of the planet. [5]

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO), a meeting that took place in Paris in the autumn of 1997, passed the Declaration on the Responsibilities of the Present Generations towards Future Generations. The Declaration recognised that "the present generations have the responsibility of ensuring that the needs and interests of present and future generations are fully safeguarded". It stressed the importance of making "every effort to ensure, with due regard to human rights and fundamental freedoms, that future as well as present generations enjoy full freedom of choice as to their political, economic and social systems and are able to preserve their cultural and religious diversity". And it stated that "the present generations have the responsibility to bequeath to future generations an Earth which will not one day be irreversibly damaged by human activity. Each generation inheriting the Earth temporarily should take care to use natural resources reasonably and ensure that life is not prejudiced by harmful modifications of the ecosystems and that scientific and technological progress in all fields does not harm life on Earth". [5]

The concept of sustainable development can be summed up in the triad of Economic Prosperity-Social Equity-Environmental Protection, which is based on a balance between these three components. This triad also influences the field of architecture and built environment education, in which sustainability must become the key-word that influences, directly and decisively, the built environment. Sustainability must become a way of life, a way of thinking and acting.

This type of education develops and improves the capacity of individuals, groups, communities, organizations and countries to think and act in favor of sustainable development. It can generate a change in people's mentalities, potentiating their ability to create a safer, healthier and more prosperous world, thus improving the quality of life. Education for sustainable development offers a critical approach, increased awareness and the power to explore and develop new concepts, visions, methods and tools. [7]

Therefore, architecture and built environment education aims to involve students in activities with real applicability in the process of identifying, designing and solving problems of the built environment, process in which they can express and engage their personality, creativity, critical thinking and responsibility.

Such an example is the "Tree of ideas" method, a didactic/working method of organizing and systematizing knowledge/ideas. In other words, it is a graphic concept in which the statements/keywords are written on the drawing, both at the bottom of the tree (roots) and at the top (branches of the fruit tree).

In our case, the roots of the tree are the sources that "feed" the architecture and built environment education and represent the fields underlying this side of education that contribute to changing the individual and collective behaviors of children and young people to create a functionally, durably and aesthetically built environment, which is in harmony with the natural environment and satisfies people's needs and aspirations.

The trunk of the tree represents the architecture and built environment education, the main, strong, long-lasting element, which is nurtured by the roots.

The branches have fruits, let's call them "the books of knowledge", which are part of the objectives/directions/principles of sustainable development of society.



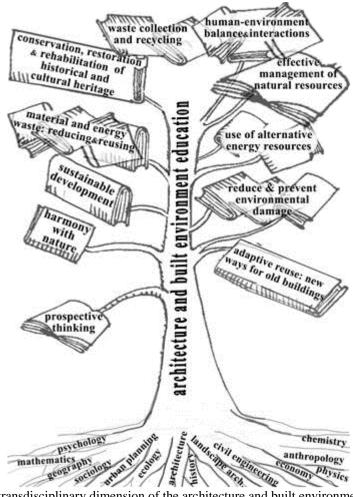


Fig. 2 The transdisciplinary dimension of the architecture and built environment education and its applicability in various fields

3. RESULTS AND SIGNIFICANCES

The importance of architecture and built environment education lies in its ability to help students understand the complex processes that transform the environment in which they live - the activities of modeling and remodeling their surroundings.

Each book in the tree represents a very important theme that can be approached through different interactive and interesting activities. Based on these various activities that can be carried out within this trans disciplinary process of architecture and built environment education, students will develop different skills, including:

- ability to self-manage the learning process;
- learning by doing, design thinking and participatory design (co-design);
- social responsibility, critical thinking (the ability to critically and constructively analyze the built environment in which they live);
 - various ways of expressing and presenting a project;



- research, planning, decision-making and problem-solving skills;
- social skills, collaboration, communication and teamwork;
- awareness and cultural expression skills;
- creativity and imagination, spatial perception and visual literacy.

4. CONCLUSION

The general purpose of this type of education is to help students understand the complex processes that transform the environment in which they live.

The architecture and built environment education is a long and continuous process, and educating students in this spirit requires a good training for those involved in this process: teachers, architects, civil engineers, urban planners etc.

For this reason, setting the theoretical foundation of this concept and establishing its strategy and main educational objectives that can lead to the development of individual and collective skills, attitudes and knowledge in this field represents a constant challenge for all those involved in the education process.

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