Emergency Reconstruction of Primary Schools in post-conflict context: the case of Kosovo

Authors: Vlora Navakazi, Bardha Meka, Flaka Xerxa

Submitted: 21. January 2019
Published: 27. January 2019
Volume: 6
Issue: 1

Affiliation: University of Prishtina

Languages: English
Keywords: Emergency Reconstruction, Rebuilding, Primary Schools, School Standards
Categories: Visual Arts, Architecture and Design
DOI: 10.17160/josha.6.1.530

Abstract:

The post-war situation in Kosovo after 1999, in most cities and especially in rural settlements, was immensely difficult due to completely or partially burned public facilities, among which, school buildings suffered the most. To recover such a state, emergency interventions from many international organizations besides reconstruction of residential buildings being the priority of the programs were mainly focused in the improvement of the primary school buildings' infrastructure, as it was an important factor to return residents in their settlements. The purpose of this study is to analyze the process of emergency design and construction of primary schools in the post-war period in Kosovo, from 1999 and afterward, also to investigate the impact of the used standards on the reforming of the educational system. The study was performed on following case studies: primary schools "Idriz Ajeti" - Shalë (Lipjan), "Ramiz Sadiku" – Gllarevë (Klinë), Abri e Epërme in Glogovac, "Kongresi i Manastirit" – Studençan (Suharekë). Outcomes have shown that post-war Kosovo design standards, used for the design and emergency construction of primary schools, have contributed to the easy and informal transition from traditional school to new school

new JOSHA
Journal of Science, Humanities and Arts

January 2019 Volume 6, Issue 1

Emergency Reconstruction of Primary Schools in post-conflict context: the case of Kosovo

Vlora Navakazi[1], Bardha Meka*[1], Flaka Xerxa-Beqiri[1]
[1] University of Prishtina, Faculty of Civil Engineering and Architecture, Kosovo.
Email: vlora.navakazi@uni-pr.edu, *corresponding author: bardha.meka@gmail.com, flaka.xerxa@gmail.com

ABSTRACT

The post-war situation in Kosovo after 1999, in most cities and especially in rural settlements, was immensely difficult due to completely or partially burned public facilities, among which, school buildings suffered the most. To recover such a state, emergency interventions from many international organizations besides reconstruction of residential buildings being the priority of the programs, were mainly focused in improvement of the primary school buildings' infrastructure, as it was an important factor to return residents in their settlements. Design and construction principles were based on international standards used before the war, namely JUS (Yugoslav standards) or DIN (German standards). In terms of reforming the educational system, as an immediate necessity was the development of unified standards. Therefore, in 2000, Urban Planning Office of Pristina (EUP) developed the "Design guide for Primary school in Kosova" and later the "design guidelines for school facilities norms and standards" were developed by Ministry of Education, Science and Technology (MEST). The purpose of this study is to analyze the process of emergency design and construction of primary schools in the post-war period in Kosovo, from 1999 and afterwards, also to investigate the impact of the used standards on the reforming of the educational system. The study was performed on following case studies: primary schools "Idriz Ajeti" - Shalë (Lipjan), "Ramiz Sadiku" – Gllarevë (Klinë), Abri e Epërme in Glogovac, "Kongresi i Manastirit" – Studençan (Suharekë). Outcomes have shown that post-war Kosovo design standards, used for the design and emergency construction of primary schools, have contributed to the easy and informal transition from traditional school to new school architecture and were suitable for application of new teaching methods.

Keywords: Emergency Reconstruction, Rebuilding, Primary Schools, School Standards

1 INTRODUCTION

1.1. Background

After the 1999 war in Kosovo, emergency interventions were necessary in terms of re-emergence of the situation in the field. The situation that was hampered by the 90s from the Milosevic regime affected the teaching system too. The processes of higher education was held in school-houses, thus degraded the educational system at all level, including the facilities of the educational buildings and their urban and architectural infrastructure.

During the war, the largest population of Kosovo was displaced in the countries of the region, both in Albania and Macedonia and less in Montenegro, and lived there for a while. Some of them departed to different countries of the world, to whom which were willing to offer asylum and shelter for Kosovars who remain without shelter (Toscania, L. et.al. 2007). Remained population settled in neighbor countries of the region, sheltered in the family premises and supported by international humanitarian aid.

The primary and secondary school age Kosovar's children were immediately included in respective education institutions, since Albania and western part of Macedonia use the same Albanian language. Additionally, children join systematically and easily to due to similarity to the system in Kosovo. It is important to emphasis that until September 2002, primary Education in Kosovo was in the same line with the rest of Yugoslavia, consisting eight years of schooling in the primary level (Sommers, M.; Buckland P. 2004). The Kosovar children, pupils completed the summer semester of academic year 1998-99 in these schools with support of International organizations, some of which were before the war in Kosovo, offering support and humanitarian aid in Kosovo. It was evident during that time host families for displaced Kosovars benefited from this humanitarian aid too. A large number of schools in Macedonia were covered and had financial support to improve infrastructure and educational facilities.

The systematization of higher education was more difficult due to consequences that remained of the parallel education system in Kosovo during 1990-1998, which were burdened by the parallel system of studies at *home-faculties*[1]. Luckily, some of students continued their studies in different universities out of neighbor countries a/o other world counties, while some of them expected to return to Kosovo, rather than that to foreign country with the respect to the home own. But the learning process in the extraordinary working conditions, known so far by UP management, succeed to be consolidated again and initiated the reorganization of higher education in Tetovo,

[1] *Home-faculty*, - the residential facilities which are adapted and refurbished to be used for educational purposes and activities. This typology has emerged as a consequence of the inadequacy and necessity for institutional space to develop parallel education system in Kosovo during the period 1990-1998, deported of Albanian educational system from their own facilities and continuity of Serbian educational system on remain / 'occupied' facilities.

Macedonia. Thus, in support of the newly formed State University Institute of Tetovo after several management meetings, the UP disseminated teachers' organized repatriation in Kosovo, back to the education facilities of the University of Pristina occupied by the Serbian regime since 1990.

1.2. Goal and purposes of the study

In 1999 Kosovo faced a multidimensional emergency situation. Along with the reconstruction and rebuilding of residential buildings, the most important factor for the return of residents to their settlements was the improvement of the infrastructure of primary school buildings. The aim of this paper is to analyze the reconstruction process of elementary schools in the post-war period of 1999 in Kosovo, to investigate the impact of used standards into reforming educational system; and to indicate the transition of traditional school to new school of architecture. In addition, this paper attempts to emphasize the importance of concept to organizing spaces as a main design quality for primary school buildings based on the post war design standards. Also, the document covers the area of design and construction of primary schools in the post-war period in Kosovo, based on the standards and norms inherited from the system of the ex-Yugoslavia adapted to norms and standards borrowed from international norms and available literature.

1.3 Emergency aid - infrastructure of school facilities

In 1999, following the NATO intervention and the establishment of the UN administration, UNMIK, the task of re-establishing and reforming the education system stats improvement, by several international agencies as well as local NGOs and institutions. This large and complex process of rebuilding the physical infrastructure (school buildings), appointment of teachers, developing curricula and teaching materials, was required for the newly created Department of UNMIK for Education and Science (MEST & MAFRD, 2004-2009)

In 1999 was established the Department of Education at other departments in UNMIK. In 2000 it was called the Department of Education and Science (DOS) and then the Provisional Department of Education and Science (TADES) in anticipation of general elections in autumn 2001. Initially, the DAP drafted a strategy that allows international bodies and NGOs to identify the needs to reform the education system and try to find solutions to emerging situations such as poor infrastructure and lack of resources (Georgescu, 2002). School buildings were gradually restored.

Under the coordination of UNHCR, over 200 humanitarian organizations have provided emergency assistance to food, medical care, housing, water infrastructure and sewage (Borrel, et.al., 1999)

1.4. Infrastructure of primary school buildings after the war '99

The European Commission had conducted the International Management Group (IMG) to carry out a damage assessment in 14 damaged municipalities in Kosovo after the NATO action in March 1999. In the spring of 1999, the European Commission and IMG Finance to fund the comprehensive and comprehensive assessment of damages and rebuilding costs for housing and all the damaged infrastructure in Kosovo. IMG activities in Kosovo during 1999/2000 were gradually fused into the activities of the newly-formed European Agency for Reconstruction (EAR).

Generally, in most villages, schools were main targets of destruction during the war. All caused damages, both to residential housing and to school buildings, were divided into four (4) categories. Estimated costs for reconstruction or refurbishment were related to categories of damages. For preliminary evaluation purposes (EU, 2000) the amount of EUR 100,000 was calculated as necessary for complete reconstruction of four-class standard village school, including mortgage, while for non-standard buildings were made additional payments during the assessments, shown in Table 1.

Table 1. Estimated cost for school buildings based on the categories during the assessment (source: EU, 2000)

Category	Degree of Damage	Rehab. Costs EUR
Category I	5-20%	12 000
Category II	20-40%	30 000
Category III	40-60%	50 000
Category IV	Over 60%	100 000

This estimation was a first rapid evaluation in purpose to indicate the immediate levels of damage to housing and village infrastructure after the conflict in Kosovo. More detailed assessment process is done covering not only housing/accommodation but also all aspects of infrastructure.

Table 2. Cost estimates of damaged education facilities – Summary for each municipality (source: EU, 2000)

					Category I		Category II		Category III		Category IV		
					12,000		30,000		50,000		100,000		
	Municipality Serbian	Municipality Albanien	TOTAL Budget (kEUR)	TOTAL Units Damager	Units	Budget (kEUR)	Units	Budget (kEUR)	Units	Budget (kEUR)	Units	Budget (kEUR)	
3	Glogovac	Gllogovc	1,226.00	25	3	36,000	8	240000	9	450000	5	500000	SDC
9	Klina	Klinë	1,340.00	38	20	240,000	5	150,000	7	350,000	6	600,000	SDC
12	Lipljan	Lipjan	588.00	12	4	48,000	3	90,000	1	6	4	400,000	SDC
24	Suva Reka	Suka Rekë	1,134.00	27	12	144000	3	90000	6	300000	6	600000	SDC

UNICEF and numerous donors have engaged in the successful rehabilitation of school buildings all over Kosovo (UNICEF, 2000) was an immediate request in order to raise interrupted educational process, since only 17% of schools were left undamaged.

Also, the educational system in post-war Kosovo has undergone changes since 2000-2001, the system of 8 years of compulsory education between the ages 7-15 expanded to compulsory education consisting of 9 classes; 4 years of lower secondary to 5 years of primary education and education. The implementation of this new structure has been slow, but from September 2002 became mandatory. Compulsory education continues till now to consist of 9 classes, 5 years of elementary education and 4 years of lower secondary education (SOC, 2001).

Figure 1. Burnt buildings of primary schools in Abri e Epërme and Gllarevë: a) Burnt buildings, b) Improvised teaching is held in tents; c) the ruins of the destroyed school in Gllarevë (Source: author V. Navakazi, 2000)

2. PROGRAM ANALYSIS, DESIGN, RECONSTRUCTION AND REFURBISHMENT Case studies: four elementary schools in Kosovo

In 2000, along with emergency project of reconstruction and rebuilding of residential buildings in the areas/settlements destroyed after the war, the international organization "The Swiss Agency for Development and Cooperation" (SDC), with the assistance and financial support enables reconstruction of several elementary schools throughout of Kosovo. The architectural firm contracted to carry out projects was the design firm "atelier N & P"- Pristina. The team contracted in consultations with UNICEF and each municipality has created a brief overview of the needs, including architectural services and complete design, inception and feasibility, outline proposals, scheme design, detail design, production information and tender documentation. In order to make a program and other analyses are taken four case studies, located in Kosovo, as shown in figure 2.

1 Primary sch., "Idriz Ajeti"- Shalë, Lipjan

2 Primary sch., "Ramiz Sadiku"- Gllarevë, Klina

3 Primary sch., "Abri e Epërme", Gllogoc.

4 Primary sch.,"Kongresi i Manastirit"- Studençan, Suhareka.

Figure 2. Location of the four primary schools on the map of Kosovo (Source: Authors, 2017)

2.1. Primary school "Idriz Ajeti" Shalë, municipality of Lipjan

The design has been adopted and incorporated in the existing school site, using the existing infrastructure, with the possibility for future developments. Preparation of a project program for the requirements of 1028 pupils in 20 classes. Project value is 1,6 million DM and the construction works are carried out by a construction company "Ramiz Sadiku", Prishtina.

Figure 3. Primary school "Shalë", municipality of Lipjan, a) Satellite view of school site; b) View of the building in 2017 (source: by author, V. Navakazi);
c) the original school project, accomplished in 2000 by N&P, Pristina

As it shown in Figure 4-c, it appears that the school building was not built according to the project. Due to limited financial resources the school hall, proposed and projected as following the level of standards for schools has not been constructed.

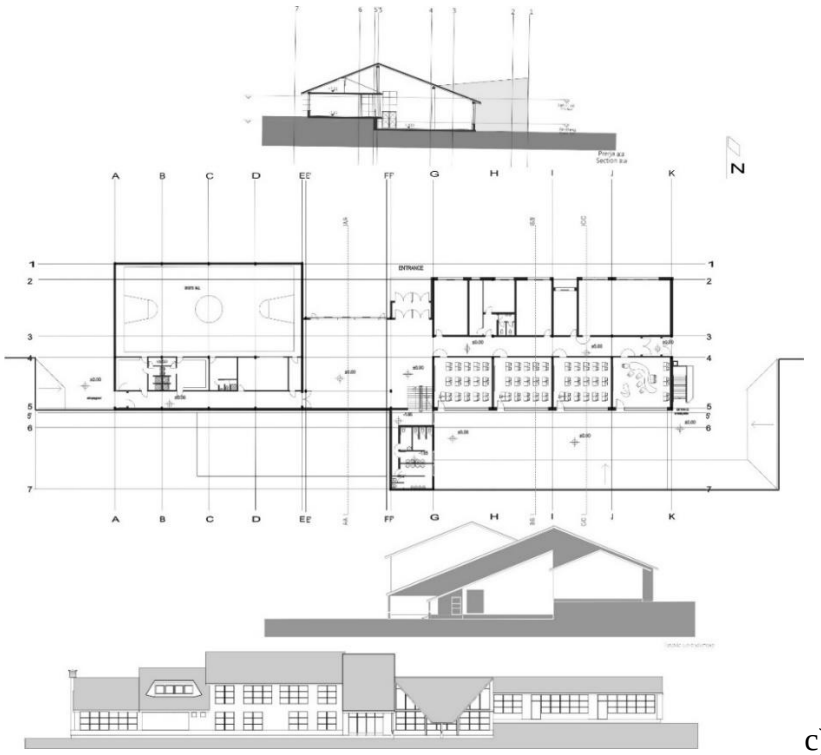
2.2. Primary school "Gllarevë", municipality of Klina

The design was planned to be adopted and incorporate existing four-classroom school, using the existing infrastructure with options of future developments., having capacities for 704 pupils, in

14 classrooms; it was build and construct by *Reveja,* Suhareke. According to the request of the municipally, the new school building is accompanied by 4 existing classrooms. Based on the proposal of the planned design program for 704 class roomed students in 14 classes, space for many purposes and the study room are planned. Because of the limited budget, nothing has been achieved.

a)

b)



c)

Figure 4. Building of primary school "Gllarevë, Klinë; a) Satellite view of school site; b) View of the building in 2017 (source: by author, V. Navakazi);
c) the original school project, accomplished in 2000 by N&P, Pristina

2.3. Primary school "Abri e Epërme", Gllogoc

The building of the elementary school in Arbri i Eperme, after the war of '99 was completely destroyed. Site given to this school is new and is out of any infrastructure. Design should consider future developments, planned by the client & municipality. Design for the 576 pupils, in 14 classrooms; building construction "Diamanti", Gllogovc. During the compilation of the design program, the required number of pupils is divided into 12 classes and 2 workshops in the ground floor and 2 laboratories, according to the standards of 5 m^2 /per pupil. The standard is perceived by the literature used before the war, Nojfert and Metric Hanbook.


a)


b)

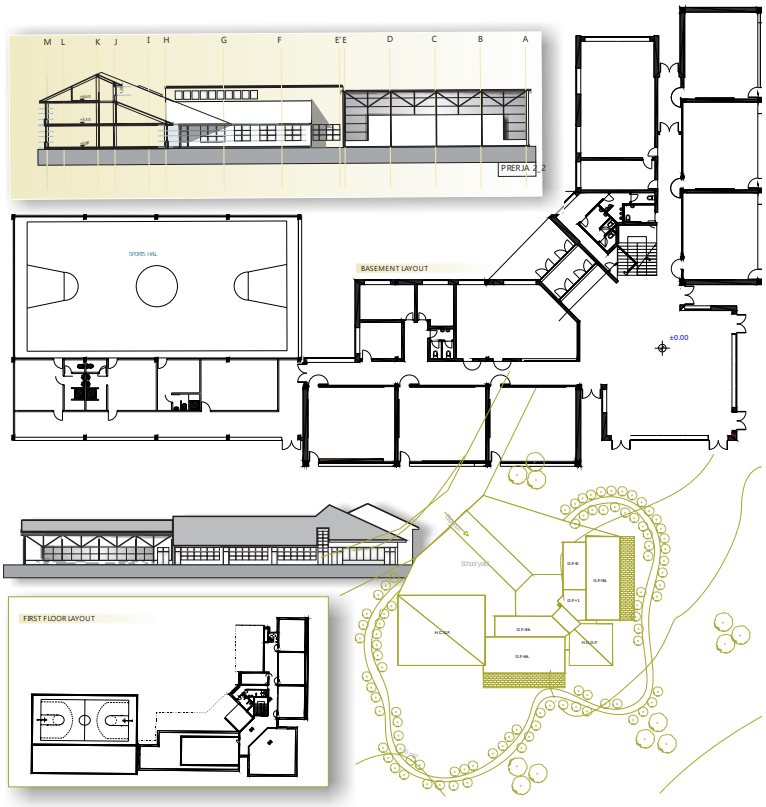


Figure 5. Primary school "Abri e Epërme", municipality of Gllokoc, a) Satellite view of school site; b) View of the building in 2017 (source: by author, V. Navakazi); c) the original school project, accomplished in 2000 by N&P, Pristina.

2.4. Primary school "Studençan", municipality of Suhareka

Due to the approximate number of pupils in two primary schools, Studençan (992 pupils) and Shale (1028 pupils), the same project was used for both schools. At the location of Studençan, school site is required to be partially cleared from the existing school building which by completion of the project is to be cleared to form the schoolyard. Building is required to be built on existing infrastructure. build. cont. EGI-bau, Prizren. The construction system of the school in Studençan (rigid polystyrene) is different from the construction of the primary school in Shale and it was used for the first time in Kosovo, therefore the construction price was higher.


a)


b)

Figure 6. Primary school Studençan, Suhareka; a) Satellite view of school site; b) View of the building in 2017 (source: by author, V. Navakazi)

3. ANALYSES OF THE SCHOOL PARAMETERS

"A school should be a thought-built good-time place for happy children– the school should regard children as a garden in the sun." Frank Lloyd Wright

In Kosovo, during the administrative system of former Yugoslavia, it was equipped with JUS standards and standards, a national standard of the former Yugoslavia, which have been translated and adapted to the German national DIN standards. Standards found in the standards but inherited from the old standards system, by internationals in the design phase of rebuilding primary schools, standards and design standards for this type are required.

Relying on the development of the Architecture School in Kosovo, which has always been in trend with the world literature, the standards that have been applicable mainly in Europe have been used.

Analyzing as a case for Elementary School Arbri i Eperme we can see that the standards for design are based on the standards that are derived from the standards of the new school of architecture. For example: Number of pupils in classrooms as per ex-Yugoslav standards (from 1982), also compatible with international standards being 20-25 m^2 per pupil; the site area being 25.0 m^2 per pupil; classroom 1.8 m^2 per pupil (min 54 m^2); laboratories 2.4 m^2 per pupil (min 72 m^2); workshops 3.0 m^2 per pupil (min 90+18 m^2); Multipurpose space 0.5 m^2 per pupil (min space 54 m^2, max 300 m^2 (9).

Table 4. The relation of parameters in terms of square meters per utility units in Abri e Eperme, Gllogoc.

No.	Spaces	Unit	Sqm per unit	Total sqm
1	Classroom	14 (6)	56	336
2	Multipurpose space	1	107	107
3	Director	1	12	12
4	Secretary	1	9	9
5	Teacher's Cabinet	1	19	19
6	Teacher's toilets	1	9	9
7	Kitchen	1	31	31
8	Porter	1	10	10
9	Workshop 1	1	20	20
10	Workshop 2	1	77	77
11	Pupil's toilets	1	25	25
12	Corridor 1	1	72	72
13	Central hall	1	62	62
14	Corridor 2	1	66	66
			total Ground floor	855
15	Hall/gymnasium	1	612	612
			total Ground floor with hall/gym	1467

Table 5. Analysis of the number of pupils, school surfaces and cost

	Primary school	Pupils	Classrooms	Total surface (m^2)	Plot area (m^2)	Sqm per pupil in plot area
1	Shalë, Lipjan	1028	20	2240	6200	6
2	Abri e Epërme, Gllogoc	576	14	**1467**	17500	30
3	Gllarevë, Klinë	704	14	1534	9600	14
4	Studençan, Suharekë	992	14	2162	8850	9

The Table 5 shows the number of pupils, school areas/surfaces and costs in four primary schools built in the central region of Kosovo. It is obvious that just primary school Arbri e Epërme (2) fulfill the standards required for pupil (30 m^2/per pupil)

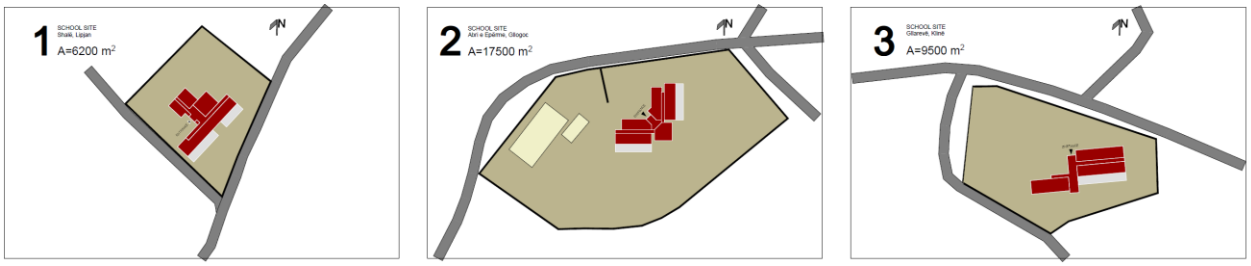


Figure 7. The site layouts of schools / case studies

Sites of the schools were allocated depending on the municipality; Buildings of the schools (1) and (4), were built in the spaces of the existing schools, completely or partially destroyed. The design of the school (3) incorporated the existing school, whereas in the school (2) the site was completely new.

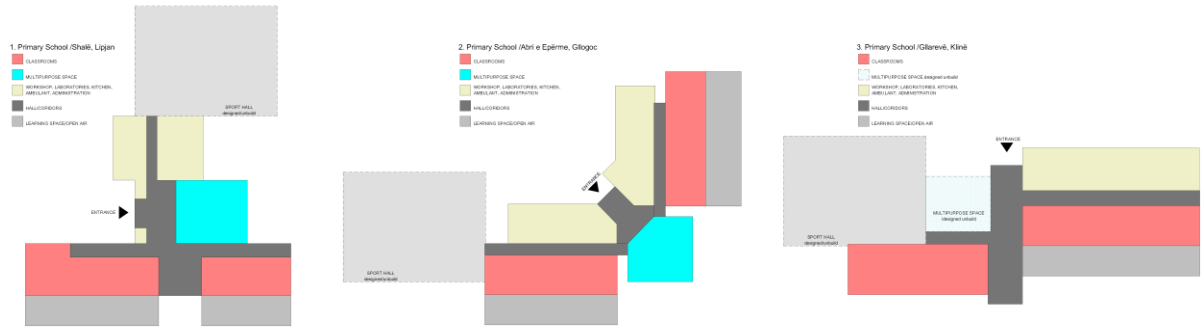


Figure 8. The schematic view of three types of schools / case studies

As shown on figure 8, all three schools are built following the emergency needs for teaching spaces. While, in none of them aren't built sport halls, multipurpose hall, etc., due to limited budgetary funds. They still are in the same conditions, without fulfilling public/relaxing space.

2. Conclusions

Outcomes have shown that post-war Kosovo design standards, used for the design and emergency construction of primary schools, have contributed to the easy and informal transition from traditional school to new school architecture and were suitable for application of new teaching methods. Didactic spaces resulted as appropriate examples which could be considered in actual and future projects related to school design.

While the internal public spaces, such as gym hall, multipurpose hall, health and wellbeing spaces, are missing. It was due to emergency to fulfil needs and recover the gap, prior and after the war, of educational processes and issues. But, it is always a possibility to extend and adapt existing ones with additional spaces.

In order to follow the movement of new architectural school, it is very good to follow the principles of sustainable issues within architectural conceptual approach, while design and construction additional spaces, to provide a learning environment for students that touch their five senses, having indoor environmental quality perception and users' satisfaction of conventional and green buildings linked in one.

References

[1] Toscania, L., et.al. 2007. Health status of returnees to Kosovo: Do living conditions during asylum make a difference? Public Health Volume 121, Issue 1, January 2007, Pages 34-44

[2] Sommers, M.; Buckland P. 2004. Parallel worlds: rebuilding the education system in Kosovo. Paris: IIEP-UNESCO, p.79

[3] Ministry of Education, Science and Technology (MEST) & Ministry of Agriculture, Forestry and Rural Development (MAFRD). 2004-2009. A Strategy for Education for Rural People in Kosovo. TCP/KOS/2901. http://www.unkt.org/wp-content/uploads/2016/08/Education.pdf

[4] Georgescu, D., 2002. On curriculum development in Kosovo. The Development Education Journal Volume 9 Number 1, p. 29. https://think-global.org.uk/wp-content/uploads/dea/documents/dej_9_1_georgescu.pdf

[5] Borrel, A., Bhatia, R., Young, A. 1999. Challenges for humanitarian response in Kosovo. Field Exchange, p. 8 https://www.ennonline.net/fex/8/challenges

[6] European Commission, 1999. Kosovo Damage Assessment, Kosovo-Housing, Damage Assessment 2000. Field Survey Report, p. 4 http://www.img-int.org/Central/Public08/Documents.aspx, (3/26/2018 1:49 PM)

[7] UNICEF, 2000. The children, Primary school years. https://www.unicef.org/kosovoprogramme/children_3474.html(3/26/2018 1:33 PM)

[8] Statistics on education in Kosovo (SOK). 2001. UNICEF, Transitional of Kosovo Administrative Department of Education, Science and Technology. (TA-DEST), p.11

[9] SAP Kosovo. 1982. Normativ skolskog prostora, opreme i nastavnih sredstava osnovne skole u SAP Kosovo. Pokrajinski Zavod za unapredjivanje obrazovanja i vaspitanja, Pristina, Kosovo.

[10] Ivanic, M., Kuhar, S. 1991-2007. Contemporary school architecture in Slovenia 1991-2007, Schwarz, Lubljana.

[11] Ministry of Education, Science and Technology (MEST), 2012. Design Guidelines for School Facilities Norms and Standards Specific Guidelines, Volume 2, Kosovo.

[12] Nicolai, S., Triplehorn, C. 2003. T*he role of education in protecting children in conflict*. Humanitarian Practice Network. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/520.pdf;

[13] Situational Analysis of Education in Kosovo, UNICEF Kosovo, January 2004, https://www.unicef.org/kosovoprogramme/ kosovo_media_pub_educ.006.04.pdf

PROF. ASS. DR. VLORA NAVAKAZI

architect, urbanist, researcher, professor with a strong background in academic education. Since 1986 she teaches at the University of Prishtina, Faculty of Civil Engineering and Architecture, and since 2008 in the State University of Tetovo, Faculty of Architecture. She has been engaged in architectural practice since 1994 and was awarded in several architecture and urban planning competitions. Since 2006 she manages the architecture studio proARCH in Prishtina in partnership. She is a founding member and a manager in the local NGO for architecture and urbanism Archis Interventions Prishtina – part of the Archis Interventions network.