

TEESCHOOLS

Transferring Energy Efficiency in Mediterranean Schools

PRIORITY AXIS: Fostering Low-carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas

OBJECTIVE: 2.1 To raise capacity for better management of energy in public buildings at transnational level

DELIVERABLE NUMBER: 5.4.1

TITLE OF DELIVERABLE: WP5 Open lessons for behavioural change to teachers and students

WP n. 5: CAPITALISING

ACTIVITY n. 5.4. 1 Open Lessons
PARTNER IN CHARGE: FVMP

PARTNERS INVOLVED: DDIP ZDC

Status:

Draft	Final 🔺	Version n. 01	

Date: December 18th, 2019



1. Overview of open lessons

Open lessons were organized in five elementary schools in the Zenica-Doboj Canton. A total of 274 participants attended the open lessons. Each school was a host for two open lessons. Pupils, teaching staff and elementary school directors also took an active part in these events and showed exceptional willingness to cooperate and participate during the implementation of project activities.

The start of the event was reserved for the presentation of the TEESCHOOLS project. Each of the open lessons was then elaborated and presented with one of the topics outlined above. The students and their teachers were very interested in topics and discussion about energy efficiency in their school and homes and how to achieve and improve it. All working groups were very interested, interesting and creative. One of the groups presented their activities in a new robotics-related section that students linked to energy efficiency. Students also provided examples of how they can save energy at home and how they can improve their energy efficiency behaviour.

They also indicated that they would like to visit some smart schools in Europe. Particular attention was drawn to the use of web tools that can help the school manager to get a real picture of the condition of the school buildings and implement energy efficiency measures based on the results obtained. The Assistant Principal at one of the schools expressed a particular interest in energy auditing and stated that they could help to obtain an adequate knowledge of the current state of energy consumption in the school and, based on this, draw up an energy savings plan. Such a plan would be of great importance to their school as the school consumes a lot of energy for heating (it is a very old school building). As a conclusion of the event, it was stated that the nZEB concept of reconstruction in B&H schools is feasible, but that a number of challenges need to be addressed in order to achieve it



2. Details about schools that open lessons were held

Elementary school "Hamza Humo", Babino, Zenica

First and third open lesson were organized in the elementary school "Hamza Humo" Bosnia and Herzegovina.

The first open lesson:

Thirty four students' of different ages (sixth to ninth grade students) and one teacher attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Behavioral change in energy efficiency at schools" has been elaborated and presented. Students and their teacher were very interested in the subject and the discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it. The working group was very welcoming, interesting, and creative. They even presented their activities on their new section related to robotics which students connected to energy efficiency.



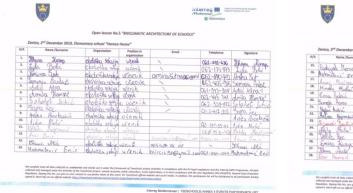


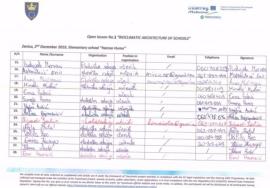




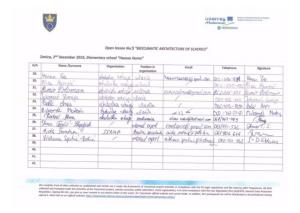
The third open lesson:

Thirty four students' of different ages (sixth to ninth grade students) and one teacher attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Bioclimatic architecture of schools" has been elaborated and presented. Students and their teacher were very interested in the subject and the discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it. The working group was very welcoming, interesting, and creative. All participants were very active during the discussion.













Elementary school "Ahmed Muradbegović", Stranjani, Zenica

Second and tenth open lesson were organized in the elementary school "Ahmed Muradbegović" Bosnia and Herzegovina.

The second open lesson:

Nineteen students' of different ages (sixth to ninth grade students) and assistant director attended the event. The beginning of the event was reserved for the presentation of the TEESCHOOLS project. Afterwards "Smart schools" has been elaborated and the presentation was presented. Students were very interested in the subject and a discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it. The working group was very welcoming, interesting, and creative. Students were giving examples of how they save



energy at home and how they can improve their energy efficiency behaviour. They also said that they would like to visit some of the smart schools in Europe.

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The tenth open lesson:

Tenth Open lesson was organized in Elementary school "Ahmed Muradbegović" in Zenica, Bosnia and Herzegovina. Twenty students' of different ages (sixth to ninth grade students) and principal's assistant attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Energy audits" has been elaborated and presented. Present participants were very interested in the subject and the discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it.



Principal's assistant expressed special interest in energy audits and stated that it could help them to gain adequate knowledge of the current state of energy consumption in the school and, based on that, draw up an energy savings plan. Such a plan would be of great importance to their school as the school consumes a lot of energy for heating (it is a very old school building).

The working group was very welcoming, interesting, and creative. All participants were very active during the discussion.

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Elementary school "Hasan Kikić", Tetovo, Zenica

Fourth and fifth open lesson were organized in the elementary school "Hasan Kikić" Bosnia and Herzegovina.



The fourth open lesson:

Nine students' of different ages (sixth to ninth grade students) and one teacher attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Solar heating of school buildings" has been elaborated and presented. Students and their teacher were very interested in the subject and the discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it. The working group was very welcoming, interesting, and creative. All participants were very active during the discussion. This topic was very interesting for the students and their teacher, since they are attending classes in a newly built school. The school building is energy efficient. This is the first school building built after the war in the Zenica-Doboj Canton area.

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The fifth open lesson:

Ten students' of different ages (sixth to ninth grade students) and one teacher attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Maintenance and management of energy in schools "has been elaborated and presented. Students and their teacher were very interested in the subject and the discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it. The working group was very welcoming, interesting, and creative. All participants were very active during the discussion. This topic was very interesting for the students and their teacher, since they are attending classes in a newly built school. The school building is energy efficient. This is the first school building built after the war in the Zenica-Doboj Canton area.

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Elementary school "Alija Nametak", Visoko

Sixth and eight open lessons were organized in the elementary school "Hasan Kikić" Bosnia and Herzegovina.

The sixth open lesson:

Twenty seven students' of different ages (sixth to ninth grade students), two teachers and a principal attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Web tool presentation and application" has been elaborated and presented.



Students, their teachers and the principal were very interested in the topic. Special attention has been drawn to the use of web tools that can help school management to get a real picture of the conditions in the school buildings and to implement energy efficiency measures based on the obtained results.

The working group was very welcoming, interesting, and creative. All participants were very active during the discussion.





The eight open lesson:



Thirty one student of different ages (first to ninth grade students), two teachers and principal attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "Life cycle assessment" has been elaborated and presented.

Students, their teachers and the principal were very interested in the topic related to energy efficiency, its implementation and improvement.

The working group was very welcoming, interesting, and creative. All participants were very active during the discussion.









Elementary school "Aleksa Šantić", Zenica

Seventh and ninth open lesson were organized in the elementary school "Hasan Kikić" Bosnia and Herzegovina.

The seventh open lesson:

Twenty students' of different ages (sixth to ninth grade students), one teacher, pedagogue and principal attended the event. The beginning of the event was reserved for presentation of the TESCHOOLS project. Afterwards, " Is nZEB renovation of schools feasible" has been elaborated and presented.

Students and school staff who attended the event was very interested in the presented topic. Special attention was drawn to the nZEB and its presence in Europe.

As a conclusion of the event, it was stated that the nZEB concept of renovation in Bosnia and Herzegovina's schools is feasible, but a number of challenges need to be addressed in order to achieve it. The working group was very welcoming, interesting, and creative. All participants were very active during the discussion.





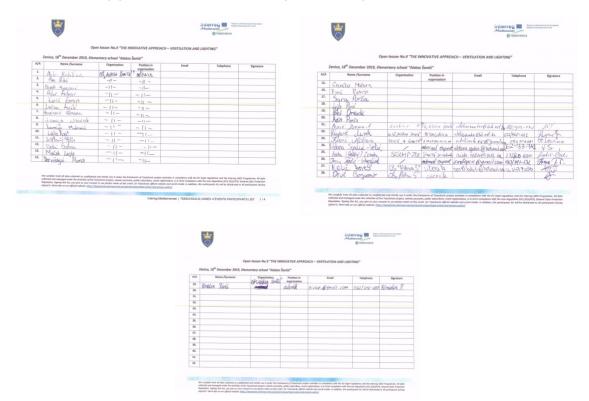






The ninth open lesson:

Twenty three students of different ages (sixth to ninth grade students), one teacher, and pedagogue attended the event. The beginning of the event was reserved for the presentation of the TESCHOOLS project. Afterwards, "The innovative approach-ventilation and lighting" has been elaborated and presented. Students and their teacher were very interested in the subject and the discussion concerning energy efficiency in their schools and homes and how can they achieve, improve and enhance it. The working group was very welcoming, interesting, and creative.







3. Media coverage

Facebook post:

TEESCHOOLS Facebook page

4. Conclusions

Each school was a host for two open lessons. Pupils, teaching staff and elementary school directors also took an active part in these events and showed exceptional willingness to cooperate and participate during the implementation of project activities. These events brought together over 100 participants from the Zenica-Doboj Canton.

Each of the 10 events (open lessons) were organized into two presentation sessions. The first session covered the topic related to the TEESCHOOLS project and its goals and achieved results. The second presentation covered one of the topics of the project.