



A virtual campus to promote the study
of dwelling in contemporary Europe

www.oikodomos.org

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OIKODOMOS

Consolidation and expansion of a virtual campus

Final Report

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Executive Summary

The purpose of this project has been to systematize, document and disseminate the pedagogical model of the OIKODOMOS virtual campus which was first envisioned in a previous LLP project developed between 2007 and 2009. The OIKODOMOS virtual campus was conceived as an open environment which fosters interaction between learners dedicated to the study of housing in Europe and which allows teachers to design the learning processes in collaboration. Its pedagogical model is based on a blended-learning approach which combines on-line learning environments with activities in the classroom and in the community.

To consolidate the digital platform developed in the previous project – consisting of a web portal and the Workspaces and Case Repository learning environments – it has been necessary to improve and enhance it. A new web portal provides better access to the learning resources. External users now have access to the activities being carried out in the learning environments, and on-line tutorials have been implemented to support the platform's users. A new environment called OIKOpeda has been incorporated into the platform. Its purpose is to capture and store the collective knowledge on housing themes developed along with the design and implementation of the learning activities. Finally, a system of blogs has been implemented to facilitate communication among academic institutions, as well as also with citizens, professionals and local representatives that might be interested in the outcomes derived from the activities of the virtual campus.

The pedagogical work developed in this project encompasses several lines of work, which are strongly interwoven: establishing procedures to guide the collaborative learning design process; implementing the procedures in the learning activities conducted with new partners; documenting and communicating the pedagogical experience to the academic community in different formats (handbook, on-line presentations); and, finally, presenting the results to scientific forums through papers and journals.

To disseminate the project among the academic and research communities, an international conference was organized in Brussels. Likewise, different events have been carried out to engage citizens, professionals and local representatives in the activities of the virtual campus. A series of exhibitions have been organized in Grenoble, Bratislava and Northern Cyprus to present the projects carried out by students participating in the OIKODOMOS workshops. Furthermore, a study of the living environment in a neighbourhood in Barcelona has been conducted with the participation of students, teachers and citizens. All of these dissemination activities have been documented in the project blogs.

Finally, a comprehensive evaluation of the work done in the different areas of the project has provided indicators to measure their impact and level of achievement of the project outcomes.

As a result of the activities developed during this project, the number of participating institutions has increased from five to eleven. There is now a fully documented pedagogical methodology which can facilitate the access of future participants to the virtual campus and guide them through the learning design processes. The fact that the activity on the virtual campus is continuing with the incorporation of new institutions is a demonstration of the value of this project.

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1. Project Objectives

The OIKODOMOS Virtual Campus (www.oikodomos.org) was carried out with the support of the Lifelong Learning Programme (LLLP) in 2007-2009. As a result of that project, we developed, implemented, tested and evaluated a blended pedagogical model which combines on-line learning activities carried out in web-based environments with seminars and design studios physically situated at the participating universities. A digital platform was created specifically to support the pedagogical methodology of the Virtual Campus, which consists of two environments: Workspaces and a Case Repository. The former supports project-based learning, such as the development of a project – architectural and/or urban – in a collaborative manner. The latter is a digital repository housing case studies which is constructed collaboratively by learners and tutors. During the project lifetime, learning activities were implemented with the participation of the partner institutions which help to develop and test the pedagogical model and the supporting ICT environment. The activities included the organization of three joint workshops in Ghent, Grenoble and Bratislava, each one addressing a specific theme regarding contemporary housing: life-long dwelling, housing for diversity and effective housing. During these learning activities, urban and housing projects were carried out in local design studios and joint workshops, as well as in the learning environment provided by the digital platform. Community representatives, local authorities and housing experts participated in these activities, contributing to the identification of design projects, formulating program needs, and assessing project results.

By the end of the project, the partnership was convinced of having devised a valuable and innovative pedagogical model but one which was not systematic enough to be applied by other users and institutions. The experience gained in the project was within the partnership and among the teachers and students who participated in the learning activities. To expand the application of the pedagogical model beyond the partnership, it was still necessary to systematize, document and disseminate the pedagogical approach developed in the previous project. This is, in fact, the main purpose of the present project carried out in the past year.

In particular, the objectives pursued in this project are the following:

- to consolidate the collaboration of the partners who have been involved in the creation and implementation of the OIKODOMOS pedagogical model developed in the previous Virtual Campus project
- to expand the pedagogical model beyond the limits of the partnership, to higher education institutions in the fields of architecture and urban planning within EU member states as well as in other non-EU countries
- to systematize the procedures applied to the design of the learning activities carried out on the Virtual Campus
- to disseminate the OIKODOMOS pedagogic model among the academic and research community, both in the field of housing and urban studies as well as in the areas of pedagogy, educational technology and related fields
- to implement communication spaces linked to the OIKODOMOS digital platform that enable different types of learners – both experts and non-experts – to participate in the learning activities
- to consolidate the existing digital platform (Workspaces and Case Repository) so that it becomes an efficient learning resource in both formal and informal settings
- to promote debates on the innovative aspects of the OIKODOMOS pedagogical model within the academic and research community by means of papers and articles, as well through the organization of an international conference on the topics of contemporary housing and pedagogical innovation

- to bring discussions about contemporary housing to the community, in order to foster the participation of citizens, local administrators, and professionals to formulate the problems and evaluate the solutions.

As a result of these actions, the ultimate objective of the project has been to move forward the OIKODOMOS virtual campus so that it can continue evolving with the contributions of new learners, in particular those coming from other institutions.

2. Project Approach

At the outset, we began this project with a collective reflection on the work done in the previous project. The questions we were formulating to ourselves were: what is the OIKODOMOS Virtual Campus? What are its unique features? Answering these questions with simple words was necessary before we could commit to the task of consolidating and expanding the virtual campus. We came up with the following answers:

OIKODOMOS is a **network**:

- of European **schools** of architecture and urban planning
- of **themes of study** about housing in contemporary Europe
- of **learning activities** – courses, seminars and design studios – dealing with housing
- of **learners** – students and teachers, citizens and professionals – constructing knowledge in collaboration

The purpose of the work done in this project has been to corroborate these essential features and to communicate its vision and results to the different stakeholders – academia, research, and the community – in effective ways.

As a first step toward consolidating and expanding the OIKODOMOS virtual campus, it has been necessary to systematize and document the experience gained during the previous learning activities.

The systematization concerns the digital platform as well as the procedures for designing the learning activities collaboratively. This platform was one of the major achievements of the previous project. It is intertwined with the pedagogical model underlying the virtual campus: a constructivist model which places the focus on **learning design** rather than on **learning management**.

We have undertaken a thorough review of the existing digital platform, which was originally composed of three environments: web portal, Workspaces and Case Repository. A first measure has been to rebuild the web portal (www.oikodomos.org) to facilitate access to the learning resources, and to communicate the activities of the virtual campus more efficiently. For the same purpose, the home pages of Workspaces and Case Repository have been redone to facilitate non-registered users' access to the learning activities and to their outcomes. Furthermore, to facilitate the dissemination of the campus activities, a system of blogs has been created: one for the project, and one for each participating institution. A full-fledged environment has been incorporated into the digital platform to collect the knowledge generated around the shared learning activities: OIKOpedia. It contains concise descriptions of themes and concepts in the field of contemporary housing which are addressed in the learning activities.

To support the work of the users of the digital platform, we have created on-line tutorials for the two environments, Workspaces and Case Repository. An FAQ section is also incorporated into their respective home pages. This documentation will make it easier for future users to work with the digital platform, and it will free the system developers from the need to provide them with personalized introductions to the platform.

To systematize the pedagogical methodology which we started to envision in the previous project, we have during the course of this new project designed and carried out collaborative learning activities involving the previous project partners (La Salle, Sint- Lucas, IUG and FASTU), the new project partner (EMU) and the associated partners which have joined the project during the last year. These learning activities have been designed around the theme of “Housing and Proximity”, and they have included a joint workshop which held at Istanbul Technical University in May 2011.

By having to replicate the learning design process in a new Workspace, along with teachers from other institutions who have not yet participated in the virtual campus, we have been able to identify the strengths and the weaknesses of the pedagogical model. To get the new partners involved in the collaborative learning design process, we had to explain the procedures to them, from the technical aspects (how to use the digital platform) to the most conceptual and pedagogical ones (how to design a structure of learning activities and tasks in collaboration, how to interlink their own courses to this structure).

The experience gained in the implementation of the Workspace “Housing and Proximity” has been documented in different forms, so that future participants of the virtual campus can better understand the learning design processes and collaborative working methods which the OIKODOMOS pedagogical methodology conveys. The most comprehensive documentation is the Compendium, a handbook which contains practical information which helps introduce teachers to the virtual campus. The Compendium contains links to on-line resources which are collected in the web portal. Among them are narrated presentations which introduce the virtual campus and its pedagogical methodology, and reports on the pedagogical experiences of teachers who participated in the project activities.

In parallel to this process of systematization and documentation of the pedagogical methodology brought about by the replication of a new learning process, we have carried out another line of work to disseminate the virtual campus in the academic and research community through conference papers and journals. In the course of writing these publications, we had to reflect on the work done and to place it in the context of current research on education, and in particular on the use of ICT in architectural education. Both systematization processes – the one carried out through the design and implementation of the learning activities in the Workspace “Housing and Proximity”, and the one that took place with the writing of the papers – were supporting each other and at some point began to converge, as can be seen in the last paper presented for the eCAADe conference¹, which summarizes the learning process followed in the Workspace. In turn, this paper has helped to clarify the methodology which then was then put forward in the Compendium.

Ultimately, what the process of work we are summarizing in this section reveals is the strong interconnection between the different lines of work conducted throughout the project: validation, systematization, documentation and dissemination.

With the intention of reinforcing the dissemination among the academic and research community, an international conference has been organized by the W&K Sint-Lucas School of Architecture, Brussels. The theme of the conference – “Innovating, Housing, Learning” – encompassed the different areas of knowledge included in the project: housing, pedagogy, and ICT. On the occasion of the conference, the partnership made public the results achieved through the project. This work of self-reflection and communication helped us to

¹ Madrazo, L., Riddy, P. OIKODOMOS Virtual Campus. Constructing learning processes in collaboration. Proceedings of the ECAADe Conference, Ljubljana, Slovenia. 2011.

assess the value of the work accomplished and to disseminate its results. In fact, the conference contributed to a consolidation of the interests of the associate partners as well as to incorporating new ones for the coming year.

One of the distinctive features of the OIKODOMOS project – which was recognized in the final evaluation of the previous Virtual Campus project – was the positive involvement in the project activities of stakeholders from outside the university: citizens, professionals and local administrators. To disseminate the project among these target groups, a range of activities have been organized in Barcelona, Bratislava, Grenoble and North Cyprus, including exhibitions, participatory events and learning community building.

3. Project Outcomes & Results

The realization of this project has contributed to increasing the knowledge of the participants about the learning design processes which the OIKODOMOS virtual campus conveys, and has helped to better understand the implications of a collaborative learning design process for teachers, students and institutions; it has contributed to opening up new themes of discussion and research in the field of housing studies; and it has enhanced international cooperation through increasing the number of participating institutions in the virtual campus. These intangible results are accompanied by tangible outcomes which have been produced during the project:

- OIKODOMOS Compendium, a handbook which introduces the pedagogical methodology to teachers
- On-line supporting material which complements the contents of the compendium: narrated presentations of the project features, reports of pedagogic experiences.
- OIKOpedia, a wiki dedicated to summarizing the collective knowledge about housing studies acquired through the learning activities
- OIKOblogs, a system of blogs to communicate the activities of the project and the project partners
- The enhancement and improvement of the two major components of the OIKODOMOS digital platform, Workspaces and Case Repository: easier access to the learning activities for non-registered users, on-line tutorial, improved functionalities to support team work and to visualize the sequences of tasks
- A joint workshop in Istanbul, with the participation of 45 students from 7 European institutions
- The Workspace "Housing and Proximity", its learning structure and activities developed collaboratively by project partners
- 35 new case studies documented and uploaded to the case repository as a result of the learning activities carried out by partners and associate partners
- 4 papers presented at international conferences, and 1 article published in a specialized journal
- An international conference organized at W&K Sint-Lucas School of Architecture, Brussels, with 36 participants, and 10 papers presented.
- A number of exhibitions in Bratislava, Grenoble and North Cyprus, aimed at engaging the local communities in discussions about urban renewal and housing design
- Learning activities developed with local communities, which have fostered the collaboration of citizens, students and teachers, in the processes of urban renewal.
- A Housing Learning Module designed to foster the participation of professionals and academics in future learning activities.
- A comprehensive quality evaluation of all the project activities, providing information about their level of achievement

A comprehensive and detailed description of the work done in each work package can be found in the web portal, under the REPORTS menu. In this document, we will focus on some of the most representative outputs with the intention of illustrating the close interrelationship between tangible and intangible outputs.

3.1 Pedagogical methodology

In this section we summarize the most relevant findings regarding the pedagogical methodology of the virtual campus. A more detailed explanation can be found in the Compendium and in the WP3 Report.²

LEARNING DESIGN

Through the process of designing, implementing and reflecting upon the experience gained in the different activities carried out in this project, it has become clear that:

- the OIKODOMOS virtual campus is neither a surrogate for a physical university, nor a closed academic program
- It is not based on a joint curriculum, but on the design of ad hoc learning activities around selected themes of study
- It is not just about e-learning, but about blending different learning spaces in formal and informal settings – courses, seminars, exhibitions, community actions - which intertwine on-site and on-line activities

Rather, as we had already suggested in the final report of the previous project³, we think of the OIKODOMOS Virtual Campus as a “dynamic entity that permits the creation of a community dedicated to training and education”⁴ and as an open environment which fosters interaction among learners and among learning designers.

The experience of the Workspace “Housing and Proximity” has made it clear that learning design in the OIKODOMOS Virtual Campus is both a top-down and bottom-up process.

As learning designers, teachers need to have a common approach to the design of learning activities and to agree first on a common framework to integrate the multiple courses and seminars planned at their own institutions. In this regard, the theme of “Proximity” proved to be useful because the deliberate ambiguity of the term facilitated the integration of a variety of courses and seminars within a common framework. In this way, teachers at different institutions could interpret and adapt this common theme in the way that was best suited to their courses. Following the same top-down approach, a basic structure of learning activities and tasks was laid out from the start. This process of learning design required close communication and appropriate supporting instruments to visualize the map of tasks and relationships.⁵

From a bottom-up approach, teachers need to be aware of the emerging relationships between the on-going tasks in order to use, for example, the results of one task carried out in another university as input for their own courses. This network of relationships cannot be

² WP3 report “Consolidating and Expanding the Pedagogic Model”. Available at the web portal, under the REPORTS menu..

³ See public report “OIKODOMOS: a virtual campus to promote the study of dwelling in contemporary Europe” available at the web portal, under the REPORTS menu.

⁴ BENVIC, Benchmarking of Virtual Campuses. Retrieved on 31/10/2011 from www.benvic.odl.org/casestudy1.pdf, p. 7

⁵ See, for example, the shared document used to planned the interactions in the current Workspace entitled “Housing Reagents”:
https://docs.google.com/spreadsheet/ccc?key=0AmV9BT3IPQfRdG9vNDVpX2tTQURUQXFGTEI2dGMtN3c&hl=en_US#gid=0

planned beforehand – not in its totality, at any rate – since it is the expression of a dynamic learning process which unfolds as it moves on.

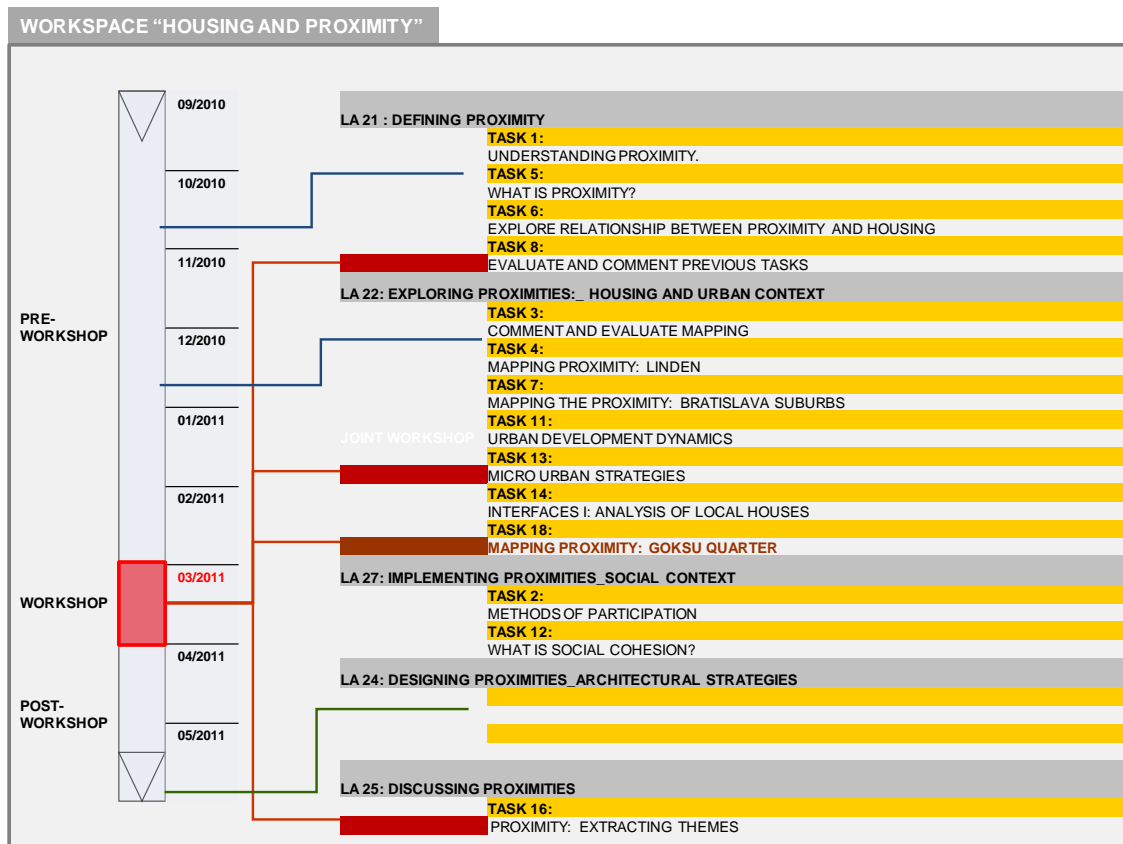


Figure 1. Designing the learning structure

JOINT WORKSHOPS

An important feature of the learning activities in OIKODOMOS, which was already part of the previous project, are the joint workshops where learners come together to interact during a limited period of time. The joint workshop is a learning space which facilitates interactions between learning activities and learners. The joint workshop – or any other similar activity which brings together learners from different places at a given point (or points) in the learning process – adds an additional level of complexity to the learning design process. As the diagram in Figure 1 shows, on the right we have the structure of Learning Activities and Tasks and on the left the temporal sequence of learning spaces where the activities are to be performed. Some preparatory tasks were conducted in the blended environment of classroom and digital platform while other tasks were carried out during and following the joint workshop.

In the blended model which we applied to OIKODOMOS, a joint workshop becomes an important event in the learning process: it drives the process, it motivates learners, it promotes collaboration by allowing the participants to meet and get to know each other, and it helps to engage local community stakeholders in the project activities.

The joint workshop carried out in Istanbul (Figure 2) has enabled us to design and implement various sequences of activities, interweaving different courses and institutions across the network of relationships between tasks, all of them sharing a common theme: Proximity.

OIKODOMOS A virtual campus to promote the study of dwelling in contemporary Europe
www.oikodomos.org

Living Learning Programme - Erasmus Virtual Campus - Reference: LM2070-LLP-1-2007-1-ES-ERASMUS-ECVC
Erasmus Accounting Measures - Reference: 177090-LLP-1-2010-1-ES-ERASMUS-EAM

OIKODOMOS is a Virtual Campus co-financed by the Long Life Learning Programme of the European Union to support housing studies in Europe. In the first two years of the project, 2007-2009, OIKODOMOS has developed, implemented, tested and evaluated an innovative pedagogic model based on a blended learning approach which combines on-line learning activities carried out in web-based environments - specifically designed for this Virtual Campus - with seminars, design studios and workshops physically taking place at the participating universities. The goal of the third year project activities (2010-2011), is to consolidate the pedagogic model and expand the Virtual Campus to other institutions.

This OIKODOMOS Workshop provides an opportunity for institutions and students to participate in the design and implementation of the learning activities carried out in the Virtual Campus. These Workshops have already taken place at the Hogeschool voor Wetenschap & Kunst, Sint-Lucas Ghent (October 2008), Institut d'Urbanisme de Grenoble, Université Pierre Mendès-France, Grenoble, France (April 2008) and the Faculty of Architecture, Slovak University of Technology, Bratislava (October 2009). The fourth international OIKODOMOS Workshop will take place in the Istanbul Technical University (ITU), in May 2011. The workshop is organized by the HREC Housing Research and Education Center in ITU with the cooperation of the HERA Center from the Eastern Mediterranean University.

4th International OIKODOMOS WORKSHOP: HOUSING and PROXIMITY
Istanbul Technical University, 2-6 May 2011

Photography: HERA-C-Active

The main objective of this International Workshop will be to analyse - or rethink - the status and design of the contemporary housing in densification processes taking place in European suburban landscapes. Besides, existing theories and practices of the compact city - as a way to preserve the natural landscape, control and limit the urban sprawl, reduce energy consume and consolidate social cohesion, reality often shows a contrasting practice of low dense landscapes conditioning an efficient and sustainable functioning of urban systems. This dual reality of the built environment - compact cities vs. low density suburban areas - will be equally considered during the workshop. This workshop focuses on the relation between the housing typology and its suburban surrounding and stimulates critical reflection about recent phenomena in an international context. The workshop will start from the idea that urban space is based on models of proximity: on a small scale, as well as on a bigger scale. Therefore, we should start asking ourselves: **what does proximity refer to?**

Important dates:
March 31, 2011 - Deadline for sending CV, motivation and statement
April 15, 2011 - Reviewers feedback and notifications of acceptance
May 2, 2011 - Start workshop

Erasmus Learning Programme
Education and Culture DG

Housing and Proximity

Proxemic models affect our reading and use of space and refer to an important cultural dimension of the built environment: systems of intimate, personal, social or public distances are based on our education and cultural references. However, proximity can refer as well to the built environment itself, or to the general urban patterns.

Manuel de Solà-Morales once stated that urban space can be seen as "a system of relative distances": systems of distances between housing blocks, between individual dwellings, between leisure facilities and residential neighborhoods, between industrial areas, wastelands and residential development areas. As if they were sets of rules to be decided, coded and decoded at various levels, by various agents. These systems of distances do not operate exclusively on a bigger scale: they penetrate the very domain of the dwelling itself: distances from the street to the front door, from the entrance door to the living room, the distance between the kitchen, as the heart of the dwelling, and the bedrooms, being the more intimate territories within the domestic space. Dwellings could be seen as configurations of distances, where physical distances obtain additional meaning: bigger or smaller distances can mean higher or lower possibility of contact, of sharing space. In other words, proximity also refers to a social dimension: sets of distances define the level of collective use within a project, from the scale of the domicile, to the scale of the neighborhood. Distance can become social distance.

In recent years, social distance is increasingly understood as a buffer, a safety measure: distance has become a device to guarantee separation and segregation. In this context, the following question arises: have territorial mechanisms which prioritize individual identity replaced mechanisms based on collective strategies to share space?

Call for participation

Participation in the OIKODOMOS Workshop is open to all interested architecture and urban planning students. To be eligible, interested students should send the following documents which will be evaluated by an evaluation board:

1. a brief letter of motivation (max 500 words in an A4 page)
2. a CV, including samples of design projects or design research related to housing (max 4 pages size A4)
3. a statement about the proposed topic of the workshop, "Proximity" (a text of max 500 words, in an A4 page, including optionally one image)

All information (in English) should be submitted as a single pdf document to oikodomos@architecture.sintlucas.wenk.be

Selected participants will receive notification of acceptance by April 15th, 2011 and will not have to pay a registration fee. After attending all activities they will receive a certificate of participation.

Members of the evaluation board are:

- Viera Joklova, Faculty of Architecture, Slovak University of Technology, Bratislava, SLOVAKIA
- Leandro Madrazo, Escola Técnica Superior d'Arquitectura La Salle, Universitat Ramon Llull, Barcelona, SPAIN
- Angel Martin Ojeda, Escola Técnica Superior d'Arquitectura La Salle, Universitat Ramon Llull, Barcelona, SPAIN
- Thomas Ooms, Hogeschool voor Wetenschap & Kunst, Department Architectuur Sint-Lucas, Brussels/Ghent, BELGIUM
- Beril Özmen Mayer, Eastern Mediterranean University, NORTH CYPRUS
- Hilayeh Pulhan, Eastern Mediterranean University, NORTH CYPRUS
- Paul Ridley, University of Southampton, UNITED KINGDOM
- Kris Schaeferleck, Hogeschool voor Wetenschap & Kunst, Department Architectuur Sint-Lucas, Brussels/Ghent, BELGIUM/ Escola Técnica Superior d'Arquitectura La Salle, Universitat Ramon Llull, Barcelona, SPAIN
- Stefano Tardini, Università della Svizzera Italiana, Lugano, SWITZERLAND
- Jan Tuncay, Institut d'Urbanisme IUG, Université Pierre Mendès, Grenoble, FRANCE
- Johan Verbeke, Hogeschool voor Wetenschap & Kunst, Department Architectuur Sint-Lucas, Brussels/Ghent, BELGIUM

More information about:

- the workshop activities, please access www.project-oikodomos.blogspot.com
- the workshop organization, please contact us at oikodomos@architecture.sintlucas.wenk.be
- the OIKODOMOS project, please contact us at project@oikodomos.org

Figure 2. Leaflet of the Istanbul Workshop

EVALUATION

Collaborative learning design conveys not only the selection of a common theme of study and a shared structure of learning activities, but a common understanding of the educational processes and the language used to describe them. In particular, in a student-centred learning model, teachers need to agree on the learning outcomes which students should achieve and on the evaluation criteria. In the Workspace "Housing and Proximity", the learning outcomes were collaboratively described and assigned to the shared activities. This enabled teachers from one institution to evaluate the work from other institutions.

Furthermore, some of the evaluators of the work done in this Workspace have been teachers who were not participating in the learning activities but acted as external critics at the end of the learning process. This external evaluation was performed by a group of teachers from the Escuela Técnica Superior de Arquitectura de Valencia, Spain. Evaluators, participating teachers and external evaluators all used the same rubric to grade and comment the works. This experiment with external evaluation was carried out for the first time in this project and has shed some light on the process to follow in future evaluations.⁶

LINKS TO EXTERNAL COURSES

One of the tasks for partners in this project has been to mentor the new institutions which have joined the virtual campus in the course of the last year. One example is the Chair of Design and Building Science at Brandenburg University of Technology, BTU, in Cottbus, Germany, with which we started to establish relationships at the beginning of the project in order to integrate them into the virtual campus activities. After exploring different options, it was decided to take a simple approach to start with: integrating the work done with the OIKODOMOS Case Repository into their curriculum. In this case there was no interaction

⁶ See report "External evaluation of learning activities in OIKODOMOS Workspaces", available at the web portal, under the RESOURCES menu.

with other partners, but only a use of the case repository as a learning resource within the course. The strategy adopted by the teachers at BTU was quite efficient, since it did not require any modification of their curriculum, only the definition of new tasks to be done with the case repository, which would be integrated within a larger assignment⁷. The results of the collaboration have been quite satisfactory, and BTU is now exploring more complex forms of integration of their learning activities within the Workspace “Housing Reagents”.

⁷ See report “Integrating the OIKODOMOS Case Repository in the curriculum”, available at the web portal, under the RESOURCES menu.

3.2 Digital platform

A detailed description of the work done to enhance the OIKODOMOS digital platform can be found in the WP2 report⁸. We summarize here the most significant outcomes.

WEB PORTAL

The project web portal has been completely redone: the graphic design has been streamlined, there is now easier access to the project resources in the home page, new sections have been added, in particular, the one on RESOURCES, which contains all the supporting documents for teachers created during this project (Figure 3).



Figure 3. OIKODOMOS: web portal

WORKSPACES

The home page of Workspaces (Figure 4) has been enhanced with new features to make it more informative for non-registered participants, and to support users. The learning workspaces are now divided into Active and Completed. An on-line tutorial and FAQ section has been incorporated.

⁸ WP2 report “Consolidation of the ICT Platform”. Available at the web portal under the REPORTS menu.

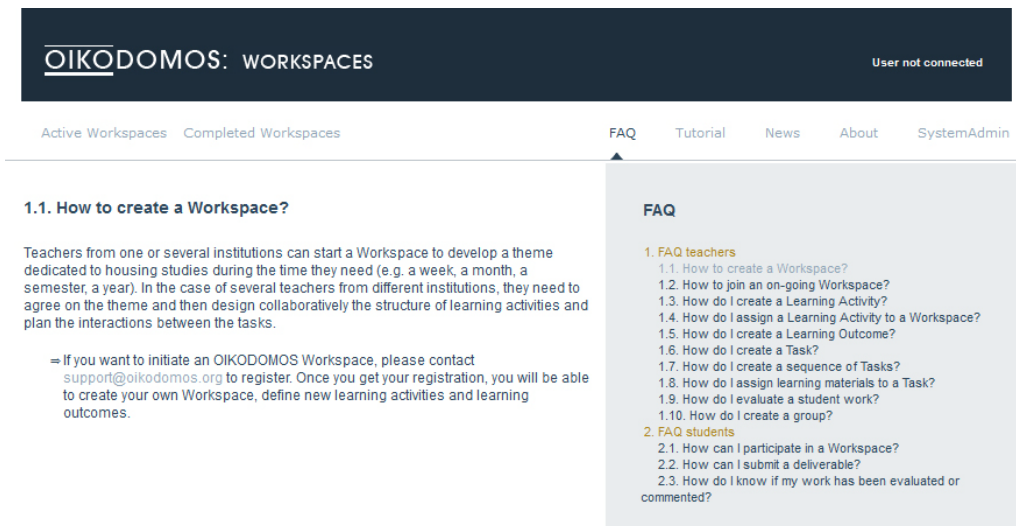


Figure 4. Workspaces. Enhanced home page

The work done in the active learning workspaces is now visible to external users, who can navigate through the structure of learning activities and tasks until they reach the student work (Figure 5). Non-registered users cannot edit the learning structure, but they can leave their comments on the selected student work. Also, in the NEWS section the messages left on the bulletin boards of the active Workspaces can be read. All of these new features help to communicate the work done within the Workspaces and to disseminate the platform among future users.

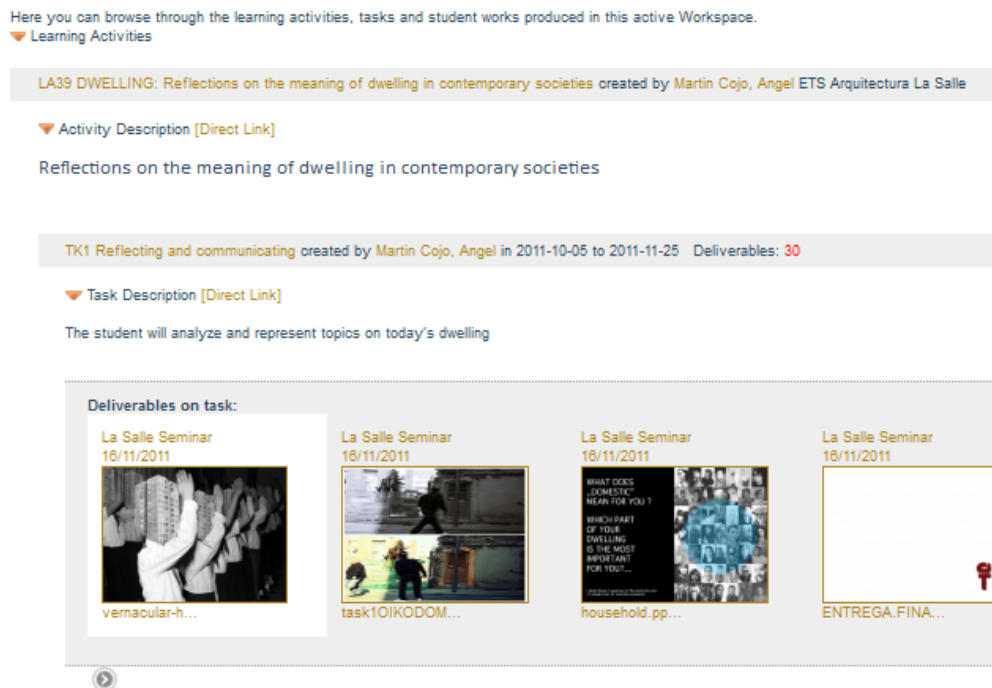


Figure 5. Workspaces. Navigation through the learning structure in the home page

Finally, the visualization of the sequences of tasks has been improved, with a new interface which simplifies the resulting map by focusing on the selected task (Figure 6). This interface enables both the visualization as well as the construction of sequences.

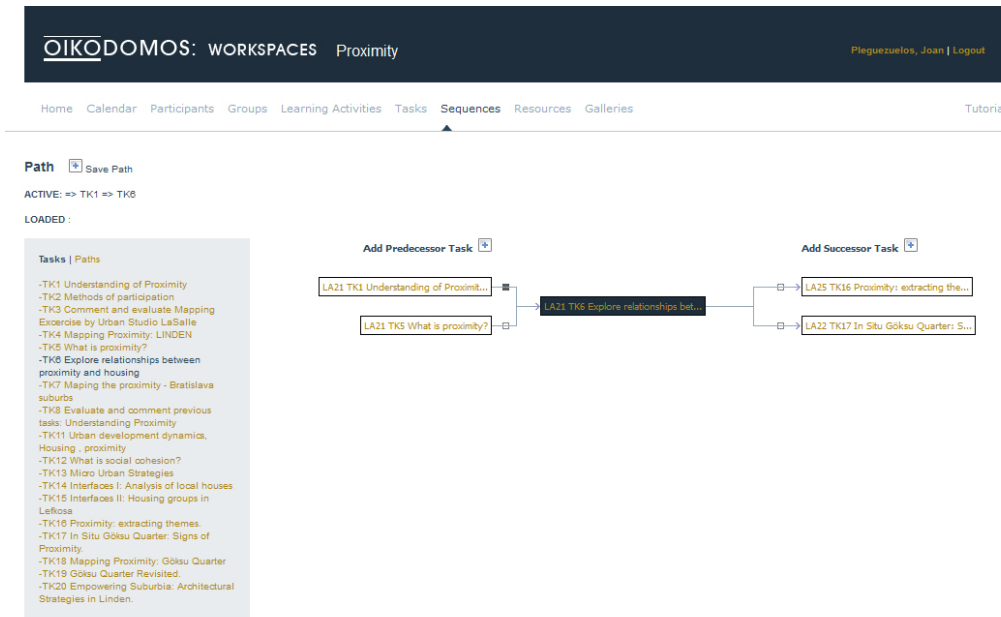


Figure 6. Workspaces. Interface to visualize and build sequences of tasks

CASE REPOSITORY

The home page of the Case Repository has been structured in much the same way as the Workspaces. It contains an on-line tutorial and a FAQ section, and access to the latest cases is open to external users (Figure 7).

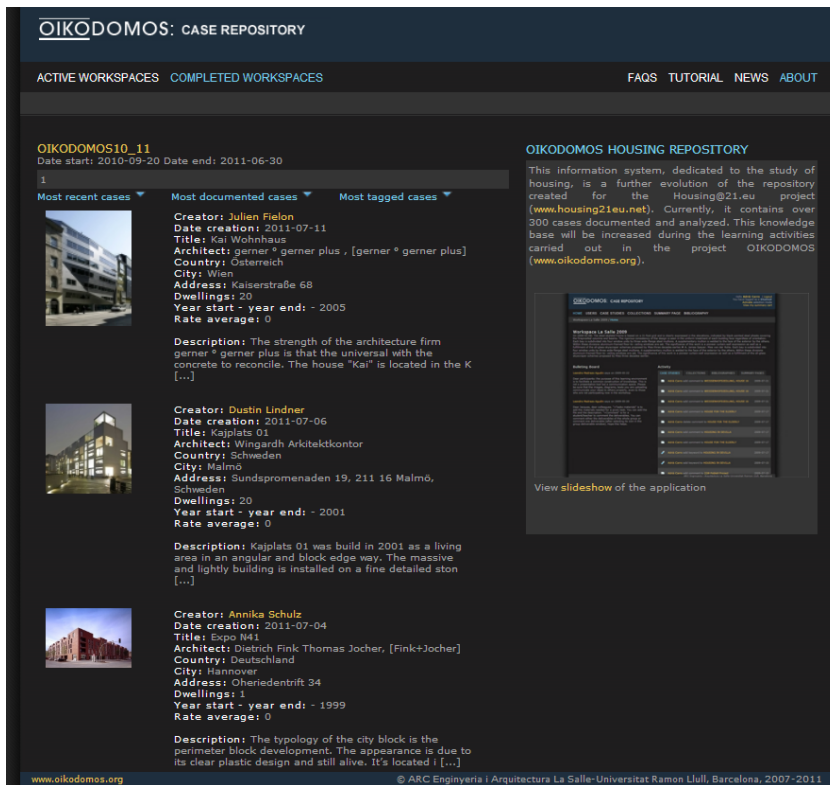


Figure 7. Case Repository. Enhanced home page

OIKOpedia

A new environment has been added to the digital platform: a “wiki” called OIKOpedia which summarizes the collective knowledge generated around the virtual campus activities⁹. The content is available in English as well as in French, Spanish, Italian, Slovak and Turkish (Figure 8). Only registered users can contribute to this environment.

OIKOpedia Login

English ▾

Concept

- Customization
- Participatory Process**
- Pattern
- Proximity
- System
- Universal Design


Participatory Process ▾

[Introduced by Leandro Madrazo , 2011-11-25 13:43:15]

Participatory processes are spaces for reflection where architects and inhabitants try to reach a consensus. The architects contribute their knowledge about the built environment, and the inhabitants contribute their personal experiences from living in different places. A participatory process is therefore an educational process, not only in terms of giving and receiving but also of sharing knowledge. Contemporary collective housing, usually homogeneous, is occupied by diverse individuals, who often do not know each other or are unrelated. These individuals try to distinguish themselves and reflect their identity by altering their domestic spaces. In the participatory process, architects determine the similarities or common goals, as well as the differences between the inhabitants of collective housing, so that they help them to create living places that reflect their respective identities. By finding a common denominator they assist in defining the character of the community, which responds to the conventions of the group. By finding the differences, they facilitate each inhabitant's ability to personalise his or her home. However a participatory process is not intended for inhabitants to become designers but for architects to take into account their demands and expectations. The inhabitants become an integral part of the design team. Participatory processes can be based on dialogue (exchange of information and negotiation), observation (of the behavioural patterns of people in living spaces) or both, and use graphical means of representation to facilitate communication among architects, inhabitants and other technicians.


Related Cases ▾

Participatory Process of Giancarlo de Carlo in Villaggio Matteotti, Terni

 One of the first architects to promote a participatory process of dialogue with the inhabitants, in meetings, interviews and exhibitions, was Giancarlo De Carlo, who was part of Team 10. De Carlo's participatory process consisted of three phases:

1. problem definition or discovery of the needs of the inhabitants;
2. formulation of a hypothesis or development of a design proposal;
3. analysis of the use or evaluation of the results.

Participatory Process of Christopher Alexander in Mexicali.

 Christopher Alexander in his books "A Pattern Language" and "The Timeless Way of Building," proposed a

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Figure 8. OIKOpedia. Home page

OIKOblogs

A system of blogs has been created to facilitate the communication of the virtual campus activities to the internet community. There is a PROJECT blog (Figure 9) for all the activities that concern all partners (conferences, workshops, etc.) linked to the blogs dedicated to the activities of each partner. These blogs are directly accessible from the home page of the OIKODOMOS web portal.

⁹ www.oikodomos.org/oikopedia



Figure 9. OIKODOMOS Project blog



Figure 10. OIKODOMOS Project blog

3.3 Exhibitions

To disseminate the project activities inside and outside the academic context, a series of exhibitions and related participatory actions have been organized in Grenoble, Bratislava, and North Cyprus. Through these exhibitions, the projects produced by international teams of students were brought to a local context.¹⁰



Figure 11. Poster of the Grenoble exhibitions

In Grenoble, the works produced in the previous workshop dedicated to the theme “Housing for diversity” were presented in the exhibition “Se former à l’Urbanisme – Learning Urban Planning”, which took place in the m’A-Maison de l’architecture de l’Isère, from May 31st to July 22nd. A collection of the projects carried out in the four OIKODOMOS workshops was exhibited in the entrance hall at IUG, Grenoble, from June 6th to September 30th (Figure 11).

The design proposals produced in conjunction with the Bratislava Workshop for the Big Camp area in Dúbravka was exhibited in this community from February 15th to March 1st. This exhibition contributed to fostering the debate with citizens and local administrators around the future transformation of the region (Figures 12, 13). The same exhibition was then displayed in two other locations in Bratislava: the Villa Rustica Gallery from March 4th to March 18th, and the SAS Gallery of Architecture from June 29th to July 15th. The activities generated around the exhibitions were further disseminated through different media: newsletters, articles, and TV, among others¹¹.

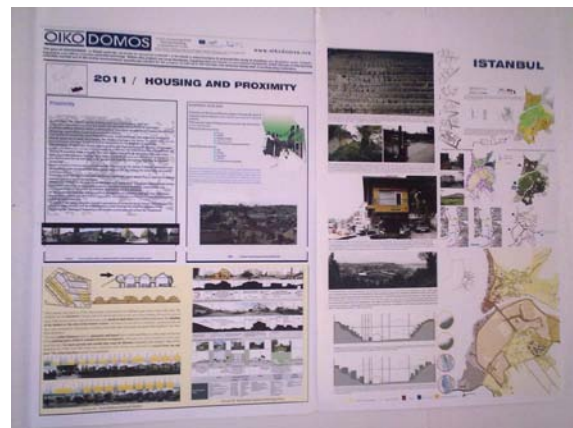
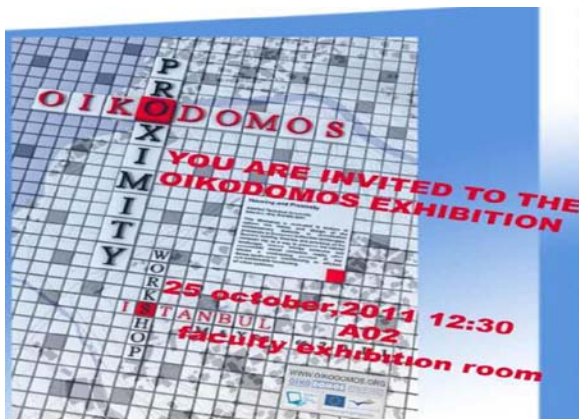
¹⁰ WP4 report “Expanding Learning Activities to Non-Academic Environments”. Available at the web portal, under the REPORTS menu.

¹¹ See in Section 7 References a list of the dissemination outputs.



Figures 12, 13. Exhibitions in Bratislava-Dúbravka City Hall and Gallery

Finally, the works produced in the Workspace “Housing and Proximity” were displayed in an exhibition at the Huseyin Ateshin Exhibition Room in the Faculty of Architecture, EMU, in Famagusta, North Cyprus, from October 25th to 31st (Figures 14, 15).



Figures 14, 15. Exhibition in Famagusta, Northern Cyprus.

All of these exhibitions have been documented and reported in the partners’ OIKOblogs.

On the occasion of these exhibitions, contacts with professionals, administrators and the general public were established. The exhibitions thus worked as catalysts which favoured the exchange of knowledge and experiences between academia and other sectors of society.

Besides these exhibitions, posters of the OIKODOMOS project have been presented at the following events: international workshop, Istanbul Technical University, from 2nd to 6th of May; “Arquitectonics” conference, Barcelona, from 5th to 7th of May 2011 (Figure 16); and the international conference in Brussels, from 27th to 28th October.

OIKODOMOS Learning Programme - Erasmus Virtual Campus - Reference: 13470-LLP-1-2007-1-ES-ERASMUS-EVC
Erasmus Accounting Measure Reference: 177090-LLP-1-2010-1-ES-ERASMUS-EAM

A virtual campus to promote the study of dwelling in contemporary Europe.

Creation of a space of collaboration among schools of architecture and urban planning where they can design and implement innovative learning models in the field of housing studies which overcome the boundaries between formal and informal education, promoting the interaction between academic and professional organisations and seeking the participation of citizens and adult learners.

PEDAGOGIC FRAMEWORK

BLENDED LEARNING: RECONCILING THE RELATIONSHIP BETWEEN TEACHING AND LEARNING
The pedagogic model of the OIKODOMOS virtual campus is based on blended learning. The platform allows to OIKODOMOS combine on-line learning activities with on-line educational activities developed for the project and activities and design studios using on-line at the participating institutions. The learning activities are designed to be used in the virtual environment. The learning activities are designed to be used in the virtual environment. The learning activities are designed to be used in the virtual environment.

LEARNING STRUCTURE: CONSTRUCTING SEQUENCES OF LEARNING ACTIVITIES
The learning activities carried out in the OIKODOMOS virtual campus are based on a constructivist methodology. It is a methodology that allows to design learning activities around a particular theme or project, promoting the interaction between academic and professional organisations and seeking the participation of citizens and adult learners.

DESIGN STUDIO: A PARADIGM OF CONSTRUCTIVIST PEDAGOGY
The pedagogic model consists in the design of a virtual studio where the learners can interact in real time. Unlike other learning systems, OIKODOMOS has not restricted to learning activities but has provided, leaving the practical work for the face-to-face activities, but it has verified in the development of distributed learning studios to be carried out both on-line and on-site.

LEARNING PLATFORM

Creation new learning environments which transcend existing boundaries: physical, institutional, disciplinary. To create a space of interaction where teaching and learning are the result of the interactions among learners.

The platform is divided into two main virtual spaces: the virtual studio and the virtual classroom. The virtual studio is a space where learners can interact in real time. The virtual classroom is a space where learners can interact in real time. The virtual classroom is a space where learners can interact in real time.

LEARNING WORKSPACE
It is a self-paced learning environment which facilitates the collaboration among distant learners, supporting learning activities in different ways: virtual studios and virtual classrooms.

CASE REPOSITORY
This repository is a further development of the results of a previous project. It is a repository of learning activities developed in the OIKODOMOS virtual campus. It is a repository of learning activities developed in the OIKODOMOS virtual campus.

DATA STRUCTURE
The data structure of the platform is based on a relational database. It is a database that allows to store and retrieve data from the platform. It is a database that allows to store and retrieve data from the platform.

IMPLEMENTATION

JOINT WORKSHOPS
The activities generated around each learning activity, organized in virtual studios and virtual classrooms, are designed to be used in the virtual environment. The learning activities are designed to be used in the virtual environment.

PARTNERS
The project is supported by the following partners: [List of partner institutions and their contact information]

Figure 16. Poster explaining the pedagogy of OIKODOMOS, presented at the Architectonics conference, Barcelona

3.4 Citizens' participation

One of the goals of this project has been to design and implement activities to engage citizens in the virtual campus. With this purpose, different activities have been carried out around the exhibitions¹². A group of students and teachers from Arquitectura La Salle have worked together with the Plus Ultra neighbourhood in Barcelona from February to June 2011 to analyse the living environment. These learning activities were part of the learning process of the Workspace for "Housing and Proximity". A Housing Learning Module has also been created and implemented in the Workspaces with the purpose of promoting the participation of stakeholders from outside academia in the digital platform activities.

PLUS ULTRA NEIGHBORHOOD

The neighbourhood Plus Ultra in the district of Zona Franca in Barcelona is one of the settlements that emerged on the periphery of the city during the first decades of the twentieth century, amongst the agricultural areas and close to incipient industrial areas. From that time on, the neighbourhood has undergone considerable transformation: in the surrounding fields housing blocks have been built, leaving the old Plus Ultra neighbourhood like an island in the middle of a newly built environment; a leftover from another time, surrounded by modern buildings up to 12 stories high. The city urban planning office has elaborated a special plan to replace the existing buildings, while maintaining some of the spatial and formal features which characterize the settlement. However, neighbours have reacted against this plan since they consider that part of their lives is embodied in the buildings. Emotional, but also financial interests – discussions on the value of their properties, on having to move somewhere else during the period of construction – are behind the neighbours' claims.

This on-going debate provided an opportunity for citizens and academics to engage in a joint study of the value and significance of our living environment. In this debate, students – guided by their tutors – have helped neighbours to externalize and communicate their views, perceptions, and experiences of their living environment.

A series of learning activities were designed within the framework of the Workspace for "Housing and Proximity", with the following purpose:

- To collect first-hand information from the inhabitants regarding the perceptions and experiences of their living environment
- To provide citizens with the appropriate methods and tools to express and communicate their perceptions of their living environment
- To promote citizens' participation in the urban planning process

A series of events were organized in the neighbourhood which brought together neighbours, students and teachers. For these meetings, students prepared specific forms of communication suited to the citizens' needs: diagrams, concept maps, and photomontages were displayed in the community centre and placed on the streets to get the citizens' feedback, which was then processed and discussed at the school (Figures 17, 18). Questionnaires were also prepared for use in interviewing citizens.

¹² WP4 report "Expanding Learning Activities to Non-Academic Environments". Available at the web portal, under the REPORTS menu.

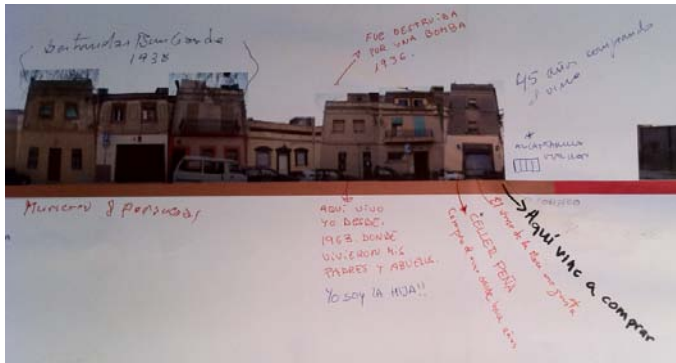


Figure 17. Collecting memories related to places



Figure 18. Mapping the activities on the city

In order to reach non-academic audiences, we have reinforced, specifically in this activity, the use of social media through the OIKOblog La Salle (Figure 19) as well as through a Facebook page which neighbours have created. At end of the process, an article was published in the newspaper “El Periódico” from Barcelona which considered as a positive learning experience the collaboration between students, architects and citizens.¹³



Figure 19. Activity report in OIKOblog La Salle. Dialogue between students and neighbours

HOUSING LEARNING

A Housing Learning Module has been designed with the purpose of including stakeholders from outside academia in the activities carried out in the digital platform. The itinerary of learning activities has been structured in such a way that it can be used to explore the results of the previous learning activities or in a new project (Figure 20).

¹³ A full report on this learning activity can be found in the Appendix 1 of the WP4 Report.

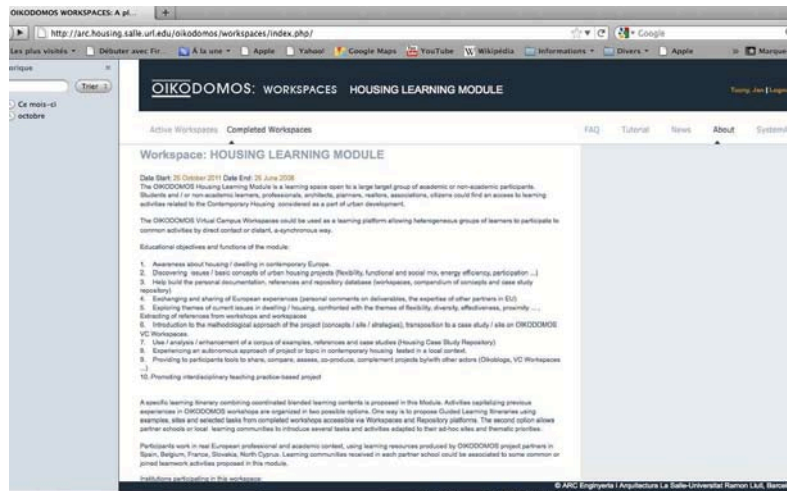


Figure 20. Housing Learning Module implemented in Workspaces

3.5 Conferences and publications

INTERNATIONAL CONFERENCE

An international conference took place at W&K Sint-Lucas School of Architecture, Brussels, on October 27th and 28th, 2011 on the theme of “Innovating, Housing, Learning”. Innovating “Housing” and innovating “Learning” were the two main topics, with ICT acting as a nexus between them. By presenting the theme in this way, we wanted to attract the interest of architects and urban planners as well as of researchers in the field of education and educational technologists.

The conference attracted 35 participants from all over Europe and there were 10 papers presented which passed the reviewing process. These papers were collected in a publication which was handed out to participants and is available on the project blog¹⁴. The keynote speeches covered the two main areas of the OIKODOMOS project: housing, from the point of view of the practising architect and teacher; and virtual learning spaces in architectural education. An exhibition was organized in parallel to the conference.¹⁵

As a preparation for the international conference, a virtual forum was set up with the intention of generating a debate among the conference participants as well as in the academic and research community. The two-day conference sessions were broadcast live and the recordings made available later on the web (Figures 21, 22).



Figures 21, 22. Conference session in the auditorium of Sint-Lucas School of Architecture

PUBLICATIONS

The results of the project have been disseminated in the scientific and academic communities through the following publications and conferences:

- Madrazo, L. El conocimiento arquitectónico en la era de la Información: los repositorios digitales. *Revista de Arquitectura, Universidad de Navarra*, vol. 39-40, pp. 134-141, December 2010.

¹⁴ project-oikodomos.blogspot.com/

¹⁵ A complete report of the conference can be found in WP5 “International Conference,” available at the web portal, under the REPORTS menu.

- Madrazo, L., Ridy, P. OIKODOMOS Virtual Campus. Constructing learning processes in collaboration. Proceedings of the ECAADE Conference, Ljubljana, Slovenia. 2011
- Madrazo, L., Ridy, P. The Oikodemos Virtual Campus: a networked-based model of education. Proceedings of the ED MEDIA Conference, Lisbon, Portugal, 2011
- Ridy, P., Madrazo, L. Towards Virtual Architecture. Proceedings of Global TIME 2011 (pp. 323-328), online. AACE. Feb 2011
- Ozmen, B. Proximity on Housing and Learning Activities in EMU Master Studies within the OIKODOMOS Virtual Campus Collaboration. ENHR Conference, Toulouse, France, 4-7 July 2011.

Besides, there have been a number of publications providing information about project-related activities in newspapers, newsletters, journals, on the web, on TV and in other media, which can be found in the Reference section of this document.

3.6 Quality evaluation

A comprehensive evaluation of the project outcomes has been carried out throughout the whole project for all activities described above. For each work package, specific evaluation forms have been prepared, the data processed and some conclusions derived.¹⁶

An evaluation plan was established early in the project and used as a guide throughout it to discuss the scope and process of evaluation of the different activities. Most evaluations involved collection of data using evaluation questionnaires tailored to the event or environments, but anecdotal evidence from staff and students and staff interviews were also employed.

All outputs have been achieved and in most areas the project has been quite successful. The virtual campus environments have been consolidated and the updates have improved their usability and functionality. Information on the virtual campus and its application have been widely disseminated through a variety of the events, reaching out beyond the academic groups to professionals and citizens who have an interest in the housing and development projects with which the project partners have engaged. Learning activities have been developed and delivered collaboratively, testing and consolidating the pedagogical model and its application through the virtual campus. The climax of this teaching collaboration was a joint workshop which brought together teachers and students from project and associate partner institutions for an intensive period, working on design proposals for a development site in Istanbul. Academic users from other institutions new to the project have been supported in becoming involved, in the use of the environments and the engagement of their students in learning activities associated with the virtual campus. The OIKODOMOS conference brought together participants from across Europe to discuss innovation in housing and share their applications of virtual campus environments. Despite considerable work in disseminating the virtual aspect of the conference, it was less successful than we hoped. More research is necessary to explore the content, activities and motivation for individuals to participate in such on-line activities within the disciplines of architecture and urban planning.

OIKODOMOS has been a productive journey of exploration and development for everyone involved. The lead partner is committed to sustaining the support and ongoing use of the virtual campus, and the network of partners and other interested institutions provides a good base for continuing, refining and extending the work of OIKODOMOS.

¹⁶ WP7 report "Quality Assurance". Available at the web portal, under the REPORTS menu.

4. Partnerships

- Escola Tècnica Superior d'Arquitectura La Salle, Universitat Ramon Llull, Barcelona, Spain

Prof. Dr. Leandro Madrazo (Project coordinator), Angel Martin Cojo, Joan Pleguezuelos, Álvaro Sicilia

The research group ARC Enginyeria i Arquitectura La Salle (www.salle.url.edu/arc) has coordinated the project. ARC has brought its pedagogic and technological know-how to the project. As coordinator, it has been responsible for maintaining a holistic view of the project activities, ensuring the coordination between the different work packages.

ARC has been responsible for the enhancement of the different components of the OIKODOMOS digital platform (web portal, Workspaces, Case Repository, OIKOpeda and blogs); the editing of the compendium; writing project publications (papers and articles); and mentoring the new associated partners who have joined in the project activities. Students and teachers from the School of Architecture La Salle have participated in the learning activities of the project, including the Workspace for “Housing and Proximity”, the Istanbul Workshop and the Plus Ultra learning community.

- Hogeschool voor Wetenschap & Kunst, Department Architectuur Sint-Lucas, Brussels/Ghent, Belgium

Prof. Dr. Johan Verbeke, Dr. Kris Scheerlinck, Tomas Ooms

The Sint-Lucas School of Architecture has brought its pedagogical and housing competence as well as its international experience to the OIKODOMOS project. Sint-Lucas has been one of the driving forces to develop the content and the pedagogical approach in the Workspace for “Housing and Proximity”, which included the international workshop in Istanbul. A group of students and teachers participated in the workshop. Faculty members have provided guidance to the teachers who joined the virtual campus and have contributed to the coordination of the compendium.

Sint-Lucas organized the OIKODOMOS international conference where the pedagogical approach of OIKODOMOS was presented and discussed. This event was a major dissemination activity of the project.

- Institut d'Urbanisme de Grenoble IUG, Université Pierre Mendès-France, Grenoble, France

Prof. Dr. Jan Tucny, Paulette Duarte, Jean-Michel Roux

IUG has been responsible for coordinating the different exhibitions and related activities organized in Bratislava, Famagusta and Grenoble. A group of students and teachers participated in the Istanbul workshop and staff members took part in the international conference in Brussels. IUG has designed a housing learning module to involve non-academic learners in the virtual campus activities. They have disseminated the project activities among professional organizations and local communities.

-Faculty of Architecture, Slovak University of Technology, Bratislava, Slovakia

Dr. Viera Joklova, Dr. Andrea Bacová, Dr. Marián Malovaný

FASTU has organized three public exhibitions on the studio projects developed by the international teams of students in the Bratislava workshop of 2009. These exhibitions have provided the opportunity to organize open discussions about the project proposals with citizens, city planning departments, authorities and experts. FASTU has been actively involved in the dissemination of the activities generated around the exhibitions through different media: newspapers, journals, TV and internet. A group of students and teachers participated in the Istanbul workshop, and faculty members presented their work at the international conference in Brussels. They have also helped to promote the project activities at different institutions.

- Eastern Mediterranean University, North Cyprus

Dr. Beril Ozmen, Hifsiye Pulhan, Kagan Gunce, Nima Talebian

As a new partner in the OIKODOMOS consortium, EMU's initial role has been to test and apply the learning design procedures in the Workspace for "Housing and Proximity". They have been site coordinators of the Istanbul workshop and responsible for the local activities. EMU has organized an exhibition in Northern Cyprus and has been actively involved in the dissemination of the project activities among other academic institutions and professional organizations. Teaching staff have participated in the international conference in Brussels, and also in the international workshop together with a group of their students.

Together with these partners, the following persons and groups have collaborated on the project activities:

- Viveka Consulting

Paul Riddy

Viveka specialises in the pedagogical design and evaluation of online learning environments, development of the educator skills of teachers working in higher education and the facilitation of multicultural discussions on developments in higher education teaching processes.

Their main role as contractors on this project has been providing guidance and resources for the evaluation of project activities, including a number of online and paper-based questionnaires. As coordinators of the evaluation work package (WP7), they have devised the evaluation plan and brought together the different data sources into a summary of the overall achievements of the project compared to its proposed outcomes. They have also played a substantial role in writing and editing project dissemination and support resources.

- NewMinE, Università della Svizzera Italiana, Lugano, Switzerland

Dr. Stefano Tardini, Chiara Bramani

NewMinE has participated as associate partner with the financial support of the Swiss government. They have collaborated in the evaluation of the project activities, particularly in analyzing the impact of the project on the internet and in the design of the usability tests of the digital platform. They have also collaborated in the preparation of the compendium and in the editing process.

- Escuela Técnica Superior de Arquitectura de Valencia, Spain

Mónica Garcia, Paula Cardells, Guillermo Guimaraens, Hugo Costa, Carlos Lacalle, Juan José Tuset

A group of teachers from this School have carried out an external evaluation of the students' work in the Workspace "Housing and Proximity". The work was presented at the international

conference in Brussels. A report of the work they have done is available on the web portal, under the RESOURCES menu.

- Brandenburg University of Technology, BTU, Cottbus, Germany

Norbert Kling

The Chair of Design and Building Science has incorporated the Case Repository into one of their teaching modules. The work was presented at the international conference in Brussels. A report of the work they have done is available on the web portal, under the RESOURCES menu.

- Gebze Institute of Technology, Turkey

Sedef Ozcelik

A group of first-year students of the department of architecture participated in the Istanbul Workshop, under the direction of its tutor, who presented also a paper at the international conference in Brussels.

5. Plans for the Future

The results achieved during this project will facilitate the further development of the virtual campus in the near future.

In fact, the project activities did not stop as this project came to an end, but they are already continuing. Currently, there is a new active Workspace dedicated to the theme of “Housing Reagents”. The institutions participating in this learning workspace are two of the partners of this project (La Salle, EMU) and three institutions which became associate partners last year: Gebze Institute of Technology, Turkey; BTU Cottbus and ETS de Arquitectura de Valencia. Two other Workspaces are planned to start this academic year: one coordinated by ETS de Arquitectura de Valencia, and a second one led by ISCTE from Lisbon. These projects would not have been possible without the work done in this year to consolidate and disseminate the pedagogical model.

In line with these initiatives, we expect the future activities of the virtual campus to be less dependent on the participation of the coordinating partner. The information we have provided through the web portal to support teachers (especially the teaching material under the RESOURCES menu) and users (the on-line tutorials) should allow them to work in the virtual campus. This way, it should be possible for a group of teachers to organize their own learning programme and design their learning activities using the digital platform autonomously, without needing the participation of a project partner.

We expect that the experience acquired and documented on the web portal will motivate newcomers to continue exploring on their own the possibilities that the virtual campus offers. It is important that the knowledge acquired through subsequent implementations is also documented in the web portal, as we have started to do in this project with the reports of the associate partners from Cottbus and Valencia.

Even though our goal is to increase the participation of institutions in the virtual campus, we think that a limited number of them (currently 11, around 30 in the future) would facilitate true collaboration.

With regard to the digital platform, it has reached a level of functionality which makes it an effective and reliable environment to support open and flexible learning design. The developing group – ARC Enginyeria i Arquitectura La Salle, Universitat Ramon Llull – will keep the platform operative and will assist future users in solving any problems they might encounter. The system of blogs will continue in operation, each partner being responsible for its contents. New blogs will be added to the new partners who join the project. The task of maintaining the system of blogs will be undertaken by ARC La Salle.

After four years of activity, there is now a considerable amount of information in the Workspaces and Case Repository which is not always easy to access for those who did not participate in the learning activities. Besides, more information is already coming through the OIKOpedia environment. All of this content has a potential pedagogical value and should not be concealed in a database.

In order to bring to the fore all the information stored on the digital platform in the course of the successive learning activities, ARC has started to develop an ontology-based system which will facilitate the retrieval of the contents stored in the Workspaces, Case Repository and OIKOpedia (Figure 23). With this system, a teacher will be able to search for “flexible housing”, for example, and obtain links to all related items in the three databases: student work, descriptions of learning activities, references, case studies and concept definitions in OIKOpedia, etc. This system will be operative in the course of the current academic year.

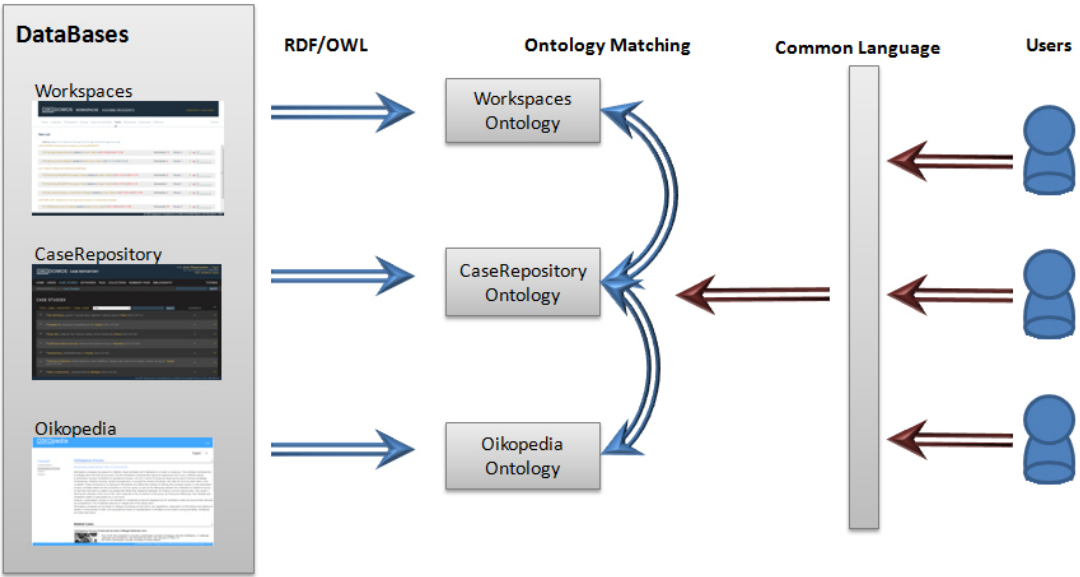


Figure 23. OIKODOMOS ontology model.

6. Contribution to EU policies

- Lifelong Learning Programme

The project addresses the eight key competences for Lifelong Learning described in the European Reference Framework¹⁷ in the following way:

1. Communication in the mother tongue

Communication in the mother tongue is the ability to express and interpret thoughts, feelings and facts in both oral and written form (listening, speaking, reading and writing), and to interact linguistically in an appropriate way in the full range of societal and cultural contexts — education and training, work, home and leisure.

Students have been able to develop their abilities to express their ideas orally and in written form, in the activities carried out in conjunction with local communities: presentations of projects through exhibitions, exchanges with professionals and elected officials, and interactions with neighbours in participatory activities. In some of the OIKOblogs, the activities have been described in the local language and in English.

2. Communication in foreign languages

Communication in foreign languages broadly shares the main skill dimensions of communication in the mother tongue: it is based on the ability to understand, express and interpret thoughts, feelings and facts in both oral and written form (listening, speaking, reading and writing) in an appropriate range of societal contexts — work, home, leisure, education and training — according to one's wants or needs. Communication in foreign languages also calls for skills such as mediation and intercultural understanding. An individual's level of proficiency will vary between the four dimensions, different languages and according to their background, environment and needs/interests.

English has been the common language used in most activities of the OIKODOMOS project. Students who have participated in the shared learning activities have used this language for communication. Nevertheless, an uneven level of English proficiency among students is still a major obstacle in international projects.

3. Mathematical competence and basic competences in science and technology

A. Mathematical competence is the ability to use addition, subtraction, multiplication, division and ratios in mental and written computation to solve a range of problems in everyday situations. The emphasis is on process and activity, as well as knowledge. Mathematical competence involves - to different degrees - the ability and willingness to use mathematical modes of thought (logical and spatial thinking) and presentation (formulas, models, constructs, graphs/charts).

B. Scientific competence refers to the ability and willingness to use the body of knowledge and methodology employed to explain the natural world, in order to identify questions and to draw evidence-based conclusions. Competence in technology is viewed as the application of that knowledge and methodology in response to perceived human wants or needs. Both

¹⁷ eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_394/l_39420061230en00100018.pdf

areas of this competence involve an understanding of the changes caused by human activity and responsibility as an individual citizen.

Learners participating in this project have been encouraged to carry out their work with method and rigour. In some of the seminars, they have been introduced to basic research techniques. They have been trained to discern valuable data from superficial information as they sought references in books and in on-line resources. By working in the Case Repository and Workspaces environments, students were able to learn to structure knowledge differently.

4. Digital competence

Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet.

A variety of digital tools have been used to carry out the tasks, including multimedia authoring tools (Powerpoint, image and video editing, CAD programs, animation software) and web-publishing (web pages, PDF documents). Collaborative activities have been developed using shared documents and project repositories. Communications have been supported by a variety of tools: email, videoconferencing, and intranet.

5. Learning to learn

'Learning to learn' is the ability to pursue and persist in learning. Individuals should be able to organise their own learning, including through effective management of time and information, both individually and in groups. Competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to handle obstacles in order to learn successfully. It means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts – at home, at work, in education and training. Motivation and confidence are crucial to an individual's competence.

The learning activities that have been implemented place the student at the centre of the learning process. Teachers have played the role of pedagogic designers and tutors rather than of lecturers. Learning activities have been designed to encourage students to investigate subject matters in an independent manner, working individually and in collaboration with peers from other institutions.

6. Interpersonal, intercultural and social competences, civic competence

These competences cover all forms of behaviour that equip individuals to participate in an effective and constructive way in social and working life, and particularly in increasingly diverse societies, and to resolve conflict where necessary. Civic competence equips individuals to fully participate in civic life, based on knowledge of social and political concepts and structures and a commitment to active and democratic participation.

The subject matter of this programme – housing studies – necessarily requires that participants have a special awareness of the social consequences of architectural design and planning. In particular, these competences have been developed in the context of the

dissemination activities of the projects within local communities, and in the participatory learning activities carried out with neighbours.

7. Entrepreneurship

Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day to day life at home and in society, employees in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by entrepreneurs establishing social or commercial activity.

Students have been involved in the planning of the activities at community level: exhibitions, participatory actions. In many instances, the initiative to carry out a work has come from them (e.g. recording interviews with neighbours to be documented in the OIKOblog).

- European Space for Higher Education

The project has made a significant contribution to achieve the goals established in the Bologna declaration:¹⁸

- Establishment of a system of credits - such as in the ECTS system – as a proper means of promoting the most widespread student mobility. Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognised by receiving Universities concerned.

The learning activities developed in the programme are ECTS credited. The work carried out within the Joint Workshops, as well as the learning activities around them, has been credited in two different ways: as an independent course, or as work done within other courses.

- Promotion of mobility by overcoming obstacles to the effective exercise of free movement with particular attention to:

- for students, access to study and training opportunities and to related services
- for teachers, researchers and administrative staff, recognition and valorisation of periods spent in a European context researching, teaching and training, without prejudicing their statutory rights.

Virtual and physical mobility have been promoted by the activities developed within the project, particularly with regard to the international workshop in Istanbul. The blended approach adopted in the OIKODOMOS virtual campus favours the reciprocal support of both kinds of mobility by connecting tasks that are done on the digital platform with other tasks performed in the participating institutions, individually or in collaboration (e.g. joint workshop).

- Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies.

Setting awarding criteria for evaluating activities carried out on the Virtual Campus has been one of the main objectives of the programme. The partnership has elaborated shared criteria to define and assign competences to the joint learning activities. To achieve this, partners had to reach a common understanding regarding definitions of competences and learning outcomes.

¹⁸ [www.bologna-bergen2005.no/Docs/00 Main_doc/990719BOLOGNA_DECLARATION.PDF](http://www.bologna-bergen2005.no/Docs/00_Main_doc/990719BOLOGNA_DECLARATION.PDF)

- Promotion of the necessary European dimensions in higher education, particularly with regards to curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research.

Housing has been addressed at a European level, encouraging learners to compare problems and solutions adopted in different countries, particularly through the exhibitions of the student projects in Bratislava, Grenoble and North Cyprus.

7. References

The references to the different outcomes of the project are compiled in this section.

SUPPORTING MATERIALS

These materials have been created to support new participants and to guide them in the learning design processes of the virtual campus:

- OIKODOMOS Compendium
www.oikodomos.org/resources/compendium.pdf
A guide of the OIKODOMOS pedagogic methodology, with examples of applications and supporting information
- What is OIKODOMOS?
www.oikodomos.org/resources/what_is_oikodomos
An audiovisual (5 min.) introducing the project development, objectives and outcomes. Also available on YouTube: www.youtube.com/watch?v=sK9bBMtgDwA
- OIKODOMOS pedagogic model
www.oikodomos.org/resources/pedagogic_model
A narrated presentation introducing the OIKODOMOS pedagogy
- Learning design with OIKODOMOS Workspaces
www.oikodomos.org/resources/learning_design.pdf
Introduction to the pedagogical model of OIKODOMOS to help teachers design new learning activities and participate in the ongoing ones
- OIKODOMOS Workspaces in 5 steps: a case study
www.oikodomos.org/resources/workspaces_five_steps.pdf
A summary of the process of designing and implementing learning activities followed in the Workspace "Proximity"
- OIKOpedia
www.oikodomos.org/oikopedia
A "wiki" environment which contains the topics and concepts studied on the OIKODOMOS Virtual Campus (in multiple languages, English, French, Italian, Spanish, Slovak and Turkish)
- OIKODOMOS Housing Concepts
www.oikodomos.org/resources/housing_concepts.pdf
Glossary of the concepts available in OIKOpedia compiled in a printable document (English version, only)
- Integrating the OIKODOMOS Case Repository in the curriculum
www.oikodomos.org/resources/caserepository_cottbus.pdf
A report of the process followed at BTU Cottbus to integrate the OIKODOMOS Case Repository into one of their teaching modules
- External evaluation of learning activities in OIKODOMOS Workspaces
www.oikodomos.org/resources/evaluation_valencia.pdf
A report on the external evaluation of the work of the Workspace "Proximity" carried out by a group of teachers from ETS Arquitectura Valencia

PAPERS, ARTICLES

The results of the project have been disseminated in the scientific and academic communities through the following publications and conferences:

- Madrazo, L. El conocimiento arquitectónico en la era de la Información: los repositorios digitales. Revista de Arquitectura, Universidad de Navarra, vol. 39-40, pp. 134-141, December 2010.
- Madrazo, L., Ridy, P. OIKODOMOS Virtual Campus. Constructing learning processes in collaboration. Proceedings of the ECAADE Conference, Ljubljana, Slovenia. 2011
- Madrazo, L., Ridy, P. The Oikodomos Virtual Campus: a networked-based model of education. Proceedings of the ED MEDIA Conference, Lisbon, Portugal, 2011
- Ridy, P., Madrazo, L. Towards Virtual Architecture. Proceedings of Global TIME 2011 (pp. 323-328), online. AACE. Feb 2011
- Ozmen, B. Proximity on Housing and Learning Activities in EMU Master Studies within the OIKODOMOS Virtual Campus Collaboration. ENHR Conference, Toulouse, France, 4-7 July 2011.

NEWSPAPERS, NEWSLETTERS

The activities developed during this project have been covered by the following publications:

- Revival of the Central Zone of Dúbravka, article in the newsletter "Dúbravský spravodajca 3/2011"
www.dubravka.sk/files/documents/spravodaj/2011/dubravsky-spravodajca2011-03.pdf
- Design of central spaces for identity and integrity of residential areas; in Information Letters FA STU, 4/2010/2011, pp.5 – 7, www.fa.stuba.sk/docs/casopisy/IL_4_-2010-2011
- Big Camp today and tomorrow, - article in the newsletter "Dúbravský spravodajca", 4/2011, www.dubravka.sk/files/documents/spravodaj/2011/dubravka4_2011.pdf
- Big Camp at SAS - article in the newsletter "Dúbravský spravodajca" 7-8/2011
www.dubravka.sk/files/dubravka_c7.pdf
- Proyecto de mediación en Sants-Montjuïc : La vida tras el ladrillo. Report on the learning activities carried out with the participation of neighbours. - "El Periódico", Barcelona, 13.11.2011, www.elperiodico.com/es/noticias/barcelona/vida-tras-ladrillo-1040871
- Keď architektúra spája ľudí aj národy, by Andrea Bacova , ARCH 06/11 - specialized architectural journal in Slovakia, pp.64 -65
www.archnet.sk/anotacia/2011/1883/ked-architektura-spaja-ludi-aj-narody
- Exhibition at SAS, Bratislava, Press agency SITA, "Urbanistické štúdie k Veľkej lúke vystavujú do piatka"
bratislava.sme.sk/c/5973011/urbanisticke-studie-k-velkej-luke-vystavuju-do-piatka.html

WEB

The project activities have been disseminated through the following websites:

- web Dúbravka - www.dubravka.sk/files/documents/spravodaj/2011/dubravsky-spravodajca2011-03.pdf

www.dubravka.sk/files/documents/spravodaj/2011/dubravka4_2011.pdf
www.dubravka.sk/files/dubravka_c7.pdf

- Web information about Istanbul workshop:

www.fa.stuba.sk/generate_page.php?page_id=2431&preview_type=from_menu-Webnews
report from the Public Exhibition in Bratislava (CITYLIFE) www.citylife.sk/blog/nove-vystavy-na-26-tyzden

- Webnews report about the Public Exhibition in Bratislava,
www.fa.stuba.sk/generate_page.php?page_id=2497

- Web information about Oikodomos Webcast
www.fa.stuba.sk/generate_page.php?page_id=2502

- Webpress report from the Public Exhibition in Bratislava (SITA - Slovak press association),
bratislava.sme.sk/c/5973011/urbanisticke-studie-k-velkej-luke-vystavuju-do-piatka.htm

- Webnews report from the Public Exhibition in Bratislava
www.stuba.sk/new/generate_page.php?page_id=4964

- Web video from the opening of the Public Exhibition in Bratislava
video.sita.sk/videoservis/bratislava-vystava---navrhy-lokality-velka-luka-od-studentov-architektury/19887-play.html

- News on the partnership of EMU in the Oikodomos Project disseminated in the Turkish media through our University - dated from December 2010 to January-February 2011.
www.emu.edu.tr/emunews/haber/ocak-2011/haber-09.htm,
pr.emu.edu.tr/haber/resimler/galeri/subat2011web.pdf, www.sondakika.com/haber-dau-mimarlik-fakultesi-hera-merkezi-ab-projesi-2476402

- News on the partnership of EMU in the Oikodomos Project disseminated in the Turkish Cypriot media - January 2011. www.kibris.be/dau-mimarlik-fakultesi-ab-projesine-ortak-kabul-edildi.html,
www.kibrispostasi.com/index.php/cat/35/news/45375/PageName/banner.html

- News of the event of the Istanbul Workshop in the Turkish Architecture Platform Arkitera and personal blog April -May 2011 v3.arkitera.com/event.php?action=displayEvent&ID=3950
ozmenberil.blogspot.com/2011/04/oikodomos-istanbulda.html

- News on the completion of the Workshop Istanbul in the Turkish Architecture Platform Arkitera and in the Faculty webpage - May 2011
v3.arkitera.com/news.php?action=displayNewsItem&ID=64063
foanews.wordpress.com/category/workshop/

- Web announcement of the Oikodomos conference Brussels in the Turkish Architecture Platform Arkitera –September 2011 www.arkitera.com.tr/etkinlik/index/detay/oikodomos-conference--innovating-housing-learning

- International conference in Brussels. Live streaming via www.ustream.tv/channel/sintlucas

LOCAL TV

- TV shot – Dúbravka Television
fastu-oikodomos.blogspot.com/2011/05/bratislava-exhibitions.html

- TV shot – SITA press agency

video.sita.sk/videoservis/bratislava-vystava---navrhy-lokality-velka-luka-od-studentov-architektury/19887-play.html

