

Parametric Design Pr
 -Aided Modelling Technique *
 Architectural Education Towards Su
 Temporary Challenge Of Environmental Su
 Architectural Education / UNCOVERING CREA
 WITH ASSESSMENT AND IDEATION TECHNIQUES
 For Basic Design? / PRE-UNDERGRADUATE BUILT E
 ion / Understanding The Employment Of Digital Des
 On Students' Behavior: By Analyzing The Stress Facto
 J Architectural Education / RE-COMPOSING MONDRIA

ONT AN INTEGRATED APPROACH BY AB
 To Education Of Sustainable Architecture
 COGNITIVE LEVEL THROUGH THEIR LEA
 Concept Of Personalisation At Architectural
 Learning In Design Education / The 'Architec
 sing Metaphor And Analogy For Understand
 Architectural Education: Physical Spaces And
 s / Affordance Based Cognitive Framework I
 OF SOCIAL MEDIA / A COMMUNITY FOR AI
 SKETCHING ON SOCIAL MEDIA / Perception Of
 tion / The First Year Challenge: Investigating
 Multi-Dimensional Model For Teaching Universal
 and The Everlasting Landscapes / Traditio
 Designer: an interdisciplinary graduate
 Socio-Cultural factors in architectural
 Analysis Of A Hybrid Educational App
 Upper Level Summer Schools In The Se
 EDUCATION / At The Point Of Depa
 TIAL TOOL FOR ARCHITECTURA
 Computer In Architectural E
 TURUNC MUD BRICK PRESCH
 TRANSPARENT ASSESSMENT
 ONMENT / PARAMETRIC D
 CTURAL EDUCATION /
 tal Education / Restrictio
 tural Educations For Re
 onting On Jury Percep
 CE IN ARCHITECTU
 se Neat East Region
 Hidden Dimension
 Turkey / The Effic
 ALITY: An Unwrit
 RAMS: THE IMP
 ONY AN INTEG
 To Education O
 COGNITIVE W
 Concept Of Per
 Learning In Des
 sing Metapho
 Architectural
 s / Affordar
 OF SOCIA
 SKETCHING C
 tion / The
 Multi-Dimens
 and The Ever
 Designer: a
 Socio-Cult
 Analysis O
 Upper Level
 EDUCATIO
 TIAL TOOL
 Compu
 TURUNC M

UATE PROGRAM / Experimental Approac
 DESIGN STUDENTS' CREATIVITY AT THE
 Cognition In Architecture Students / The
 'ment On The Implementation Of Implic
 hing Architecture In Northern Cyprus
 an Perspective / The 'Architecture' C
 Design Critique Sessions In Urban Design Stu
 SE COMPUTER AIDED DESIGN VIA THE US
 THE RELEASING IMPACT OF SINCERE
 An Inquiry On Ethical Values In Design Edu
 ception Of Architecture? / A Proposal Of A
 Of Hesitation: Learning From The Ephemera
 Role Of Architects / The Making of an Urba
 ciplinary graduate education / The effect of
 s projects according to these factors. / The
 nology Of Multi-Disciplinary Basic Design Studios Due To
 MPLEX RELATIONS UNCONCEALING THE ARCHITECTURA
 Step In Architectural Education / PRAXIS AS A NEW CONCEP
 TY CONTEXT / Students' Perspective On The Role Of Hand And
 NT EDUCATION PRACTICES: THE CASE OF MARMARIS /
 CTURAL EDUCATION 'Fine' Arts Make The Design Fine /
 DESIGN COURSES IN PERCEPTION OF THE BUILT ENVI
 e / SOME CRITICISMS ON THEORY - DRIVEN ARCH
 sus Conventional Model Making Technique In Architec
 tainability: In Order To Know The Critical Role Of Archi
 Sustainability / The Impact Of Materials Used While Pro
 CREATIVITY: STRUCTURING THE TEAMWORK EXPERI
 TQUES / New Foundations In Architectural Education I
 BUILT ENVIRONMENT EDUCATION & PARTICIPATION
 tal Design Tools In Architectural Design Education I
 Factors In E.M.U Faculty Of Architecture / INFOR
 NDRIAN'S PAINTINGS BY USING COMPUTER PRO
 ME THE CORE OF THE ARCHITECTURAL EDUCAC
 RGRADUATE PROGRAM / Experimental Approac
 TURAL DESIGN STUDENTS' CREATIVITY AT THE
 Spatial Cognition In Architecture Students / The
 Experiment On The Implementation Of Implic
 and Teaching Architecture In Northern Cyprus
 ; An Iranian Perspective / The 'Architecture' C
 Design Critique Sessions In Urban Design Stu
 RSE COMPUTER AIDED DESIGN VIA THE US
 OF THE RELEASING IMPACT OF SINCERE
 / An Inquiry On Ethical Values In Design Edu
 nception Of Architecture? / A Proposal Of A
 Of Hesitation: Learning From The Ephemera
 Role Of Architects / The Making of an Urba
 ciplinary graduate education / The effect of
 s projects according to these factors. / The
 ti-Disciplinary Basic Design Studios Due To
 NS UNCONCEALING THE ARCHITECTURA
 al Education / PRAXIS AS A NEW CONCEP
 ents' Perspective On The Role Of Hand And
 RACTICES: THE CASE OF MARMARIS /
 ATION 'Fine' Arts Make The Design Fine /

INTERNATIONAL CONFERENCE
 UNSPOKEN ISSUES in ARCHITECTURAL EDUCATION
 Eastern Mediterranean University, Faculty of Architecture, Famagusta, North Cyprus

April 3-4, 2014

**INTERNATIONAL CONFERENCE
UNSPOKEN ISSUES in ARCHITECTURAL EDUCATION**

April 3 - 4 2014, Famagusta, Turkish Republic of North Cyprus

Organized by Eastern Mediterranean University (EMU), Faculty of Architecture



Editors:

Prof. Dr. Özgür DİNÇYÜREK

Prof. Dr.Şebnem HOŞKARA

Assoc. Prof. Dr. S. Müjdem VURAL

Faculty of Architecture - Eastern Mediterranean University

Preparation for publication & Graphic Design: Aminreza IRANMANESH

UIAE Contact Address:

Faculty of Architecture - Eastern Mediterranean University,
Gazimagusa, North Cyprus

(via Mersin-10 Turkey)

Tel: +90 392 630 1346 / 630 2039 / 630 1049

Fax: +90 392 630 2365

e-mail: education2014@emu.edu.tr

<http://architecturaleducation2014.emu.edu.tr>

Copyright © 2014 by UIAE

Eastern Mediterranean University

All right reserved

ISBN 978-975-8401-91-8

First Edition: April 2014

Printed by: **Eastern Mediterranean University Press**, Gazimagusa, North Cyprus

All rights reserved For Authors. No part of this publication may be reproduced, distributed, or transmitted without the prior written permission of the publisher, except in the case of brief cited quotations. Authors are responsible for the content and language of their respected papers.

CONFERENCE CO-CHAIRS

Özgür DİNÇYÜREK
Şebnem HOŞKARA

Eastern Mediterranean University, NORTH CYPRUS
Eastern Mediterranean University, NORTH CYPRUS

INTERNATIONAL ADVISORY COMMITTEE

Balint BACHMANN
Martin CHENOT
Adalberto DEL BO
Johan DE WALSCHE
David GLOSTER
Jorgen HAUBERG
Hansjoerg HILTI
Susanne KOMOSSA
Stephan MAEDER
Louis NELSON
Susan ROAF
Sally STEWART
Martha THORNE
David VANDERBURGH
Johan VERBEKE
Pieter VERSTEEGH

University of Pecs, HUNGARY
Ecole d'Architecture et de Paysage de Bordeaux, FRANCE
Scuola di Architettura Civile, Politecnico di Milano, ITALY
University of Antwerp, BELGIUM
Royal Institute of British Architects, UK
The Royal Danish Academy of Fine Arts, DENMARK
University of Liechtenstein, LIECHTENSTEIN
Technical University of Delft, NETHERLANDS
Zurich University of Applied Sciences, SWITZERLAND
University of Virginia, USA
Heriot-Watt University, SCOTLAND
Mackintosh School of Architecture, SCOTLAND
IE School of Architecture, SPAIN
University Catholique de Louvain, BELGIUM
LUCA Sint-Lucas School of Architecture, BELGIUM
Fribourg College of Architecture, SWITZERLAND

INTERNATIONAL CONFERENCE SCIENTIFIC COMMITTEE

Raina ABDEL GALIL
Esra AKCAN
Ali ASGARY
Oya ATALAY FRANCK
Ayfer AYTUĞ
Ivan CABRERA I FAUSTO
Nur ÇAĞLAR
Neslihan DOSTOĞLU
Özlem ERDOĞDU ERKARSLAN
Maria Linda FALCIDIENO
Guita FARIVARSADRI
Orhan HACIHASANOĞLU
Karim HADJRI
Harriet HARRISS
Karin HOFERT
Yonca HÜROL
Deniz İNCEDAYI
Shahin KEYNOUSH
Sevinç KURT
Sevgi LÖKÇE
José Manuel Pagés MADRIGAL
Fuad H. MALLICK
Münevver Özgür ÖZERSAY
Çiğdem POLATOĞLU
Mosé RICCI
Güven Arif SARGIN
Ayşe ŞENTÜNER
A. İpek TÜRELİ
Zuhal ULUSOY
Nicholas WILKINSON

Arab Academy for Science, Technology & Maritime Transport, EGYPT
University of Illinois at Chicago, USA
York University, CANADA
Zurich University of Applied Sciences, SWITZERLAND
Yildiz Technical University, TURKEY
Universitat Politècnica de València, SPAIN
TOBB University of Economics & Technology, TURKEY
Istanbul Kültür University, TURKEY
Gediz University, TURKEY
University of Genoa, ITALY
Eastern Mediterranean University, NORTH CYPRUS
Özyeğin University, TURKEY
University of Central Lancashire, UK
Oxford Brookes University, UK
Universitat Politècnica de Catalunya, SPAIN
Eastern Mediterranean University, NORTH CYPRUS
Mimar Sinan Fine Arts University, TURKEY
Girne American University, NORTH CYPRUS
Cyprus International University, NORTH CYPRUS
Atılım University, TURKEY
LAU, LEBANON - University of Genoa, ITALY
BRAC University, BANGLADESH
Eastern Mediterranean University, NORTH CYPRUS
Yildiz Technical University, TURKEY
University of Genoa, ITALY
Middle East Technical University, TURKEY
Istanbul Technical University, TURKEY
McGill University, CANADA
Kadir Has University, TURKEY
Open House International, UK

KEYNOTE SPEAKERS

Manuel Couceiro Da COSTA
David GLOSTER
Theodore C. LANDSMARK
Susan ROAF
Constantin SPIRIDONIDIS

Member of the EAAE Council
Director of Education, RIBA
President, NAAB
School of the Built Environment, Heriot-Watt University
Project Leader, ENHSA

CONFERENCE ORGANIZATION COMMITTEE

Özgür DİNÇYÜREK (Co-Chair)
Şebnem HOŞKARA (Co-Chair)
Mukaddes FASLI
Rafooneh M. SANI
Harun SEVİNÇ
S. Müjdem VURAL

Eastern Mediterranean University, NORTH CYPRUS

CONFERENCE ORGANIZATION SECRETARIAT

S. Müjdem VURAL (Coord.)
Nilay BİLSEL
Aminreza IRANMANESH
Timothy Onosahwo IYENDO
Begüm MOZAIKÇI
Özlem ŞAHAL
Bedia TEKBIYIK TEKİN
Gökhan VAROL

Eastern Mediterranean University, NORTH CYPRUS

CONFERENCE THEMES

Diversified Mediums

- The mass/digital/social media and architectural education
- Information and knowledge in architectural libraries
- Implicit learning and education
- Extracurricular activities / informal education
- Pre-undergraduate education (for architecture)
- The role of accreditation in architectural education

Dynamic Philosophy

- Ideology / beliefs and architectural education
- Authentic pedagogic models for architectural education (studio versus live project)
- Architectural education for conflicted fronts / disaster management
- Contextual / regional / local effects in architectural education

Contradictory Education

- Architectural education for professionals
- Technology and architectural education
- New challenges / trials
- Architecture for the poor

CONTENTS

Preface Özgür Dinçyürek Şebnem Hoşkara S. Müjdem Vural	XI	Editors
Rector's Note Abdullah Y. Öztoprak	XIII	Rector of the Eastern Mediterranean University
Dean's Forward Şebnem Hoşkara	XV	Dean of Faculty of Architecture, EMU
Acknowledgments	XVII	UIAE Conference Organizing Committee
Yiğit Acar,	1	Ideological Limits of Design Studios
Ece Kumkale Açıkgöz	13	Uncovering Creativity Structuring the Teamwork Experience in Architectural Design Studio with Assessment and Ideation Techniques
Ece Kumkale Açıkgöz	27	Inserting the Design Component into CAD Teaching The Problem of Restructuring the Courses Computer Aided Design I and II
Ece Kumkale Açıkgöz	39	A Community for Architectural Sketching Experiencing the Releasing Impact of Sincere Sketching
Kamyar Arab Aref Arfaei	49	Hidden Dimensions in Architectural Education
Sebla Arın Ahsen Özsoy	55	Pre-Undergraduate Built Environment Education & Participation
Nezih Ayıran	65	Some Criticisms on Theory-Driven Architectural Education
Jacob Sebastian Bang	75	The Operational Drawing Workshops for Undergraduates at the School of Architecture
Saadet Toker-Beeson	83	Teaching Structures in Architecture Schools
Deborah Bentley	91	RIBA Validation or NAAB Accreditation: A Comparison of Architecture Education
Peter Bertram	99	Cultivation of a Problem Field
Warebi Gabriel Brisibe Ferdinand Daminabo	111	Examining Student Interests in Vernacular Architecture The Role of the 'Hands-On' Teaching Approach

Ata Chokhachian Resmiye A. Atun	121	A Framework for Exploring the Role of Parametric Design on Design Procedure
Kyle Sturgeon Anna Gritching	141	Urban Design Build: The Frederick Douglass Peace Park Community-based Learning Through Making
Selcen Nur Erikci Derya Adıgüzel Özbek	151	Integration of Bep-Tr Methodology to the Architectural Education
Rania Abdel Galil Yasmin Kandil	159	Indifferent or Devoted An Exploration of Student Identity Through the Design Studio
Nilay Ünsal Gülmez Murat Şahin Önder Turan Ela Kaçel Begüm Erçevik	169	Restriction of the Unrestricted
Amir Sasan Hadian	177	Using Metaphor and Analogy for Understanding Structural Concepts in Architectural Education; an Iranian Perspective
Badiossadat Hassanpour Adi Irfan Che Ani	189	Transparent Assessment Model in Architecture Design Studio Eastern Mediterranean University as Case Study
Shayan Heidarian Samaneh Ghafourian	201	Morphology of Multi-Disciplinary Basic Design Studios due to Upper Level
Anna Katrine Hougaard	213	Architectural Drawing- An Animate Field
Maryam Imani Emadi	223	Perception of Students about Jury Evaluation in Design Studio Case Study: Second Year Architecture Students in EMU, Cyprus
Shirin Izadpanah Kağan Günçe	231	The Necessity of Teaching Students Develop Critical Thinking in Design Studios A Case of EMU Fourth Year Interior Architecture Students
Michael Karassowitsch	241	Architecture Is Not Technology The Space of Differentiation in Architectural Education
Tina Davoodi Fiona Kavakure	251	Educating Socially Responsible Architects for Shelter Deprivation

Pooya Lotfabadi Aref Arfaei	261	The Impact of Materials Used on Jury Perception
Cristiano Luchetti	267	"Space[Less]City": A Virtual Learning Community
José Manuel Pagés Madrigal	273	About Accreditation Processes Some Similarities and Disparities
Raffaella De Martino Rossella Franchino Caterina Frettoloso	281	Design Issues in Technology Education From The Building to Open Space
Abdollah Mobaraki Mohsen Shojaee Guita Farvarsadri	291	An Evaluation on Design Critique Sessions in Urban Design Studios; Case of Urban Design Program at Eastern Mediterranean University (EMU)
Faas Moonen Tom Veeger	299	Preparing Students towards the Complexity of Today's Practice Start-Up in a Multidisciplinary Assignment
Halleh Nejadriahi Arash Vahedi	311	Students' Perspective on the Role of Hand and Computer in Architectural Education: A Case Study
Ece Ceren Önder Tonguç Akış	317	An Approach to Built Environment Education Practices: The Case of Marmaris/Turunç Mud Brick Preschool Workshops
Shadi Pakpour Aghghaleh Maryam Alsadat Hosseini Mojarad	329	The Effect of Educational Settings on the Students' Behavior By Analyzing Stress Factors in EMU Faculty of Architecture
Sigrid Pauwels Johan De Walsche Lies Declerck	341	Architectural Education and Quality Assurance in the European Higher Education Area A Flemish Case as a Plea for Academic Freedom
Ehsan Reza	351	The Effect of Socio-Cultural Factors in Architectural Design Education and New Strategies for Criticizing Student's Projects in Eastern Mediterranean University
Robin Schaefferbeke Hélène Aarts Ann Heylighen	357	Imagining Space How to Teach Drawing as a Tool to Explore Spatiality?
Sema Serim Yeşim Alemdar Şeyda Güngör Açıkgöz	365	Complex Relations Unconcealing the Architectural Education



Sezin Tanrıöver Zeynep Ceylanlı Pınar Sunar	373	The Analysis of a Hybrid Educational Approach in Interior Architecture Design Studio: The Case of Bahçeşehir University
Fatemeh Ghafari Tavasoli	385	The First Year Challenge: Architecture Students, from Learning to Perception
Ahmet Erdem Tozoğlu Burak Asiliskender Nilüfer Baturayoğlu Yöney	393	How The Global Issues Become The Core of The Architectural Education? An Integrated Approach by AGÜ School of Architecture
Karolina Tulkowska	399	The Form and Substance in Architectural Education Design Methodology in the Preliminary Exercises at the Faculty of Architecture Warsaw University of Technology
Hülya Turgut Hale Sinirlioglu	411	An Approach to Architectural Design Education: City as a Main Tool for Conceptual and Contextual Design
Hülya Turgut Emel Cantürk	423	Design Workshops as a Tool for Informal Architectural Design Education "Istanbul as a Palimpsest City and Imperfection"
Evren Ülkeryıldız	437	Recomposing Mondrian's Paintings by Using Computer Programs: The Impact of Knowledge and Flexibility
Andrea Vian	449	Design Thinking In a Digital Era Defining a Physical/Digital Methodological Path Task Oriented
Derya Yorgancıoğlu	457	Praxis as a New Conceptual Tool for Architectural Education in the Changing University Context
İpek Yürekli	465	Translation as The Main Skill to Be Developed in Architectural Education
Hugh Clarke	477	Foundation Education for Students of Architecture in Turkey Personal Reflections on the 'Basic Design' Course
Ferdinand F O Daminabo	483	Architectural Education; an Assessment of the Import of Knowledge and Technology Necessary to Combat Climate Change within the Built Environment



Pre-Undergraduate Built Environment Education & Participation

Sebla Arın, M. Arch, PhD Candidate
ITU Faculty of Architecture, Istanbul, Turkey
Email: seblaarın@gmail.com

Ahsen Özsoy, Prof. Dr.
ITU Faculty of Architecture, Istanbul, Turkey
Email: ozsoya@itu.edu.tr

ABSTRACT

The most significant deficiency of the current educational system in Turkey is that the concepts of architecture and built-environment are excluded from the pre-undergraduate curriculum. There is a common tendency to see built environment education as only a part of vocational training. This attitude results in keeping social urban awareness under a satisfying level. This paper focusses on the importance of pre-undergraduate education affecting the quality of urban life. The individual's awareness on built environment gains him/her a new approach, an open mind a consciousness about his/her rights where as a massive awareness results in more qualified urban environments for all. This paper concerns about the examples of built environment education programs in all over the world, urban consciousness and children's rights to participate in built environment. The benefits of dealing with urban issues and being a part of participation processes before becoming adults are mentioned. A case study is also included in the paper. This case study is an ongoing built environment education project in which the author takes a role as an advisor and instructor. This project might be a beneficial model for spreading the environmental consciousness to a wide populace.

Keywords: Pre-undergraduate education, Participation, Built environment education

1. INTRODUCTION

Built environment depends on several dynamics such as politics, economics, design, human rights, etc... all of which are deeply related with the discipline of architecture. As many fields are effecting the constitution of built environment, the decisions which are affecting the quality of built environment are taken by individuals from different professions. These decisions might be of a wider range including the urban planning issues or small individual preferences which are constructing the integrative look of the urban environment when they league together. Each member of the community, consciously or unconsciously, become determinant in decision-making process by using his/her individual initiative. This initiative might be taken in urban management, or in law-making as a legislative, as a member of NGO's or as a simple citizen in voting for urban policies or simply shaping his/her private properties. When all of these decisions come together they form the urban quality of the built environment, altogether. Therefore, every single person ought to have awareness on built-environment issues, independently from being a professional or not. Creating an architectural and urban sensitivity for the whole community would result in more qualified built environments.

Creating the awareness on built environment issues might become possible only if an urban education could be provided in a wide range. This means each member of the public should be aware of his/her responsibilities and his/her rights on having a voice for the urban environment. In order to procure ideal circumstances where every citizen fulfill his/her obligations necessary urban and built environment education should be supplied. The most significant deficiency of the current educational system is that the concepts of architecture and built-environment are excluded from the pre-undergraduate curriculum. Even though architecture has a wide potential to be integrated with other disciplines, it can hardly be seen

that this potential is used at the best. This situation causes two main defects. Primarily, the consciousness of built environment can't be widespread among the public. Therefore most of the main actors that constitute urban environment (users, politicians, legislatives, etc.) tend to adopt an insensible attitude for environmental issues; unfortunately pulling down the quality of life for each member of the public. Secondly, having an idiosyncratic quality, architectural education is generally severe for the students who are used to conventional educational systems. The freshman year of the School of Architecture might become an insuperable threshold for most of the students. Therefore a qualified pre-undergraduate education might ease the adversities of architectural education.

In the terms of this paper rather than discussing the importance of built environment education for the candidate students of architecture, we will focus on the built environment education for non-professionals. Batırbaygil (2001) argues that a qualified architectural environment depends on the education of "outsiders" rather than the education of architects and candidate architects who are already "insiders" of the discipline. Similarly Magliocco (2003) claims that in order to make "architecture", an architectural education is not always an obligation, but the education of the public on built environment is a must. It shouldn't be assumed that the importance of a qualified architectural education for the professionals is underestimated. But without consciousness of the public, the quality of the professionals is not enough to shape the urban environment. Architecture is a discipline which gives its fruits best, when it is produced in a milieu where all actors are conscious.

The basic framework of built environment education was developed in Belgrade Conference on Environmental Education (1975) and Tbilisi In-governmental Conference on Environmental Education (1977). Built environment education aims to raise consciousness on environmental issues and motivate children and youth to take active roles as responsible public figures (Otero & Mira, 2003). Different models of built environment education programs are being arranged all over the world by many institutions such as Chamber of Architects, NGO's, municipalities, universities, museums and art institutions, private initiatives.

In the UIA Built Environment Education Guidelines: 2002 (Peck), it is stated that critical thinking, responsible citizenship, cultural literacy, social relevance and environmental sustainability all can be addressed through using issues of the built environment to teach traditional curriculum material. This phrase is the threshold of architectural education programs in many countries. Each country shape built environment education and repertory of activities according to the needs and deficiencies of the educational system. The major deficiency of most of these programs is that the participants can't be able to see the concrete outcomes of their effort. As far as most of them are instant, short-term activities, a continuous and sustainable model can't be achieved. Within this paper, an educational program which is designed to raise environmental consciousness and constitute an urban culture for children aged 10-13 years old with the aim of becoming a long term project enriched by concrete outcomes of children participation will also be presented. This age range was identified according to the theories on cognitive development of children. Piaget claims that the intelligence of human being develops in a number of stages until maturity (Piaget & Inhelder; 1967). The last stage of Piaget's Theory of Cognitive Development is the "formal operational stage" from adolescence to early adulthood (11- ~15 years). At this stage child gains the ability to understand abstract concepts. This is the stage when the child begins to consider possible outcomes & consequences of actions, starts reasoning and problem solving in a logical and a methodological way. Another pioneer in education is Maria Montessori, An Italian educator who is famous with her method named after her name. She divides human development into four distinct periods which she defines as "planes". The second plane (6-12 years) is the period of formation of intellectual independence and social organization. The third period (12-18 years) is the adolescence when the child constructs of the adult self in society (Scott; 2010). Steiner, who is the founder of Waldorf Schools, defends that placing various disciplines such as art and design in the curriculum benefits developing abstract thinking. And this multi-disciplinary educational system practiced until the age of 14-15 enables the child to adopt into the collective life and raise the sense of belonging (Steiner; 1919). There are many studies focusing on the developmental periods of the child depending on the age ranges. As a matter of fact, there can't be a constant age specified for the cognitive development of all children as far as there are many other factors influencing this process such as cultural, social and physical environment and facilities. But

on the basis of these researches mentioned above, the age range of 10-13 is chosen to be the most convenient for the context of the case-study in which the ability to perceive built environment, self-expression and to use architectural representative techniques have a crucial importance.

2. URBAN CONCIOUSNESS

Built environment education is directly related with urban culture and city. Cities are the symbols of the common life. Therefore all social spaces created within the city should be a reflection of common production. This means every single individual should have the right to say a word on the production of the spaces which shape his/her life style. The construction of the city, common space, can't be left to a privileged class. According to Harvey (2013), right to the city is the city man's right to reinvent and reshape the city according to his needs and wishes. But this right is a collective right, not an individual one. The city man should be aware of the fact that city doesn't belong to an individual, but a collective ownership. So that, he/she should have the conscious that living in the city might sometimes mean to put the public's interest in front of his/her own.

The participation of the citizen to the reshaping of the city is a critical issue and should never be misunderstood. Giving the right to shape his environment to the city man doesn't mean to ignore the accumulation of knowledge and experience of the professionals such as urban planners and architects. The skilled and well educated professionals have a crucial importance in environmental design. The imagination and the foresight of a qualified designer have the potential of opening up the whole society's horizon creating pioneer living environments for the prosperity of people. But architecture has a special context and the relationship between the user and the professional is an interconnected situation. The designer is nourished from the society and the key to create qualified solutions depends on understanding and being aware of needs of the user. The cultural wealth of the milieu that the professionals arise from directly affects their occupational skills. Therefore it can be assumed that a more conscious society would result in more conscious professionals who design qualified environments for the benefit of the whole.

Living in the city and being a part of the built environment bring responsibilities to the citizen. As explained in the previous paragraphs each individual has the right to participate to the decision taking processes about their urban environment. But "the right to the city" comes with the question of scale. Depending of the scale of the urban problem, direct participation might not always be possible. In this situation urban consciousness come up with evaluating urban projects, using one's right to support or confront to environmental decisions and keeping the common weal in front of anything else. Urban consciousness is really important for the sustainability of built environments which includes protecting cultural heritage, efficient use of natural resources and respecting other generations' rights on the built environment. Such kind of a consciousness could only be obtained with proper education supplied for each member of the society. Built environment education shouldn't be limited to vocational education.

3. PARTICIPATION THROUGH BUILT ENVIRONMENT

The user's participation to the production of his/her own built environment should also be considered from the aspect of civic rights. In democratic communities the citizens have the right to participate in decision-making processes which would directly affect his/her life style. But in order to be efficient in these kinds of decisions which not only affect him/her but also the rest of the community, an adequate level of cognition and conscious is required. Respecting to other perspectives is important in public life. On the other hand the responsibility of taking urban design decisions that would affect the history and the future of a city can't be given to the individuals who are unconscious about urban culture and built environment. Therefore "built environment education" should be provided in pre-undergraduate education for all citizens that will take a role in public life in order to provide awareness.

Even though their lives are directly affected from them children are generally excluded from built environment decisions. Like many other fields, adults are taking decisions about built environment on behalf of children. But having a voice in the shaping process of his/her own built environment independently from the individual's age, gender, race is an issue that

should be evaluated in the frame of civic rights. From this perspective children should be included in the urban design process as active participants. It is a public responsibility to set the necessary platforms for child participation.

According to Knowles-Yanez (2005), including children to social decision-taking process should be considered with youth activism, public participation, children rights, experimental education and sustainability. Including children in urban planning process would also benefit to their individual and intellectual development. From the educational point of view, child participation to urban planning enriches present curriculum with new cognition and experience. Besides its educational value, this subject should also be considered in respect to children's rights which is also an extension of human rights.

As being one of the most important researchers in the field of "children participation", Driskell (2002) claims that a major misbelief about child participation is that having been children plenty of years ago, adults have the adequacy to think and decide in behalf of children. But the point that escaped the attention is that "being child / young" is an unstable context which change in time. No one else can fully understand what it is like being a child in today's world, rather than themselves. Therefore adults should take a facilitative role instead of being an oppressive leader in participation projects. This is similar with Hart's participation ladder model (Fig.1) where "youth-initiated, shared decisions with adults" is on top and "manipulation" in which children don't have an actual voice is on the bottom (Hart; 1997).

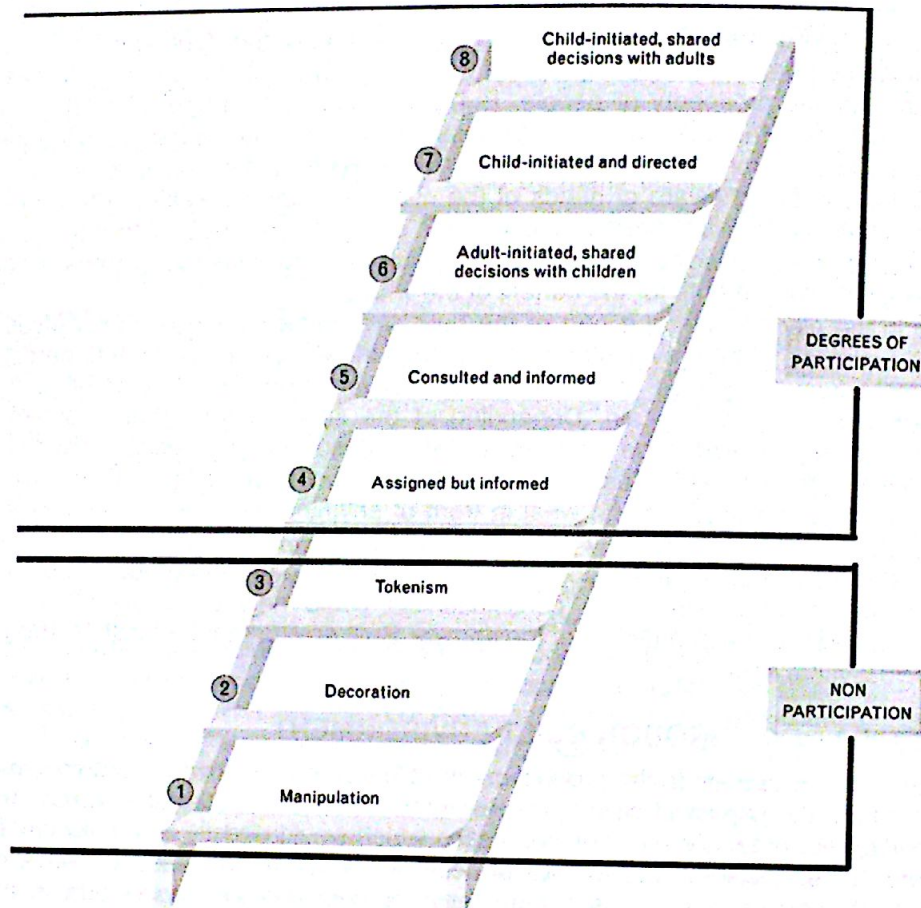


Figure 1: Hart's Participation Ladder (Hart; 1997)

There are many programs all over the world which come out with the assertion of being a children participation project. But the important thing is to create a meaningful participation which means the interactive participation of the children on the subjects affecting their individual and social lives. This participation process should be structured by the pursuits, aims and competencies of the children instead of passivizing them. An ideal participation project should have some specific qualities. It should be transparent, have voluntary basis,

promote children to present their ideas, let them understand the whole process with all its aspects, offer the opportunity of building up the structure of the activity to children and let the children to see the results of their participation and effort (Chawla; 2001).

The common approach which ignores the rights of the children as equal citizens is the main reason why children participation projects generally fail to reach a satisfying level. But according to 1989 United Nations Convention on the Rights of the Child, children have the rights to get proper education, be an active participant of the social and cultural life, to have a word in any kind of field affecting them and declare his/her ideas. Freeman & Tranter (2011) claims that children participation projects shouldn't focus on making researches about children, but making researches with/by children. Professionals have to avoid from alienating children from designing process. The collaborative projects where children find a chance to express their ideas on urban design and architecture would benefit both the children and the professional designers. Children should find a way to put their signs on urban environment by participation projects, instead of dealing with abstract projects which neither come out with concrete results nor go further than stalling them.

4. CASE-STUDY

Making use of this theoretical background which is explained in the previous chapters, a schedule was prepared for a built environment education program and started to be practiced and it will be explained within this article. This program is an on-going project which is supported by a number of institutions. The project is called "Oyun Engel Tanımaz" (Game Without Handicaps) and it is coordinated by NKK (Nilüfer Kent Konseyi / Nilüfer City Council). The author's participation is as an advisor and instructor in the educational process. This project aims to evolve into an "Urban Culture School" for a wider populace in the future.

"Game Without Handicaps" Project aims to let the children design a playground for themselves in which both handicapped children and children without any handicaps would be able to play together. The project takes its name from this specific purpose. Meanwhile, in order to get the attendees prepared for the designing process, a built environment education is supplied for them. The education schedule consists of two different terms. The first term is based on a theoretical content, whereas the second one is focused on the practical design education, both of which will be explained in the following sections.

The playground project will be designed for a specific park area and planned to be built in the sponsorship of the Nilüfer Municipality. The children who will attend to this program were chosen according to several criteria. First criterion was to create an inclusive playground in which everybody could feel himself/herself involved. This could only be managed by applying universal design principles and letting people to express their ideas in behalf of themselves, not anybody else. This means disabled children should also find a way to present their demands. Therefore a total number of 30 attendees were planned, 6 of which were handicapped and 24 were unhandicapped. The second criterion was to involve the actual users of an urban space in the designing process. Therefore, the attendees of the program were chosen from the primary schools surrounding the park area. There were four major schools in the neighborhood and 24 unhandicapped students were chosen on voluntary basis through the medium of District National Education Directorate. As most of these students are also the inhabitants of the neighborhood, they are supposed to be the direct users of this playground. 6 handicapped children who were having different kind of disabilities were again chosen on voluntary basis from a social support foundation that they were keeping attendance. This center is also located close to the park area. The third criterion was the age of the participants. They were aged between 10-13 years old, as this group was the most appropriate group to learn and benefit from the built environment education.

The methodology of this educational program is to give both theoretical and practical education on built environment and architectural design and at the end of the educational process to obtain a playground project designed by children which is ready to be built with minimal technical support. The educational program consists of two terms first of which has 11 weeks, second one has 15 weeks. Each week there will be a meeting on Saturday that long for 3-4 hours. The first term is designed to focus on different theoretical issues that

would be beneficial to understand the built environment and to design an inclusive playground. Each of the seminars was given by experts of that topic. These topics were in order of "creative drama", "human, children and disabled rights", "designing a social project", "the use of public space", "sustainability, environment and ecology", "game, children and space", "scope of built environment", "waste management", "human body and architecture", "rise of urban space and local authority", "architectural cognition: (architectural design and application, responsibilities of chamber of architects, open space design)". In all of these seminars depending on the context visual materials like power point presentations, drawing materials, animation movies, etc... were used (Fig:2, Fig.3). Meanwhile verbal translation was also supplied for two blind students who occasionally attended the seminars. Also some plays based on body experience were created and practiced in the convenient topics. At the end of the first term the attendees were supported by theoretical knowledge that would be helpful for the designing process and also essential to constitute urban consciousness.



Figure 2: OET-Term 1: Theoretical Education



Figure 3: OET-Term 1: Working on the project

The second term consists of interrelated practical exercises that aim to teach methods of designing and representational methods. This term consists of 15 weeks all of the sessions are sequential. The educational curriculum of the second term is planned to direct participants to design the playground project step by step. Each week's program consists of approximately 3 sections that cover up 4 hours totally with the breaks. At the beginning of the session, there is a short presentation on that week's topic to make it clear how would the exercises going to be made and give information about the content. At the beginning of each week, all of the students are given a detailed schedule explaining the exercises, giving clues about these exercises and the materials that would be used, and expressing the expected benefits that would be gained from that week's program. The content of the second term would be: "basic design education", "architectural representational techniques", "architectural analysis", "creating space", "designing for a specific purpose", "designing for the user's needs" and "representation of a spatial solution" (Fig:4, Fig.5). The participants are expected to design a playground with all its entities such as the landscape plan, play equipment, walking & biking routes, urban furniture and etc... All the attendees will work in groups in the designing process. There will be 3-4 professional designers each week in workshop-place to help the participants without over-shaping their creativity. These sessions will be similar to an architectural design studio. The methodology of these design activities will be based on brain storming, team work, face to face education, table crits and self-representational techniques. The final project is planned to be the fruit of team work of all participants. Based on the concept created by the participants of the project, the construction drawings will be prepared by the professionals in the Parks Department of the Municipality and the playground will be constructed in the sponsorship of the Nilüfer Municipality.



Figure 4: OET-Term 2: Working on clay models



Figure 5: OET-Term 2: Working on basic design project

This is an on-going project. The first term has been finished and the second term was organized and just started when this article was written. It is planned to finish the construction of the playground by the autumn of 2014. Therefore only the early outcomes of the project could be obtained, yet. But depending on the first impressions it might be possible to state that, even though the first term is more theoretical, when supported by interesting teaching materials, participants were promoted to express their ideas and given opportunities to play in the frame of the topic, the concentration of the attendees stay at high levels. Consequently, it is assumed that such kind of a long-termed project would broaden the participants' minds on urban culture, spatial organization and built environment while increasing the public awareness of urban quality. Another important aspect of the project is to encourage children to participate in the public issues that are related to them before reaching adulthood. The quality and functionality of the final product should be the topic of another research after the second term and the construction process are totally completed.

5. CONCLUSION

Pre-undergraduate built environment education gives the opportunity to get involved with urban experience and to use their right to participate environmental issues before becoming adults and developing rooted beliefs which are difficult to change after a specific age. Being conscious on these subjects and being accepted as equal participants would raise the children's self-esteem. Being related with an architectural based education adds some skills to the child such as abstract thinking, converting visual data and building a bridge between diverse disciplines.

Built environment education is crucial for the 21st century. Because it is about understanding not only built environment but also principles of design and participation. This century requires the individuals to obtain a designer identity. As a reaction to the standardization which is brought by serial production, "tailor-made" designs in every sector become a status symbol in 21st century. This forced people to design their own goods. The new technologies give the opportunity of removing the mediator, the professional designer, and let the individual design different goods such as furniture, car, outfit, web-blog, etc... according to his/her taste and needs. Zande (2010) emphasizes on the major contribution on national economy that the widespread design education starting from early steps of the childhood would make. The key of creating a difference in the economic field in the globalization era depends on innovation and creativity.

The benefits of the pre-undergraduate education aren't limited with only children. As far as children are the best way to reach a wider populace starting from their family and amongst the society rapidly. Built environment education is important for the whole members of the urban society not for designing the urban environment according to their taste but for noticing the difference between qualified and unqualified environments and being able to use their civic rights to live in a qualified built environment.

6. REFERENCES

- BATIRBAYGIL, H., 2001, Mimarlık Eğitime Alternatif Bir Bakış (An Alternative View to Architectural Education), *Mimarist*, vol:1, pp:81-85
- CHAWLA, L., 2001, Evaluating Children's Participation: Seeking Areas of Consensus, *PLA Notes* 42, pp:9-13
- DRISSKELL, D., 2002, *Creating Better Cities with Children & Youth*, Unesco Publishing & Earthscan Publishing, UK
- FREEMAN, C. & TRANTER, P., 2011, *Children and Their Urban Environment: Changing Worlds*. Earthscan Pub.: London & Washington
- HART, R. A., 1997, *Children's Participation: The Theory and Practise of Involving Young Citizens in Community Development and Environmental Care*, Earthscan Publishing, London
- HARVEY, D., 2013, *Asi Şehirler – Şehir Hakkından Kentsel Devrime Doğru (Rebel Cities – From the Right to the City to the Urban Revolution)*, Metis Yay.; İstanbul
- KNOWLES-YANEZ, K. L., 2005, Children's Participation in Planning Processes. *Journal of Planning Literature*. 20:3, pp: 3-14
- MAGLIOCCO, A., 2003, Education in Architecture. University role into architectural-environmental education: parallel experiences of didactic workshop, *EAAE Transaction on architectural education N°15 Writings in architectural education*, EAAE prize 2001-02 (ed. Ebbe Harder), Royal Danish Academy of fine arts, School of Architecture, Copenhagen. pp: 207-217
- OTERO M.D.L., MIRA R.G., 2003, Action Competence in Environmental Education, MIRA R.G., CAMESELLE J.M.S., MARTINEZ J.R. (ed), in *Culture, Environmental Action and Sustainability* (pp:71-84). Hogrefe & Huber Pub., Germany
- PECK, M. (Director), 2002, *UIA Built Environment Guidelines*, UIA International Work Programme "Architecture and Children (Built Environment Education)
- PIAGET, J. & INHELDER B., 1967, *The Child's Conception of Space*, The Norton Library: New York
- SCOTT, S., 2010, *Architecture For Children*, ACER Press: Victoria, Australia
- STEINER, R., 1919, *An Introduction to Waldorf Education*
http://wn.rsarchive.org/Articles/IntWal_index.html
- THE UNITED NATIONS CONVENTION ON THE RIGHTS OF THE CHILD (1989)
<http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>
- ZANDE, R. V., 2010, Teaching Design Education for Cultural, Pedagogical and Economic Aims, *Studies in Art Education*, V:51, No:3, pp:248-261