EXPLORING THE ROLE OF THE CITY AS A LEARNING ENVIRONMENT FOR HERITAGE EDUCATION

Gökçe ŞİMŞEK*, Esin ACAR**, Nurdan ATALAN ÇAYIREZMEZ*** and Ayşe ELİTOK KESİCİ****

Received: 28.11.2012; Final Text: 30.07.2013

Keywords: Heritage education; city; urban heritage; children; learning environment.

- 1. UNESCO recommends developing education and information programmes in the project entitled "Young People's Participation in World Heritage Preservation and Promotion" from http://whc.unesco.org/en/wheducation/.
- 2. ICCROM Raising Awareness from http://www.iccrom.org/eng/05advocacy_en/05_01raising_en.shtml. (05.08.2012)
- 3. Why Heritage Education? from http://www.hereduc.net/hereduc/i18nfolder.2005-04-15.6720001990/
- 4. https://shareweb.kent.gov.uk/Documents/leisure-and-culture/heritage/heritage-education-packs/canterbury-city-walls.pdf.
- **5.** http://www.loc.gov/folklife/edresources/ed-heritage.html.
- **6.** http://www.thehindu.com/news/cities/Delhi/article3323309.ece.
- 7. http://www.kulturbilinci.org/eski/eng/current_project_2.html.
- * Department of History of Art, Faculty of Arts and Sciences, Adnan Menderes University, Aydın, TURKEY.
- ** Department of Elementary Education, Faculty of Education, Adnan Menderes University, Aydın, TURKEY.
- ***Ankara, TURKEY.
- **** Department of Educational Sciences, Faculty of Education, Adnan Menderes University, Aydın, TURKEY.

INTRODUCTION: HERITAGE EDUCATION AND THE CITY

Educating the public on matters related to cultural heritage has become a global endeavour. In recent decades, efforts have been made to develop cultural heritage programmes that target children and young people, particularly at the international level. These efforts range from the development of education and information programmes in a global context (1) (UNESCO, 1972, article 27) to national curriculums (Stone, 2004), with the intention of encouraging initiatives that create a better understanding of the conservation and restoration of cultural property (2), raising awareness of cultural heritage among young people (3), and so on. A broad variety of disciplines and discourses, such as preservation, education and history, has devoted substantial effort to the education of children and young people on heritage.

Particularly in the preservation discourse, beginning with the Athens Charter, encouraging the general public and young people to take an interest in protecting cultural heritage has been emphasised (1931, article 7). In recent years, the education of people of all ages has been considered as part of interpretation programmes (ICOMOS Charter for the Interpretation and Presentation of Cultural Sites, 2007). In addition, recent decades have also witnessed substantial efforts at the city level regarding the need to educate the urban population on issues related to cultural heritage. The establishment of an information programme for all urban residents, including children of school age (ICOMOS, 1987), the potential of urban areas for education and the importance of urban areas in ensuring the participation of the public (UNESCO, 2011, article 1) have all been stressed, especially for children and young people.

In parallel to these theoretical developments, specific heritage education programmes have been developed in a number of cities around the globe, such as Canterbury (UK) (4), Montana and Arizona (USA) (5), Delhi (India) (6) and Istanbul (Turkey) (7). Due to the rising number of individuals

under 25 in population counts, already representing 43 percent of the global population (UNFPA, 2011), the need to develop heritage education programmes and projects for children and young people is growing. The fact that "about one in two people lives in a city" (UNFPA, 2011) means that there is an urgent need to develop heritage education programmes at the city level to make young people aware of where they live, who lived there before, what remains of the past today, what problems exist and what they can do to address them. As stated in the European Urban Charter, "adequate conservation can only be achieved through increased awareness among the general public. This requires the use of modern communication and promotion techniques, with special attention being directed at young people, as from school age" (CE, 1992, principle 2). In this respect, it is widely accepted that the education of children in matters related to the cultural heritage of their own city and generating interest in preservation is important not only for them to discover the history of their city but also to encourage their participation and enhance their quality of life.

In parallel with these developments around the globe, Turkey has also witnessed increasing efforts to heighten the level of understanding of heritage issues among children. Aside from the developments in formal education, certain institutions such as the Foundation for the Promotion and Protection of the Environment and Cultural Heritage, the Ankara Section of the Union of Architects and the Cultural Awareness Foundation and researchers (Asatekin, 2004) have been developing locally specific programmes aimed at children. Each heritage programme has different goals, whether the aim is to raise awareness of a specific type of cultural heritage or preservation issue or to teach local history and develop citizenship (Şimşek and Elitok, 2012). In Turkey, larger numbers of people are living in cities and according to reports from the Turkish Statistical Institute in 2011, 76.8 percent of the population live in cities and town centres. Moreover, the urban environment has undergone substantial changes due to recent urban transformation projects. Because these urban transformation projects generally cause irreversible changes in the authentic qualities of the urban fabric and lack public participation, there is a substantial need to educate the public on their rights as urban residents and their responsibilities for participating in decisions related to the urban environment. Therefore, these projects have greatly contributed to increasing the awareness of young people, as future adults, regarding their urban environment and encouraging them to participate in decisions related to the cities in which they live. In this context, the essence of this article is to emphasise how cities are important in the heritage education of children. The article makes significant contributions in demonstrating possible strategies in Turkey related to the heritage education of children at the municipal level and the important role of heritage education in setting the agenda on urban preservation issues and encouraging these future adults to participate in decisions related to their urban environment. Some 25.3 percent of the population of Turkey is below the age of 15 (18,886,575) (8), meaning that it is necessary to devote greater efforts towards developing heritage education programmes for children and young people to increase their awareness of the urban environment and encourage their participation.

The widely accepted recognition that European towns and cities are "... perfect places for personal development and access to learning and knowledge" (CE, 2008) is valid also for Turkey, given its long history, cultural diversity and variety of cultural heritage. In this respect, this

107

paper proposes that cities and towns with long histories, broad cultural diversity and wide variety in their cultural heritage (archaeological sites, monuments, houses, etc.) from different periods can be viewed as learning environments. The intention is to explore the role of cities as learning environments for the heritage education of children, proposing that the city, as a learning environment, can play a significant role in raising the awareness of children regarding local history, heritage and preservation problems, thereby fostering a sense of belonging on the part of children and encouraging their participation in decisions related to the urban environment.

To this end, the role of the city as a learning environment is examined through the different levels of awareness among children with respect to the local historical environment and preservation issues. It is based on the findings and results of the project entitled "Discovering the Cultural Heritage of Our City", supported by the Science and Society Project Support Program 2011 of the Scientific and Technological Research Council of Turkey (TÜBİTAK). The project focuses on a particular case, the city of Aydın, and has two goals: first, to investigate the effectiveness of the city as a learning environment for heritage education with respect to the goals and approaches of the preservation discipline and second, on a practical level, to develop a model for heritage education and stimulate its implementation in other cities in Turkey. It is a rich, activity-based programme including 61 different activities over eight days and has been applied five times to different groups of participants. It combines education and entertainment, where children can quickly learn about heritage places through drama, site visits, painting, writing, and so on. It is an interdisciplinary programme that is enriched by the involvement of experts from different disciplines, including history, archaeology, art history, architecture and education from Adnan Menderes University. During the project, immovable cultural heritage, dating from prehistoric times to the Turkish Republican period in the city of Aydın, which is located in Western Anatolia (Figure 1), are studied.

The project has at its core the city and interactions among the children. In this article, the term "city" denotes urban heritage places (large and small) and their environments, urban residents (especially the residents using these places, those responsible for the preservation of heritage, people living next to cultural heritage, etc.) and heritage institutions located in the city. To validate the role of the city as a learning environment for heritage education, the question of how the key underlying principles and knowledge and activities can be integrated and balanced more effectively is raised. Furthermore, the project, as well as its findings and results, can act as a good indicator and source of data to address these questions.

TOWARDS THE DEFINITION OF THE "CITY AS A LEARNING **ENVIRONMENT"**

Along with the global emphasis on cities, urban areas are not only centres of economic growth but also centres providing opportunities for education (UNESCO, 2011, article 1) (9). Given this emphasis, this study aims to examine how a particular city can affect children's awareness of their heritage, the problems faced in the preservation of cultural heritage and the role of the city as a learning environment. To understand fully what "the city as a learning environment" means, one first needs to define the term "learning environment". However, the intention of this article is

9. The draft text of the new proposed Recommendation on the Historic Urban Landscape, as adopted on 27 May 2011 at the Intergovernmental Meeting of Experts on the Historic Urban Landscape (category II) at UNESCO Headquarters from http://unesdoc. unesco.org/images/0021/002110/211094e.pdf.

not to provide a literature review on the different definitions of "learning environment" but rather to provide a brief description of what "the city as a learning environment" means.

The learning environment is the main component of every education activity and has been studied in depth in educational research (e.g., Bloom, 1956; Joyce and Weil, 1996; Fraser, 1998). The aspects of learning environments and their classification have been studied in the educational context (e.g., Fraser and Fisher, 1982; den Brok, Brekelmans and Wubbels, 2004, Elshout-Mohr, Van Hout-Wolters and Broekkamp, 1999). As has been noted, "...the concept of learning environment is restricted to school settings". In the study, the key underlying principles and knowledge and activities can be integrated and balanced more effectively is raised seven main aspects of the learning environment are defined: a) the physical context, in which learning and instruction occur; (b) the division of roles between teacher and learner; (c) the roles of learners in relation to each other; (d) learning goals; (e) the teacher's method of instruction; (f) the tasks to be performed by the students; and (g) the materials used and the roles they play (Kock et al., 2004). The learning environment has been taken out of classrooms and schools in some cases (e.g., National Research Council, 1996 (10); Davies et al., 2012), thus extending beyond the physical architecture of the space (Dudek, 2000). It may also encompass psychosocial and pedagogical features (Fraser and Fisher, 1982; Roth, 2000). Given these views and changes in the concept of the learning environment, there is a substantial need to elaborate on the widespread practice in heritage education, including teaching about heritage places and visiting sites as powerful factors in successful heritage education. In other words, heritage places and/or historic sites can be considered learning environments. Substantial emphasis has been placed on the importance of heritage places and/or historic sites in heritage education (e.g., Hunter, 1988 (11); Boland, 1994 (12); Harper, 1997 (13); Chin, 2002 (14); Aplin, 2007). The general tendency to regard heritage sites as teaching resources in heritage education is also valid for this project. However, the concept of "the city as a learning environment" goes beyond this general tendency.

The concept of "the city as a learning environment" has been asserted in a number of recent studies and defined in relation to different contexts (e.g., the need to use technology to create local connections and networks in the city context (15) and to "take advantage of the urban situation, using it to develop a relevant and meaningful education programme for schools" (16). In this paper, the concept of "the city as a learning environment" is based on four important key features of a city: (1) the potential and opportunities of the city as a display (1a) of cultural heritage from different periods, ranging from prehistoric times to the present, and (1b) different heritage types (e.g., archaeological sites such as mounds and ancient cities, monuments such as Ottoman madrasah, inns, baths and traditional houses), (1c) different preservation problems (e.g., material problems, use problems, inappropriate conservation interventions, etc.), and (1d) of the heritage issues for the generation of concepts through observation, exploration, and interpretation; (2) the potential of the city as a medium for interacting (2a) with institutions (e.g., the municipality, Regional Directorate of Foundations, museum) related to cultural heritage and (2b) with a culturally and socially diverse range of people; (3) the potential of a city to develop children's understandings of the value of cultural heritage and (4) the strong role of the city in providing the distinguishing character of a locale and establishing a sense of place. The

- 10. http://www.p21.org/storage/documents/le_white_paper-1.pdf.
- 11. Heritage Education in the Social Studies. ERIC Digest, ERIC Identifier: ED300336 Publication Date: 1988-11-00 from http://www.ericdigests.org/pre-929/heritage.htm.
- 12. "Our Past/Ourselves: Teaching with Historic Places", CRM: Using the National Register of Historic Places, Vol. 17, No. 2, 1994, p. 33.
- 13. Harper, Marilyn, Source: ERIC Clearinghouse for Social Studies/Social Science Education Bloomington, Including Historic Places in the Social Studies, Curriculum. ERIC Digest. http://www.eric.ed.gov/PDFS/ED415178.pdf.
- 14. In Heritage Matters News of the Nation's Diverse Cultural Heritage, Teaching American Diversity, p.3 from http://www.cr.nps.gov/crdi/publications/HM_VI_NPS_Activities.pdf.
- 15. http://www.youtube.com/watch?v=9xTnn1dIK6Q. The city as the learning environment: making change happen in Leicester's schools" Invited speaker session by Josie Fraser, ICT Strategy Lead (Children's Capital), Leicester City Council, at Thriving in a colder and more challenging climate, the 2011 conference of the Association for Learning Technology (ALT) on Tuesday 6 September 2011 at 14.50. For information about ALT go to http://www.alt.ac.uk/. Made publicly available by ALT under a Creative Commons Attribution-Non-Commercial 2.0 UK.
- **16.** http://prezi.com/qxowgbx971za/using-the-city-as-a-learning-environment/

concept of "the city as a learning environment", based on some specific features of a city, as explained above, may provide children with an effective, interactive learning and teaching process in heritage education. Here, the main goal is to allow children to interact with heritage places, urban residents and the past in an urban context. In this way, the "city as a learning environment" integrates heritage places from different periods (e.g., museums, monuments, sites and buildings from different periods in a particular city) with urban residents (e.g., experts, neighbours, users and the general public) and relevant institutions (e.g., the municipality, the Regional Directorate of Culture and Tourism, museums, or the Regional Directorate of Foundations) for the heritage education of children. Accordingly, the concept the "city as a learning environment" is regarded not only as a topic of "history," "art" and "culture" but also contributes to the appropriation of heritage by children, as the youngest residents of their city, and encourages their participation in preservation efforts and decisions related to the urban environment. In this respect, the city as a learning environment is considered an appropriate and complementary learning environment for reaching out to young people and all underrepresented groups, encouraging them to participate as stated in Article 27 (UNESCO, 2011) (17).

It is important here to define heritage education precisely in the context of the "city as a learning environment". The different definitions of heritage education (Hunter, 1988 (18); Boland, 1994, Van Boxtel and Grever, 2009 (19)) are not the central concern of this paper, but it is necessary to briefly summarise the previous literature to explain the differences and commonalities of the various approaches to the "city as a learning environment". Generally, "the heritage education approach is intended to strengthen students' understanding of concepts and principles about history and culture" (Hunter, 1988; Patrick, 1993 (20), Bolland, 1993 (21); Koman, 1994 (22)), while it also has the potential to increase the tolerance and knowledge of others (Aplin, 2007). Currently, attempts are being made to examine the contributions of heritage education to the construction of a shared historical knowledge, national identity and social cohesion, and active citizenship (23). Heritage education is regarded as a tool for acquiring key competences in the context of lifelong learning.

In relation with the intention of the project entitled "Discovering the Cultural Heritage of Our City", the creation of an effective learning environment in a city is discussed in terms of four main features. First, it should facilitate on-site learning. The assumption is that the significance of places can be best recognised on-site through observation, experience and touch by and thinking and playing next to them. The first-hand experiences of children lead them to understand the realities and problems of cultural heritage and foster a desire to protect heritage.

Second, it should be based on developing partnerships with the relevant institutions and individuals (e.g., experts, the municipality, the Regional Directorate of Culture and Tourism, museums, the Regional Directorate of Pious Foundations). The interaction of children with the relevant institutions and individuals responsible on the subject of heritage leads them to actively participate in decision-making processes regarding preservation issues.

Third, it should rely on the active involvement of children throughout the learning process, for which a variety of methods and tools may be used to increase their engagement with cultural heritage, preservation problems

17. http://portal.unesco.org/en/ev.php-URL_ ID=48857&URL_DO=DO_TOPIC&URL_ SECTION=201 html

CITY AS A LEARNING ENVIRONMENT FOR HERITAGE EDUCATION

- 18. Heritage Education in the Social Studies. ERIC Digest, ERIC Identifier: ED300336Publication Date: 1988-11-00 from http://www.ericdigests.org/pre-929/heritage.
- 19. Project 3 PhD heritage and entrance narratives: constructing shared historical knowledge from http://www.fhk.eur.nl/ fileadmin/ASSETS/fhk/Onderzoek/CHC/ NWO PhD2.pdf.
- 20. Prominent Places for Historic Places K-12 Social Studies Curriculum, Patrick, J.J. from http://crm.cr.nps.gov/archive/16-2/16-2-all.
- 21. Teaching with Historic Places, Where Did History Happen?, http://crm.cr.nps.gov/ archive/16-2/16-2-all.pdf.
- 22. Historic Places: Their Use as Teaching Tools from http://www.historians.org/ perspectives/issues/1994/9402/9402TEC.cfm
- 23. There is a need to emphasize two projects focusing on heritage education: (1) Heritage Education, Plurality of Narratives and Shared Historical Knowledge, http:// www.narcis.nl/research/RecordID/ OND1335207/Language/en, and (2) Life Long learning Project; Aqueduct: Acquiring Key Competences through Heritage Education from http://eacea.ec.europa.eu/llp/projects/ public_parts/documents/comenius/2009/ com_mp_502572_aqueduc.pdf.

and individuals (e.g., on-site drama activities, site visits, poster-making to highlight preservation problems, meetings with responsible institutions).

Fourth, the "city as a learning environment" should be based on a process of developing one's own knowledge and values in interaction with the real environment, heritage issues, preservation problems and individuals. Apart from the general focus on cultural heritage in the city, the "city as a learning environment" approach is based on encouraging interactions

Table 1. Phases and modules.

110

	MODULES						
PHASES	Historical Urban Development& Periods of human history in the city (1)	Topics Related to Cultural Heritage & Preservation (2)	Heritage Place(s) (3)	People (4)	Institutions Relevant to Cultural Heritage (5)	Activities (6)	
Phase 1	Urban History.	Definition of Cultural Heritage.	Various heritage places in the city.	Experts, participants, officials.	Regional Directorship of Culture and Tourism.	Seminars, drama, workshop, game, research at the Library, visiting the Regional Directorship of Culture and Tourism.	
Phase 2	Urban History through Museum.	Types of Cultural Heritage and their main characteristics.	Museum.	Experts, participants, officials.	Museum Directorship.	Seminars, drama, workshop, game, visiting museum and Museum Directorship.	
Phase 3	Prehistory	Mound, main characteristics, threats and preservation problems.	Mound	Experts, participants, officials.	Museum Directorship.	Seminars, site visit, drama, workshop, game, film demonstration.	
Phase 4	Antiquity	Ancient site, main characteristics, threats, preservation problems and values.	Ancient site	Experts, participants, officials.	Museum Directorship.	Seminars, site visit, drama, workshop, game.	
Phase 5	Turkish-Islamic Period	Monuments, main characteristics, threats, preservation problems and values.	Monuments.	Experts, participants, officials.	Regional Directorship of Pious Foundations	Seminars, site visit, drama, workshop, game.	
Phase 6	Turkish Republic Period	Traditional houses, main characteristics, threats, preservation problems, values and preservation approaches	Traditional Houses	Project Team	Municipality	Seminars, site visit, drama, workshop, game.	
Phase 7	Evaluation	Evaluation	Evaluation	Evaluation	Evaluation	Poster making, presentation of posters, poster festival and project festival.	

with the relevant institutions and other individuals in the city involved in heritage issues and preservation.

This approach considers every heritage place, teacher, institution addressing heritage issues and resident of the city as both an educator and a student. In this respect, interactions with heritage places, other individuals and institutions forms the basis of this approach. Children are regarded as discoverers of knowledge through experiencing heritage and related issues in their own context and interactions with other urban residents. The method is not only based on the transfer of knowledge in a ready-made environment by educators but also uses the built environment and community as sources of information. Moreover, it is actively shaped by children and their experiences and interactions.

In relation to this approach, the physical space of the city is organised into three sub-areas: (1) immovable and movable cultural heritage (i.e., Aydın Museum, Dedekuyusu Mound, Tralleis, Ottoman baths, complexes, mosques, Ziraat Bankası [Agricultural Bank], Republican houses); (2) relevant institutions (i.e., Aydın Museum, the Aydın Regional Directorate of Foundations, Aydın Municipality, the Aydın Regional Directorate of Culture and Tourism); and (3) meeting places (i.e., with experts from different disciplines, individuals living next to heritage places, individuals participating poster exhibitions). In **Figure 2**, while certain primary cultural heritage are presented on the map, main meeting places, which can be anywhere where activities take place, are assigned.

At a practical level, the approach of the "city as a learning environment" is based on a process, through which the periods of a city's cultural history are distributed chronologically. The process is designed in seven phases, encompassing six modules: (1) Historical Urban Development & Periods of Cultural History within the City, (2) Topics Related to Cultural Heritage and Preservation, (3) Heritage places, (4) People, (5) Institutions Related to Cultural Heritage, and (6) Activities. The details of each modules are provided in **Table 1**. This paper focuses on Aydın as a case study to understand the roles and effects of the city as a learning environment on the heritage education of children.

THE CITY OF AYDIN AS A LEARNING ENVIRONMENT

The city of Aydın is located in the west of Turkey near the Aegean Sea and a growing urban centre (**Figure 1**) with 191,000 residents (**24**). The early settlement of the city centre dates back to the Bronze Age. There are varieties of cultural heritage such as mosques, inns, madrasahs, mesjids, baths and complexes from the Ottoman period, and buildings such as banks, hotels, houses and shops from the period that began with the foundation of the Republic of Turkey (**Figure 2**). These heritage places are from different eras, such as Dedekuyusu (Deştepe) Mound from prehistoric times (Akdeniz, 2001), the Tralleis, an archaeological site from Antiquity (Dinç, 2003), the Nasuh Paşa Complex from the Ottoman period and Ziraat Bank from the Turkish Republican period. Therefore, the contemporary city centre features multiple layers of characteristics and a richness of heritage types, including archaeological sites (9), historical sites (3), religious and cultural buildings (54), military buildings (3), administrative buildings (15), industrial buildings (14) and residential buildings (98) (Aktakka, 2012).

In Aydın, the most famous heritage place is the Tralleis archaeological site, featuring the freestanding remains of a bath-gymnasium complex

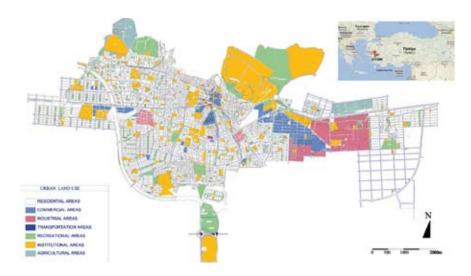


Figure 1. The location of the city of Aydın in Turkey and Land Use in the city center of Aydın.

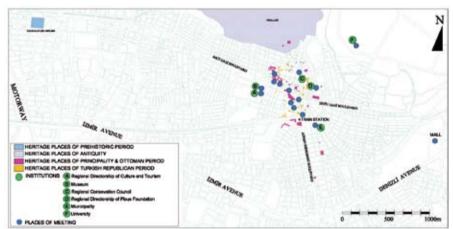


Figure 2. Organization of the city for "City as a Learning Environment".

from antiquity, known as "Üçgözler". The Cihanoğlu Mosque from the Ottoman period has been hailed as a prominent example of its type from the era of the Ottoman Westernisation of the Aegean region (Goodwin, 1971, 388). In the 19th century, the city was well known, being on the route of the first train line through Anatolia connecting İzmir with the Aydın Line constructed in the second half of the 19th century. The city was culturally diverse, featuring Greek, Jewish and Muslim quarters (Simsek, 2011) and played a key role in the War of Independence, when many buildings and sites from the Ottoman period, such as the city walls, the public buildings, and the Greek and Jewish Quarters were demolished. There are also various types of buildings from the Republican period, including homes, banks and hotels. These cultural heritage are generally beset by different preservation problems, such as inappropriate functions, lack of use, material deterioration, lack of maintenance and insufficient presentation, and very few still contribute to the social and economic life of the city, although they have the potential for re-use and refunctioning. Apart from these problems, the city is an administrative centre for cultural heritage, containing such governmental institutions as the Aydın Regional Directorate of Foundations (responsible for the cities of Aydın and Denizli), the Regional Directorate of Culture and Tourism, and Regional Cultural and Natural Assets Conservation Council (responsible for Aydın and Denizli and offering residents the opportunity to participate in decision-

25. The programme was applied before the transformation of the national education programme (4+4+4). In 2011, primary school was the first formal school begins with the first grade and ends at eight.

making processes regarding their cultural heritage). In this respect, the city centre of Aydın, which is rich in cultural heritage from various periods and faces many preservation problems, is home to the regional centres of a number of governmental institutions, affords children the opportunity to experience different aspects of their heritage, witness the preservation problems being experienced, and interact with individuals and institutions. In this respect, Aydın can be considered a good learning environment for heritage education. Thus, it is the intention of this paper to demonstrate the role of a city with the qualities mentioned above as a learning environment for heritage education.

METHOD AND SCOPE

The paper is based on the results and data gathered from a heritage education project offered by Adnan Menderes University for sixth and eighth grade students (164 children aged 12-14) in the primary schools (25) in Aydın. The programme was applied to 164 children over five periods of eight days each, and data were gathered over the summer of 2011. In particular, children (aged 12–14) from 11 schools located in city centre (Figure 3) are the main focus group, with priority assigned to employed children and high-risk groups. The geographical proximity of the schools to the city centre, where most of the heritage places are located, differs (from within the historical environment itself to schools approximately 1 km away), as well as the socio-economic statuses of the children. The children located to the south and east are predominantly children of lower-income immigrant families, while those living close to the city centre and in

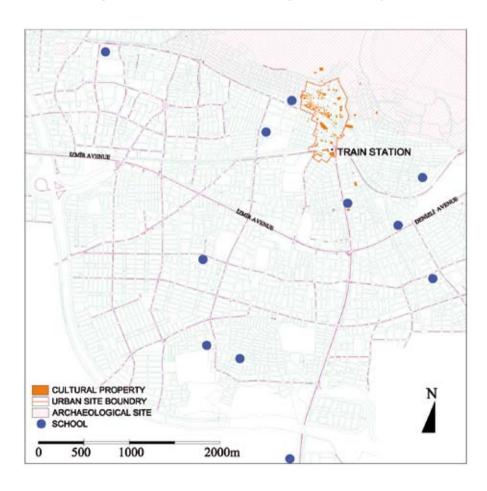


Figure 3. Location of heritage places and schools in Aydın.

the western part of the city have a fairly even mix of native families and the children of civil servants from relatively higher income families.

This research was based on data on 61 activities with scientific themes (i.e., architectural characteristics, sources of information, surface investigations), heritage and urban themes (i.e., urban history, changes in the settlement over time, location, types of heritage places, preservation, values of heritage), social themes (i.e., civil rights and responsibilities, public participation and influence) collected to validate the methodology (Şimşek, 2011a), as shown in **Table 2**. The data were analysed using both qualitative and quantitative research methods: (1) analysis of questionnaires,

Table 2. Distribution of the activities according to main themes

METU JFA 2013/2

114

	ACTIVITY THEMES			
SCIENTIFIC THEMES	HERITAGE and URBAN THEMES SOCIAL THEMES			
_	and experiencing surface investigation, Visiting Trallei g the Cultural Heritage dated back to the Turkish Repu			
	Visiting Aydın Regional Directorship of Culture and Tourism and seminar on the Mission and Responsibility of the Regional Directorship, Visiting Aydın Museum and seminar on the Museum' Mission and Responsibility, Visiting Regional Directorship of the Pious Foundation and semina on Its Mission and Responsibility, Visiting Aydın Municipality and seminar on Its Mission and Responsibility, Workshop 6: Interview with Public – Monuments and Public Statements, Poste Festival, Project Festival			
Characteristics of Cultural Herita on the Problems Related with the	ruct the ancient structures ?, Seminar on General age, Seminar on Values of Cultural Heritage, Seminar he Preservation of Cultural Heritage and Principles of y of Aydın from the Photographs, Seminar on Historical			
Searching at the Library of Adnan Menderes University, Film Demonstration: Life at Prehistoric times at Anatolia, Game 3: Finding the objects from past, Defining and interpreting archaeological objects	Game 2: Heritage Places of Our City, Drama I: Museum and officers I; Workshop 3: Writing – Objects and Stories; Evaluation of Workshop 3; Drama 2: 1 Country, Many Cultural Heritage Places; Drama 3: Importance of Cultural Heritage; Drama 4: School Trip to Dedekuyusu Mound; Drama 5: Presentation and the Mound; Game 4: What? Prehistoric time?; Workshop 4: Painting – 1 Mound, Many Cultural Layers; Evaluation of Workshop 4; Drama 6: Museum and officers II; Game 5: The Story of Tralleis; Workshop 5: Mini Theater Play- Ancient City and the remains of the Bath-Gymnasium Complex so called 'Üçgözler'; Evaluation of Workshop 5; Drama 8: creativity and the archaeological site; Drama 9: 1 Mortal Man, 2 Immortal Men; Drama 10: 1 Mortal Man, 1 Immortal Man; Drama 11: Stop destroying cultural heritage!'; Game 6: Measuring With Our Body; Drama 12: If monuments are not used; Evaluation of Workshop 6, Drama 14: New buildings in Old Setting; 2D Model of monuments of the dated back to the Turkish Republican Period; Evaluation of Workshop 7; Drama 15: If public owns their city; Game 8: Defining the Meaning of Heritage; Brainstorming Before Postermaking; Workshop 8: Poster making - 100 Children, 1 City; Presentation of Posters; Evaluation of Workshop 2, Workshop 2: Locating heritage sites on the city map	Game I: Meeting - Children, City and Project Team, Workshop I: 1 Project and 100 T-shirts, Evaluation of Workshop I		

of Aydın.

115

(2) content analysis, (3) semi-structured interviews and (4) observations. Four programme experts (an architect-preservation specialist, two experts on education and an archaeologist) analysed and evaluated the data. Data triangulation is based on overlapping the results of a pre-test, post-test, content analysis, semi-structured interviews and observations to maintain and increase reliability and validity. Four different forms of data were used: (1) pre-test and post-test questionnaires, (2) posters on preservation issues, (3) written documents; and (4) pictures and figures.

The pre-test and post-test questionnaires are based on eight main topics related to the main themes of the program: (1) the definition of cultural heritage, (2) the basic characteristics of cultural heritage, (3) cultural heritage and heritage related scientific disciplines, (4) knowledge on cultural heritage in Turkey, (5) knowledge on and approaches to the preservation of cultural heritage and basic principles of preservation, (6) knowledge on cultural heritage in their city, (7) value and importance of cultural heritage, and (8) problems related to the preservation of cultural heritage in Aydın. A pre-test questionnaire (15 items) and a post-test (10 items) were used to measure the changes in the children's level of knowledge on heritage issues and their appreciation of heritage places, applied before the programme and at the end. The children completed the questionnaires under the guidance of two observers. The questions were designed to evaluate whether the children had gained knowledge on heritage and preservation issues and improved their understandings and approaches.

Content analysis is employed to assess the contributions and effectiveness of the city as a learning environment. It is based on understanding the meanings attributed by the children through their outcome products such as the texts, paintings, posters and the phrases used. The data obtained through the content analysis are classified in relation to the outcome products, with the findings interpreted through a descriptive analysis. Two researchers individually coded and classified the data to increase reliability. The documents analysed through the content analysis were read three times, with a similar classification made each time. For instance, the content analysis of the 66 posters, submitted by 80 percent of the children, provided insight into not only the changes in the knowledge but also the children's sensitivity in addressing preservation problems.

After the daily exercises, a semi-structured interview was generally applied. The children were asked questions on the main topics of the exercises to assess the changes in their knowledge and understanding. During these exercises, the experts systematically watched the children and recorded their statements. Of the sixty-one (61) activities during the programme, the results of various activities such as site visits, drama activities, workshops, seminars, and games were considered to explain and support the findings. As shown in **Table 3**, the following research methods are used to analyse and evaluate the daily activities.

FINDINGS

In conjunction with the stated purpose and method, this paper analyses the role and effectiveness of the city as a learning environment for heritage education by attempting to understand the changes in the children's knowledge, understandings, attitudes and opinions regarding the heritage concept, heritage places sites within their city, and approaches to

ACTIVITIES	CONTENT ANALYSIS	OBSERVATIONS	SEMI-STRUCTURED INTERVIEW
SEMINARS	Х	x	Х
DRAMA	Х	Х	Х
WORKSHOP	Х	Х	-
GAME	Х	Х	Х
POSTERS	Х	Х	Х
SITE VISITS	Х	Х	-

Table 3. Methods used for analysing and evaluating the data gathered through the activities

preservation. The findings are evaluated according to three criteria: first, the children's knowledge on the concept of "heritage" and cultural heritage in Aydın; second, the values and significance accorded by the children; and third, the children's approaches to preservation and the preservation problems identified by them.

Children's Knowledge of the "Heritage" Concept and Heritage Places in the City

The project reveals that children had low levels of knowledge, interest in and engagement with heritage in Aydın prior to the education programme. The programme, which enables children to learn in, through and about the cultural heritage of and heritage places in their city through first-hand experience, made a substantial contribution to increasing the children's awareness of heritage types, heritage places sites and enhancing their knowledge. Therefore, the programme demonstrates that experiencing heritage places sites within a city plays valuable role in not only identifying heritage places sites but also increasing the knowledge of children regarding the concept of heritage, types of heritage and the main characteristics of cultural heritage. This type of experience provides children with information on what heritage is, what heritage places look like, what the basic characteristics are, where they are located within the city, how they are used, what their physical conditions are and other topics.

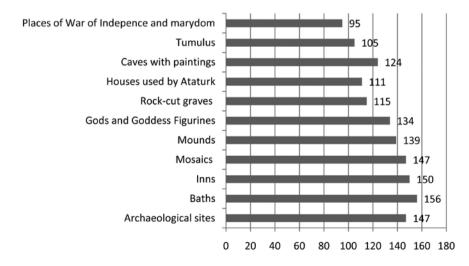


Figure 4. Number of children identifying the heritage items under the concept of heritage.

■ Heritage Types according to End Test

Therefore, the city as a display of heritage places makes a substantial contribution to the development of children's understandings of the concept of heritage, heritage types and their basic characteristics.

Most children in the programme had difficulty in defining the types of heritage prior to programme. According to a multiple choice questionnaire on the types of cultural heritage applied at the beginning of the programme, only nine (9) percent of the children were able to identify the six given cultural heritage types (historical buildings, antique objects, traditional houses, archaeological sites, the Mevlevi Sema Ceremony, folk tales). Unexpectedly, most of the children were unaware that "archaeological sites" (54 percent) and "traditional houses" (45 percent) also fall under the concept of "heritage". The results show that most of the children link the concept of "heritage" with classical view of "old buildings" (90 percent). After the programme, the children were asked whether they agreed or disagreed with the 11 different types of heritage listed as forms of cultural heritage under Law No: 2863 on the Conservation of Cultural Natural Property. Figure 4 is a visual presentation of the responses to these 11 heritage types. The responses indicated that 23 percent of children (38) were aware that all of the given choices were included in the concept of "heritage". In addition to the classical understanding of heritage in relation to 'old buildings' (i.e., baths-95 percent/156, inns-91 percent/149), there was an increase in the number of children who were aware that assets of an archaeological nature, such as mosaics (90 percent/148), mounds (85 percent/139), statues of gods and goddesses (82 percent/134) and rock-cut graves (70 percent/115) are also included in the concept of heritage. Additionally, approximately 70 percent of children (115) were aware of the different heritage types after the programme.

The findings also indicate that the children's understandings of certain heritage types such as mounds, archaeological sites, baths, and inns (above 80 percent), which were experienced during the education programme, was better than their understandings of other heritage types (i.e., caves with paintings, places from the War of Independence and martyrdom sites, houses used by Atatürk were below 70 percent), which were explained through lectures but not experienced on-site. Thus, the programme demonstrates that experiencing heritage places on-site makes a substantial contribution to heightening children's awareness and developing their understandings of different types of heritage that is greater than that achieved by lectures alone.

The programme also highlights the importance of the city as an assemblage of heritage places capable of providing children with knowledge on basic characteristics of heritage. Thus, children had the opportunity to experience and compare different basic characteristics of heritage assets and develop their understandings. Regarding the basic characteristics, the children were asked whether they agreed or disagreed with four basic characteristics of heritage assets and rated the given statements on a scale from 1 to 4, ranging from "Disagree" to "Agree", as shown in **Figure 5**. For instance, the high level of agreement with statement II demonstrates that most of the children had learned that each heritage asset is unique, as shown in **Figure 5**. Statement I shows that 89 percent of children had become aware that heritage assets are authentic in terms of material, design, technology and detail. Moreover, it was observed that the children provided examples from the heritage places that they visited when

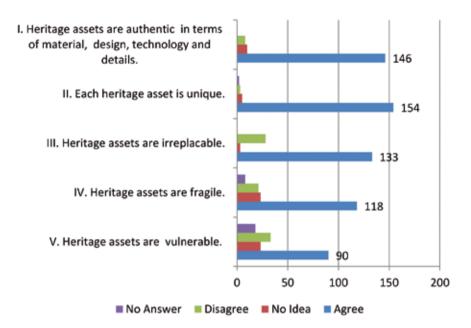


Figure 5. Number of children identifying the basic characteristics of heritage assets.

discussing the basic characteristics of heritage assets. Therefore, the results indicate that city allowed children to obtain first-hand experiences with different heritage places, which was very beneficial to the development of their understandings of the basic characteristics of heritage assets.

Prior to the education programme, the children were asked whether seven items fall under the concept of a heritage asset: Ephesus, the Anatolian Civilisation Museum, the Miniature of the Ottoman Navy, Miletos İlyas Bey Mosque, Aydın Court, and one additional item, the Trojan horse, which is not a heritage asset. In comparison to well-known heritage assets such as Ephesus and the Anatolian Civilisation Museum, as shown in **Figure 6**, the children generally failed to identify the Miletos İlyas Bey Mosque and Aydın Court, which are located within the borders of their city (near the city centre), as heritage assets. In addition, the responses to the question in the pre-programme test "What cultural heritage sites have

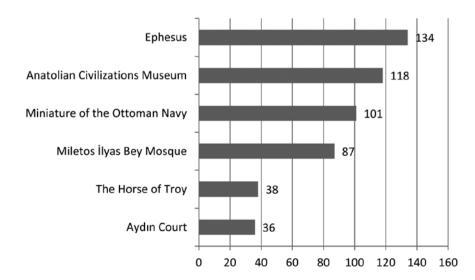


Figure 6. Number of children identifying heritage items under the concept of heritage.

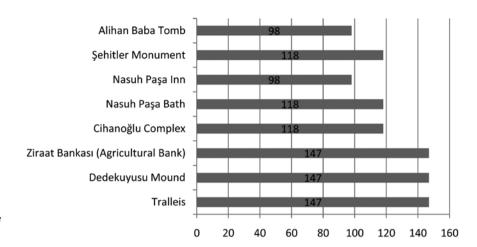


Figure 7. Number of children giving accurate responses by writing down the names of heritage places in Aydın.

you visited in the city of Aydın?" indicate that of the 164 participants, most of the children (60 percent) had never visited a heritage site, monument or museum in Aydın's city centre. This indicates that children were not generally interested in heritage places did not recognise them. Therefore, the majority of children had only limited experience with the heritage sites in Aydın prior to the education programme.

After the program, the children were asked to write down the names of the historic buildings or heritage sites in Aydın, of which photographs were provided. Figure 7 shows the distribution of accurate identifications of heritage sites in the city of Aydın. It is clear that heritage sites such as Tralleis, Dedekuyusu Mound and Ziraat Bank, which were analysed in depth and experienced without focusing on similar types of heritage assets, were recalled accurately by 90 percent of the children (147). However, the responses reveal that the names of heritage assets such as the Cihanoğlu Complex, Nasuh Paşa Inn and the Şehitler Monument, Nasuh Paşa Baths and Alihan Baba Tomb, which were experienced in a single day, were correctly identified by less than 72 percent of the children (118). This indicates that the children were able to increase their level of knowledge on Aydın's heritage sites by experiencing them in their own settings, combined with guidance from and interactions with experts. However, experiencing many similar types of heritage assets in a given day might difficulty in recalling the names of heritage assets. In addition, some 90 percent of the respondents labelled the photograph of the remains of the Bath-Gymnasium Complex with its proper name "Tralleis" rather than its local name "Üçgözler". Thus, the programme made a substantial contribution to the development of children's recognition of heritage

Figure 8. A view from the lecture given during the site visit to Dedekuyusu Mound.

Figure 9. Examples from the children's pictures on the life at the Dedekuyusu Mound during the Bronze Age.







assets and places in their city and facilitated their understandings of their appearances and names.

The programme demonstrated that heritage education provides children with an interesting opportunity to learn on-site how and where the first settlements were founded, how they were changed and moved and how these past cultures lived. (Figure 8) While the posters on Dedekuyusu Mound including artefacts from Bronze Age generally demonstrate that the children learned that it was the first settled area near the city centre of Aydın, the children were also generally aware that Tralleis was the second area settled. The chronological distribution of historical periods throughout the days of the programme was tremendously helpful on developing the children's understandings of not only the urban development of the city, but also developments in human history. In addition, the programme demonstrates that an effective module was developed for children to learn about prehistoric times by integrating several activities and tools such as experiential surface investigations, lecturing and guidance by an expert, films, drama exercises, information sheets and painting. For instance, the children's paintings on life at the Dedekuyusu Mound show that the children were able to accurately depict life at the Dedekuyusu Mound during the Bronze Age. As shown in Figure 9, children drew daily activities such as hunting, farming, fires and animal husbandry that characterised life during the Bronze Age.

Thus, this programme, which emphasised on on-site learning and first-hand experiences at heritage sites such as archaeological sites, museums, monuments on the streets, and enjoyable activities, stimulated the children's interest in heritage sites and the history of the city, curiosity about the past and enhanced the children's historical and critical thinking. The city as a display of heritage assets is an effective learning environment for developing children's understandings of heritage concepts, heritage types, their basic characteristics and increasing children's recognition on heritage and engagement with the city.

Values and Significance Accorded by the Children

The outcomes of the education programme indicate that the city is an effective environment for children to learn heritage values and internalise them. The programme demonstrates that children easily accept newly learned values, organise their values and create their own value systems for different heritage assets. The values and significance of cultural heritage relate to decisions regarding why cultural heritage should be preserved are important. Therefore, the heritage places and assets within a city allow children to learn different types of heritage values, compare and internalise them, such as the document value of Tralleis, the historical value of the Ottoman period, and the architectural value of the buildings dated to the Turkish Republican period.

The programme has substantial effects of the children's feelings, values and appreciation related to heritage assets. Prior to the programme, most of the children regarded the informational value and historical value as the prominent criteria for the preservation of heritage over other factors such as memory value, educational value, and aesthetic value. In the multiple-choice question, "Do you think that cultural heritage must be protected? If yes, why?" administered prior to the programme, of the five possible responses, "protected for its informational value" was accorded the highest importance (84 percent/138), followed by "protected for

121

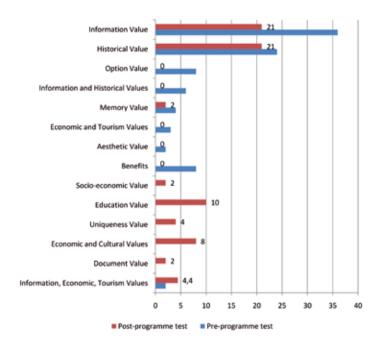


Figure 10. Distribution of children's responses on the question "Why do you think the preservation of heritage is necessary?'

CITY AS A LEARNING ENVIRONMENT FOR HERITAGE EDUCATION



Figure 11. A view from the site visit to the buildings dated to Turkish Republican

historical/informational value/age value" (23 percent/38). In response to the open-ended question, "Why do you think the preservation of heritage is necessary?", the responses were grouped according their content, which was categorised according to the value types (i.e., informational value, historical value, economic and tourism value, educational value), that are widely accepted in the preservation literature. Of the 164 children surveyed, 34 percent (56) prioritised informational value and 24 percent (39) prioritised historical value, as shown in Figure 10. To compare the effects of the programme on the children's appreciation of heritage assets, the respondents were asked a similar open-ended question, "Why do you think that preservation of heritage is necessary?", at the end of the programme. As Figure 10 demonstrates, the children continued to emphasise informational value (21 percent/34) and historical value (21 percent/34). Among the most striking results of this open-ended question was substantial emphasis on such values as educational value (10 percent/16), uniqueness (4 percent/6) and document (2 percent/3). This shows that the children internalise certain specific values and meanings such as educational value, cultural value, architectural value, uniqueness value and document value, which they did not mention prior to the education programme.

The programme shows that visiting heritage places sites within the city gives children the opportunity to learn different value types and apply these newly learned values to different cultural heritage. In the case of the buildings dated to the Turkish Republican period, the children, who analysed and compared the architectural features with those of more recent buildings (Figure 11), agreed that traditional houses dated to the Turkish Republican period are of particular importance due to their architectural and historical values and to remember the lifestyles of the past. In another case, Tralleis, the children, who did not have any information on the document value of cultural heritage prior to the programme, mentioned the importance of Tralleis for its document value. Most of the children agreed that Tralleis is important for its informational and document value and explained this using phrases as "Tralleis is tangible evidence of the past",



Figure 12. A view from the children's interaction with the official at Aydın

"it gives significant information on past", and "Tralleis informs us about our past". In addition, the economic value of Tralleis received far greater attention than in the responses to the pre-test. Some common phrases such as "it has great value for tourism", "it is worth seeing for tourists and has economic value", and "Tralleis can contribute to the economic development of our country" indicate that children agreed that Tralleis is important for its economic and tourism value. This shows that the city as an assemblage of heritage places and assets allows children to analyse and compare heritage assets on-site and contributes to their learning new values and developing deeper understandings of them. Moreover, the drama activity titled 'Stop destroying cultural heritage!' demonstrates that most of the children believed that the monuments of the Ottoman period should be preserved due to their informational and historical value. Thus, the changes in the children's valuations of heritage assets indicate that the programme allows children to create their own value systems for a specific heritage asset and makes a substantial contribution to their critical thinking skills. Therefore, identifying and comparing different heritage places within the context of the city can provide children an opportunity to internalise different value types and develop their own value systems for specific heritage assets.

In addition, the participation of heritage institutions in the programme and sharing their expertise with the children are useful and exciting ways for the children to internalise the values and importance accorded heritage assets. In an activity involving interactions with officials at Aydın Museum (Figure 12), the children asked what they would do if they found an ancient object in a field. It was noteworthy that many children, after learning about the punishments for not presenting ancient objects to a museum, presented a scenario that emphasised the necessity and importance of delivering ancient objects to a museum in subsequent drama activities. In addition, this information presented by museum officials on the public's responsibility to deliver ancient objects to a museum changed the behaviours of some children who believed that they had found ancient objects near heritage places in the past. As a result, two children brought their finds to the museum. The interactions with officials from Aydın Museum provided the children with information on their own responsibility, the responsibility of Aydın Museum, and recognising the value of movable heritage assets. Thus, programmes that can improve the dialogue between heritage experts and children and the exchange of ideas and meanings are useful and beneficial for the development of meaningful communication on heritage assets, children's understandings of the responsibilities of the public and increasing public participation. As a result, the city is a powerful environment for developing children's understandings of heritage values and creating beneficial changes in the children's attitudes towards heritage assets. Moreover, introducing the interpretations of individuals such as experts, officials and members of the public enriched the experiences of children in terms of the understanding the mutable characteristics of heritage values.

The programme also demonstrates that the focus of the activities and the subjects emphasised by experts are among the main factors affecting children's valuations of specific types of heritage assets. While the children's emphasis on the architectural value of buildings dated to the Turkish Republican period was related to the architect's emphasis on the architectural characteristics of the buildings and activities related to the analysis of architectural features, the archaeologist's emphasis on-site

123



Figure 13. A view from the archaeologist's guidance at Tralleis.

(Figure 13) was reflected in the children's focus on informational and document value. Therefore, the development of a meaningful balance between on-site activities, their emphasis and their relationships with specific heritage assets is among the challenges facing heritage educators.

Approaches to the Preservation of Cultural Heritage

Efforts to encourage children to participate in decisions related to the urban environment in which they live have been considered in the areas of planning, urban design, heritage and citizenship. To encourage participation, emphasis was placed on the development of educational resources and activities. In this respect, the education programme indicates that allowing children to view, experience and identify preservation issues related to heritage assets in their city and speaking out about them at the local level makes a substantial contribution to a variety of aspects such as children's understandings of preservation concepts, preservation issues, interventions and participation as urban residents. The programme provides evidence that the city can provide children with important learning experiences related to preservation issues and encourage their participation in decision-making at the local level.

The children's understandings of the meaning of preservation increased substantially. Of the 164 children asked the key question "what does restoration mean?" prior to programme, 55 percent provided the correct definition; however, 45 percent did not and some of them mistook the term 'restoration' for 'restaurant' or 'radiation'. After the programme, children were asked to rate basic statements related to preservation on a scale from 1 to 4, ranging from "Disagree" to "Agree". Table 4 presents the number and percentage of agreement with statements one through ten. As shown in the table, the children's levels of agreement were high (above 70 percent), indicating that they had made cognitive and affective improvements in the form of increased interest in certain aspects of preservation. For instance, Statement I shows that 95 percent of children became aware of the necessity of permanent maintenance to slow the deterioration of

cultural heritage. Similarly, the high level of agreement with Statement III (85 percent) indicates that there was a substantial, positive change in the children's understandings of the necessity of interventions to ensure the preservation of cultural heritage. Additionally, the high level of agreement with Statement II (90 percent) shows that the programme provided the children with new perceptions of the importance of controlling environmental factors to prevent the deterioration of cultural heritage. Regarding Statements IV and X, the percentages of correct responses were approximately 71 percent and 81 percent, respectively. The responses indicate that experiencing authentic heritage assets, their current physical condition and preservation issues in real-life enable children to validate the information they receive on certain aspects of preservation and facilitate their explanations of and justifications for various aspects of preservation. For instance, the experiences and observations of children at the Nasuh

_	STATEMENTS ON PRESERVATION CONCEPT		DISAGREE	UNDECIDED	NO IDEA
I	Deterioration of cultural heritage can be retarded through permenant maintanance.	94%	4%	2%	3%
II	Deterioration of cultural heritage can be prevented by controlling environmental factors.	90%	4%	3%	3%
III	Lack of necessary and sufficient interventions on cultural heritage cause irreversible damage to cultural heritage.	85%	5%	2%	8%
IV	The interverventions do not be harmful on the authentic features of cultural heritage.	71%	7%	2%	20%
V	New uses proposed for cultural heritage should be compatible with physical and architectural characteristics of cultural heritage.	76%	11%	2%	7%
VI	It is not necessary to keep cultural heritage environment's clean.	15%	72%	8%	6%
VII	We can cover the wall of cultural heritage in grafiti.	72%	14%	8%	6%
VIII	There is no need to follow the warning in signboard in heritage places.	10%	66%	13%	11%
IX	We do not cause erosion on the architectural pieces by stepping on them.	69%	19%	7%	5%
X	The intervention is not based on authentic documents and must not stop at the point where conjecture begins.	8%	81%	4%	7%

Table 4. Ratings on children's agreements on the basic statements about preservation.

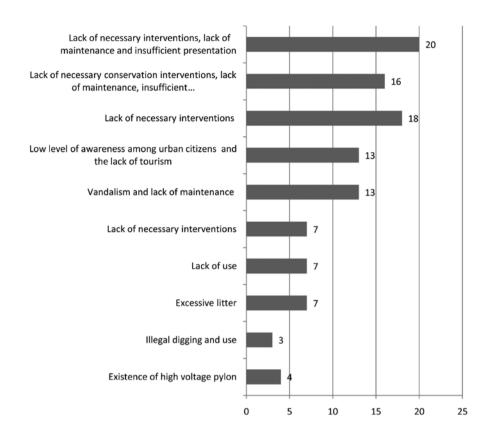


Figure 14. Responses on the question "Do you think there are problems preserving cultural heritage within the city centre of Aydın?"

Paşa Bath, which was in poor condition due to dampness in the walls and a lack of maintenance, facilitated the process of developing the children's understandings of Statements I, II and III. Therefore, the programme represents a powerful tool to involve children in the process of thinking about and evaluating preservation issues.

Experiencing preservation problems on-site encourages children to consider preservation issues. In case of the open-ended question "Do you think there are problems in preserving cultural heritage within the city centre of Aydın?", the responses indicate that children who were able to observe and experience the preservation issues facing heritage assets on-site commonly made clear statements regarding their opinions of the preservation issues confronting heritage assets in their city. As shown in Figure 14, combined problems of preservation were emphasised such as the lack of necessary interventions, the lack of maintenance and insufficient presentation of site by 12 percent of the children (20) and the lack of necessary conservation interventions and maintenance, insufficient presentation of site, vandalism and the lack of sensitivity by 10 percent of the children (16). Some 8 percent of the children (13) emphasised the low level of awareness of the sites among urban residents and the lack of tourism. Thus, the wide range of problems identified by the children demonstrates that the programme, which not only uses heritage places but also individuals such as experts, officials working at heritage institutions and the public as a source of information, substantially improved children's understandings of preservation issues in their physical and social dimensions.

The project-based activity, designing a poster on the preservation issues associated with a selected cultural heritage asset in the city of Aydın,



Figure 15. Examples from the children's posters on the preservation problems of Tralleis.



Figure 16. Examples from the children's posters on the preservation problems of Dedekuyusu Mound.

demonstrates that the children acquired meaningful experiences, developed a concern for the problems facing a particular heritage asset and were able to clearly articulate the preservation issues. Moreover, one of the programme's major contributions was to improve the children's ability to identify these issues, which is among the main components of problem solving. Thus, the programme substantially improved the children's understandings of the built environment. Faced with these problems and preservation issues, children discover the realities of their cultural heritage and city as shown in **Table 5**. For instance, those focusing on the ancient city of Tralleis (39 percent) highlighted the lack of presentation materials, lack of use, the graffiti, excessive litter, the lack of maintenance and conservation interventions as the problems experienced at the site. On some

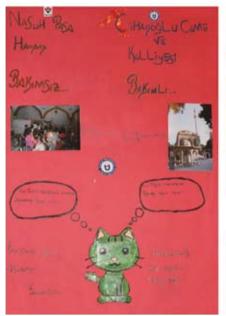




Figure 17. Examples from the children's posters on the preservation problems of the Ottoman Monuments.

occasions, the lack of tourism potential was identified as a problem. (Figure 15) In the case of Dedekuyusu Mound, chosen by 27 percent the children, the excessive litter and lack of maintenance were stressed as issues, as well as the presence of high-voltage electricity pylons on the mound and its use as a picnic area. (**Figure 16**) Often, the lack of infrastructure to promote the site as a tourism destination (i.e., information panels, entrance and fences) was suggested as a problem. The children studying at the school next to Dedekuyusu Mound, who were unaware of the importance of the site prior to the programme, generally emphasised the lack of signage as a problem. Nasuh Pasha Bath was emphasised by 21 percent of the students, parts of which are currently used as a restaurant and for storage, and is in poor physical condition. Some children made comparison between the physical conditions of the Ottoman monuments in their posters as shown Figure 17. After the on-site observations and semi-structured interviews, the children were shocked with the poor physical condition and use of the bath, with the most commonly highlighted problems being dampness, rubbish in the storage area, the lack of maintenance and poor conservation interventions. Regarding the monuments and houses from the Turkish Republican period, visual pollution on the façades and the lack of use were generally viewed as the most common problems. Moreover, 10 percent of the children emphasised the poor physical condition of houses dated to the Turkish Republican period, specifically the lack of maintenance and inappropriate conservation interventions. (Figure 18) In this context, the city allows children to witness the physical condition and preservation issues facing cultural heritage and create opportunity to identify problems. Additionally, the children's attempts to convey various messages on their posters as shown in Table 5 represented an opportunity to consider different and similar aspects of heritage and preservation issues and highlight analogies between parallel situations in heritage places within the city.

Moreover, this programme, which provided the children with the opportunity to move from the experience of identifying problems to experiences related to the presentation of preservation issues using posters, involves the children with the tools to express their opinions and develops





Figure 18. Examples from the children's posters on the preservation problems the cultural heritage dated to Turkish Republican Period.



Figure 19. A view from the poster exhibition at the mall.

their participatory role as urban residents. In addition, by presenting their posters in an exhibition at a mall, the children discovered strategies for conveying their messages on the preservation of heritage and speaking out on the issues and problems related to heritage assets in their city (**Figure 19**). Additionally, news articles in both the national and local press using the words of the children raised interest in the cultural heritage of Aydın. Thus, the city served as a medium for highlighting local heritage and the problems associated with its preservation, not only for children but also for the general public, experts and officials.

Combining design-based activities with heritage places offers children opportunity to think about and investigate the relationship between heritage places and innovative uses for them. For instance, in an activity entitled "creativity and the archaeological site" (26), the children were asked to design specific symbols at Tralleis, which would bring to mind the ancient city of Tralleis, to be printed on t-shirts. The project team encouraged the children to express their thoughts and ideas individually

26. The participants were informed that the best design, selected by a jury, would be the winner of the competition. Before they started to design their t-shirts, they were asked some challenging questions, such as "what has potential in Tralleis to represent the city of Aydın," "which form affects you most when you walk through Tralleis," and "which form and/or image most reminds people of the city of Aydın".

	Dedekuyusu Mound	Tralleis	Nasuh Pasha Bath	Turkish Republican Buildings	Mixed Heritage Places
Frequent Mottos	"We do not want an electric pylon on the mound", "Let's remove the electric pylon from Dedekuyusu Mound", "The pylon on Dedekuyusu Mound is harming the first settlement in Aydın".	"We are the owners of the symbol of the city, Üçgözler, conserve it", "Conserve Tralleis, use it for tourism", "Preserve Tralleis, use Tralleis, live with Tralleis", "Preserve Tralleis, no damage", "Own Tralleis, preserve it, do not drop litter".	"Let's preserve Nasuh Paşa Bath all together", "Nasuh Paşa is our history, preserve it and transmit it to future", "Clean Nasuh Paşa Bath", "There is no other Nasuh Paşa Bath".	"The past is in our lives, preserve it for our future", "No large advertising panels", "Use it, Transmit it to future", "Preserve the heritage of the Turkish Republic period", "No damage to the houses, rehabilitate them".	"Be aware of the cultural heritage of your city", "Preserve and know the cultural heritage of your city", "Enhance together the cultural heritage of our city".
Less Frequent Mottos	"Dedekuyusu needs presentation panels", "No signboard. Who knows it is the Dedekuyusu Mound?", "Stop damaging the first settlement in Aydın".	"Tralleis is your Ancient city, Display it", -"Preserve Tralleis, Dsiplay Tralleis", "Tralleis needs presentation panels", "Tralleis needs security and guides".	"Let's preserve together the cultural heritage of Aydın", "Own your past", "Preserve heritage, transmit to the future", "Discover your culture, improve yourself".		
Rare Mottos	"Did you know that Dedekuyusu Mound was the first settlement in Aydın?".	"No graffiti", "Avoid graffiti", "Graffiti harms Üçgözler".			
Very Rare Mottos		"Üçgözler, the symbol of Aydın, is the remains of the Bath-gymnasium complex", "It is your past", "The ancient city, the symbol of Aydın", "Own Tralleis, the symbol of the city of Aydın".			

Table 5. Written messages on the posters.

on the aspects of the site that affected the children the most. Most of the children adopted the semi-circular arches of the "Ücgözler" as their symbol, which is the remains of the bath-gymnasium complex, to be placed on the t-shirts. The arches were generally illustrated with their general outline. Other symbols selected by the children were small objects such as antique oil lamps, vases and pottery. A small number of children used slogans on their shirts such as "Tralleis" and "Memory of Aydın," while a smaller number used a heart-shaped pattern that can be found on an in-situ mosaic floor at Tralleis. Through the creation of a small-scale version of a real-life situation, the children were able to experience one of the ways in which cultural heritage can be used in real life, apart from the heritage assets themselves. This expands the scope of the learning process to include creativity. Involving children in a design-based activity related to a heritage site, and using the site as a source of information and images, demonstrates that heritage places sites have substantial potential for developing children's creative thinking skills.

CONCLUSION

This study on teaching and learning about cultural heritage and educational effectiveness demonstrated the importance of the city as a learning environment that promotes children's learning regarding heritage and preservation issues in their environment and their involvement as urban residents. The results supported our hypotheses and established a connection between the city as a learning environment and heritage issues. The principles necessary to ensure that the city is an effective a learning environment are illustrated through the case study of an education programme. The following principles address the main aspects of education programmes that heritage educators should consider when attempting to use a city as an effective learning environment for children:

- The character of the city as a physical context for learning and teaching is very influential in developing children's understandings of the issues of heritage, preservation and historical thinking. The role of the city is to provide a physical and cognitive environment conducive to learning about the past and the present. Opportunities to experience heritage places of different types from different periods and to face various preservation issues enhance children's learning and understanding.
- Ensuring the city's effectiveness as a learning environment requires the establishment of reciprocal relationships among children, heritage institutions and the public. Practice providing learning opportunity is necessary, but not sufficient, and the program must not fail to ensure the participation of interested institutions, officials and experts, who address and make decisions related to heritage assets. By supporting relationships between children and heritage institutions and officials, their understandings of civil rights and responsibilities will be improved and their participation will be encouraged. Additionally, the children should be encouraged to participate in decisions concerning the urban environment and have the opportunity to participate in decision-making processes by sharing their opinions with heritage experts, officials and the public through presentations and exhibitions.
- The activities offered by an educational programme are the critical determinants of learning. The programme indicates that a process focussing on urban history and six modules is generally effective for developing a holistic perspective on heritage and preservation issues, influences the children's historical thinking and provides them with the opportunity to understand heritage places sites as a part of the whole city and its history. The opportunity to use the city to present a narrative of urban history through the physical remains of heritage assets promotes the development of a holistic perspective towards heritage assets on the part of children.
- Moreover, activities allowing children to identify real-life problems, which may prepare them to address real life issues related to cultural heritage and associated concerns are essential components of the programme. Appropriate teaching practices ensure an optimal balance between the teacher's role and the children's own experiences and engagement. Activities emphasising experiencing the realities of the urban environment and identifying problems have the potential to generate a synergy

131

that can encourage interventions to preserve heritage assets and provide a sense of belonging on the part of children with respect to the heritage of their own city. Project-based activities allow heritage assets within the city to be understood as an environment presenting the opportunity for critical thinking, creative thinking and problem solving and to regard the programme as a resource for encouraging participation.

A programme based on the principles explained above forms the basis of a model for heritage education that can be applied on a wider national scale. As demonstrated by this programme, the concept of "the city as a learning environment" has the potential to deliver results similar to those outlined above to other cities in Turkey that share characteristics with Aydın.

As cities become more important than ever before, this project has the potential to make support for heritage places in a city increasingly relevant to the widest range of individuals and to facilitate the participation of young people in decision-making at a local level. Therefore, the city as a learning environment for heritage education has substantial potential to engage and connect with young people, making them more important than ever before in Turkey and beyond. Consequently, the city plays a crucial role in not only producing cognitive and affective gains related to heritage and preservation issues, but also in shaping the future of our citizenry. There is a need not only in Turkey but also around the world to be aware of the substantial value of cities as a learning environment.

BIBLIOGRAPHY

- 21st Century Learning Environments, Retrieved in August 2012 from http:// www.p21.org/storage/documents/le white paper-1.pdf.
- Adrese Dayalı Nüfus Kayıt Sistemi Veri Tabanı, Şehir Belde ve Köy Nüfusları, 2011, Retrieved in November 2012 from http://rapor.tuik.gov. tr/reports/rwservlet?adnksdb2&ENVID=adnksdb2Env&rep ort=wa idari yapi 10sonrasi.RDF&p il1=9&p yil=2011&p dil=1&desformat=html.
- AKDENIZ, E. (2002) Büyük Menderes Ovası'ndaki Prehistorik-Protohistorik Yerleşimler ve Bunların Ege Dünyasındaki Yeri, I. Uluslararası Aşağı Büyük Menderes Havzası Tarih, Arkeoloji ve Sanat Tarihi Sempozyumu Bildiriler Kitabı (15-16 Kasım 2001), Söke-Turkey, İzmir, s. 158-175.
- AKTAKKA, N. der. (2012) Aydın Kültür Envanteri I, Ozyurt Matbaacılık, Ankara.
- Ants of Cultural Heritage, Retrieved in June 2012 from http://www. kulturbilinci.org/eski/eng/current_project_2.html.
- APLIN, G. (2007) Heritage as exemplar: a pedagogical role for heritage studies in values education, Environmentalist (27) 375–383, Retrieved in October 2012 from http://download.springer.com/static/pdf/450/ art%253A10.1007%252Fs10669-007-9053-4.pdf?auth66=1351267256_9 0ebd323642e242ec58677822d8098d0&ext=.pdf.
- ASATEKİN, N. G. (2004) Kültür ve Doğa Varlıklarımız Neyi, Niçin, Nasıl Korumalıyız?, T.C. Kültür ve Turizm Bakanlığı, Ankara.

Aqueduct, Acquiring Key Competences through Heritage Education, Retrieved in October 2012 from http://eacea.ec.europa.eu/llp/projects/public_parts/documents/comenius/2009/ com mp 502572 aqueduc.pdf.

- BLOOM, B.S., ed. (1956) Taxonomy of educational objectives: The classification of educational goals, Davis McKay, New York.
- BOLAND, B.M. (1994) Our Past/Ourselves: Teaching with Historic Places, *CRM: Using the National Register of Historic Places* (17:2) 33.
- Canterbury City Walls, Using urban remains & the Kent Historic Environment Record as clues about the past, Retrieved in August 2012 from https://shareweb.kent.gov.uk/Documents/leisure-and-culture/heritage/heritage-education-packs/canterbury-city-walls.pdf.
- Convention Concerning the Protection of the World Cultural and Natural Heritage, Retrieved in March 2012 from http://whc.unesco.org/en/conventiontext.
- DAVIES, D., JINDAL-SNAPE, D., COLIER, C., DIGBY, R., HAY, P., HOWE, A. (2012) Creative learning environments in education—A systematic literature review, *Thinking Skills and Creativity*, http://dx.doi.org/10.1016/j.tsc.2012.07.004.
- DE KOCK, A., SLEEGERS, P., VOETEN, M.J.M. (2004) New Learning and the Classification of Learning Environments in Secondary Education, *Review of Educational Research* (74:2) 141–170.
- DEN BROK, P., BREKELMANS, M., WUBBELS, T. (2004) Interpersonal teacher behaviour and student outcomes, *School Effectiveness and School Improvement* (15), 407–442.
- DİNÇ, R. (2003) *Tralleis Rehber/Guide*, Arkeoloji ve Sanat Yayınları, İstanbul.
- DUDEK, M. (2000) *Architecture of schools: The new learning environments*, London Architectural Press.
- ED415178 1997-10-00 Including Historic Places in the Social Studies Curriculum.ERIC Digest, Retrieved in July 2012 from http://www.eric.ed.gov/PDFS/ED415178.pdf.
- ELSHOUT-MOHR, M., VAN HOUT-WOLTERS, B., BROEKKAMP, H. (1999) Mapping situations in classroom and research: Eight types of instructional-learning episodes, *Learning and Instruction* (9), 57–75.
- European Urban Charter II, Manifesto for a New Urbanity, Retrieved in August 2012 from https://wcd.coe.int/ViewDoc.jsp?id=1302971&Site=.
- FRASER, B. J., FISHER, D. L. (1982) Predicting Students' Outcomes from their Perceptions of Classroom Psychosocial Environments, *American Educational Research Journal* (19), 498–518.
- FRASER, B. J. (1998) Classroom Environment Instruments: Development, Validity and Applications, *Learning Environments Research* (1) 7–33.
- GOODWIN, G. (1971) *A History of Ottoman Architecture*, Baltimore, Johns Hopkins Press.
- Haber Bülteni, Adrese Dayalı Nüfus Kayıt Sistemi Sonuçları 2011, Retrieved in July 2012 from http://www.tuik.gov.tr/PreHaberBultenleri. do?id=10736.
- Heritage Education in the Social Studies. ERIC Digest, Retrieved in July 2012 from http://www.ericdigests.org/pre-929/heritage.htm.

- Heritage Education, Plurality of Narratives and Shared Historical Knowledge, Retrieved in October 2012 from http://www.narcis.nl/research/ RecordID/OND1335207/Language/en
- Heritage Projects & Place-Based Education, Retrieved in July 2012 fromhttp://www.loc.gov/folklife/edresources/ed-heritage.html.
- *Historic Places, Their Use as Teaching Tools*, Retrieved in August 2012 from http://www.historians.org/perspectives/issues/1994/9402/9402TEC.
- Heritage Education in the Social Studies. ERIC Digest, Retrieved in August 2012 from http://www.ericdigests.org/pre-929/heritage.htm.
- *ICCROM Raising Awareness*, Retrieved in July 2012 from http://www.iccrom.org/eng/05advocacy_en/05_01raising_en.shtml.
- ICOMOS, Charter For the Conservation of Historic Towns and Urban Areas (Washington Charter 1987), Retrieved in August 2012 from http://www.international.icomos.org/charters/towns_e.pdf.
- JOYCE, B. R., WEIL, M. (1996) *Models of Teaching* (5th ed.), Allyn and Bacon, Boston.
- Making Delhi count among heritage cities, Retrieved in August 2012 from http://www.thehindu.com/news/cities/Delhi/article3323309.ece.
- Project 3 PhD Heritage and entrance narratives: constructing shared historical knowledge, Retrieved in June from http://www.fhk.eur.nl/fileadmin/ASSETS/fhk/Onderzoek/CHC/NWO_PhD2.pdf.
- Prominent Places for Historic Places K-12 Social Studies Curriculum, Retrieved in June from http://crm.cr.nps.gov/archive/16-2/16-2-all.pdf.
- Recommendation on the Historic Urban Landscape, including a glossary of definitions, 10 November 2011, Retrieved in June 2012 from http://portal.unesco.org/en/ev.php-URL_ID=48857&URL_DO=DO_TOPIC&URL_SECTION= 201.html.
- Recommendation on the Historic Urban Landscape, Revised Draft, Retrieved in July 2012 from http://unesdoc.unesco.org/ images/0021/002110/211094e.pdf.
- ROTH, M. (2000) Learning environments research, lifeworld analysis, and solidarity in practice, *Learning Environments Research* (2) 225–247.
- STONE, P. (2004) Introduction, The Education and Historic Environment into the Twenty-First Century, *Education and the Historic Environment*, *eds*. D.Henson, P.Stone, M.Corbishley, Routledge, London and New York; 1-12.
- ŞİMŞEK, G. (2011a) 'Discovering the Cultural Heritage of Our City'
 Unpublished project report supported by TÜBİTAK's (Scientific and Technological Research Council of Turkey) Science and Society Project Support Program.
- ŞİMŞEK, G. (2011b) Defining the Urban Environment of Aydın in the 20th Century through the Memoirs of Zeki Mesud Alsan, *METU JFA* (28:2) 81-103.
- ŞİMŞEK G. and ELİTOK-KESİCİ, A. (2012) Heritage Education for Primary School Children Through Drama: The Case of Aydın, Turkey, Procedia - Social and Behavioral Sciences (46) 3817–3824.

- ŞIMŞEK G. and ÖZ, N. (2008) *Çocuk ve Mimarlık: Toplumsal bir Eğitim Modeli*, eds. N. Bayraktar, B. Binbir and et al., TMMOB Mimarlar Odası Ankara Şubesi Çocuk ve Mimarlık Çalışmaları Merkezi, Ankara; 83-84.
- *Teaching American Diversity,* Retrieved in August 2012 from http://www.cr.nps.gov/crdi/publications/HM_VI_NPS_Activities.pdf
- *Teaching with Historic Places, Where Did History Happen?* Retrieved in July 2012 from http://crm.cr.nps.gov/archive/16-2/16-2-all.pdf.
- The Athens Charter for the Restoration of Historic Monuments-1931, Retrieved in July 2012 from http://www.icomos.org/en/charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/167-the-athens-charter-for-the-restoration-of-historic-monuments.
- The city as the learning environment... Josie Fraser at ALT-C 2011, Retrieved in July 2012 from http://www.youtube.com/watch?v=9xTnn1dIK6Q.
- The European Urban Charter, Retrieved in August 2012 from http://sustainable-cities.eu/upload/pdf_files/URBAN_CHARTER_EN.pdf.
- The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, Retrieved in July 2012 from http://www.international.icomos.org/charters/interpretation_e.pdf.
- Türkiye İstatistik Kurumu, Adrese Dayalı Nüfus Kayıt Sistemi Veri Tabanı, Şehir Belde ve Köy Nüfusları, 2011. Retrieved in October 2012 from http://rapor.tuik.gov.tr/reports/rwservlet?adnksdb2&ENVID=adnksdb2Env&report=wa_idari_yapi_10sonrasi.RDF&p_il1=9&p_yil=2011&p_dil=1&desformat=html.
- *Using the City as a Learning Environment,* Retrieved in August from http://prezi.com/qxowgbx971za/using-the-city-as-a-learning-environment/
- UNFPA, State of World Population 2011, People and Possibilities in a World of 7 billion, Retrieved in August 2012 from http://foweb.unfpa.org/SWP2011/reports/EN-SWOP2011-FINAL.pdf.
- Why Heritage Education?, Retrieved May 2012 from http://www.hereduc.net/hereduc/i18nfolder.2005-04-15.6720001990.

Alındı: 28.11.2012; Son Metin: 30.07.2013

Anahtar Sözcükler: Kültürel miras eğitimi; kent; kentsel miras; çocuk; öğrenme ortamı.

KENTİN ÖĞRENME ORTAMI OLARAK KÜLTÜREL MİRAS EĞİTİMİNDE ROLÜNÜN KEŞFEDİLMESİ

Günümüzde, toplumların kültürel miras üzerine eğitimi önemli küresel uğraşlardan biri haline gelmektedir. Kültürel miras eğitimi, tarih, koruma, eğitim gibi farklı disiplinlere çalışma konusu olmakta ve geçmişe ilgi uyandırmak, geleneklerin devamlılığını sağlamak, kentlilerde yaşadıkları çevreye yönelik farkındalık oluşturmak, kentliler arasında birlik duygularını, dayanışmayı sağlamak gibi çeşitli amaçlar doğrultusunda gerçekleştirilmektedir. Küresel düzeyde, özellikle kentlerin yaşam alanı olarak önem kazanmasına paralel olarak, kültür mirası eğitiminin kent ölçeğinde de giderek önemli olduğu izlenmektedir. Son yıllarda kentler bireylerin eğitimi için fırsatlar sunan merkezler olarak görülmekte ve

dünyada Avrupa'dan, Afrika'ya çeşitli yerlerde proje uygulamaları gerçekleştirilmektedir. Belirtilen çerçevede, bu çalışma, çocukların kültürel miras eğitiminde bir kentin öğrenme ortamı olarak rolünü ve katkısını keşfetmeyi amaçlar.

Çalışma kapsamında kent, sadece "tarih", "sanat" ve "kültür" konularında çocukların ilgisini uyandıran bir merkez olarak görülmemekte, kentin çocukların yaşadıkları çevreye duyarlı bireyler olarak yetişmelerine katkıda bulunan bir öğrenme ortamı olduğu ileri sürülmektedir. Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TÜBİTAK), Bilim ve Toplum Projeleri Destek Programı (2011) tarafından desteklenen "Kentimizin Kültürel Mirasını Keşfedelim" başlıklı projenin bulguları üzerine temellendirilmiştir. Aydın kent merkezinde yaşayan 164 cocukla (12-14 yas) beş dönemde gerçekleştirilen eğitim programının verilerine dayanmaktadır. Veriler, nitel ve nicel araştırma yöntemleri ile çözümlenmiştir. Proje, öğrenme ortamı olarak kent ve çocukların kültürel miras eğitimi arasında önemli bağlantılar olduğunu ortaya koymaktadır. Kent bir öğrenme ortamı olarak, hem kültürel miras, mirasın korunması konuları ile ilgili bilissel ve duyussal kazanımlar üretilmesinde, hem de gelecekte kentlerimizin şekillenmesinde karar vericiler olacak çocukların bilinçlenmesinde oldukça önemli rol oynar. Bununla birlikte, kent öğrenme ortamı olarak çocukların yerel düzeyde karar vermeye katılımını kolaylaştırma potansiyelleri sunmaktadır. Proje kapsamında hazırlanan kültürel miras eğitim programının, Aydın gibi kültürel miras alanları, kültürel mirasla ilgili kurumları ile çeşitlilik sunan ve benzer özellikler gösteren diğer kentlerde de uygulanabileceği saptanmıştır. Ayrıca, bir kentin, öğrenme ortamı olarak tanımlanabilmesi için bazı temel ilkeler saptanmıştır. Sonuç olarak, kentlerin hiç olmadığı kadar giderek önemli hale geldiği bu dönemde, öğrenme ortamı olarak kentin kültürel miras eğitimi açısından çocukların yaşadıkları çevreye duyarlılıklarının artmasına önemli katkıları ortaya konmuştur. Bunun yanında, kentin kültürel miras eğitimi ile toplumda birlikte yaşamanın, dayanışmanın öğrenildiği ve pekiştirildiği bir ortam olarak önemli potansiyeller sunduğu işaret edilmelidir.

GÖKÇE ŞİMŞEK; B.Arch, M.Sc., Ph.D.

Received B.Arch. (1996) at Istanbul Technical University, Faculty of Architecture, and M.Sc. (2002) and Ph.D. (2009) in Restoration at METU Faculty of Architecture. Research topics and areas of interest are preservation of archaeological heritage, impacts of interventions, urban heritage and heritage education. gokcesimsek@adu.edu.tr; gokcesk@hotmail.com.

ESİN ACAR; B.Ed. M.Ed., Ph.D.

Has Bachelor's degree in Education in Dokuz Eylul University and specifically Master degree from University of Missouri, Columbia (2000-2002), and a Ph.D. from University of Illinois, Urbana-Champaign (2007). Has research on curriculum implementation, classroom instruction-management, elementary education and some interdisciplinary education studies. esinnacar@gmail.com

NURDAN ATALAN ÇAYIREZMEZ; M.Sc.

Has Bachelor of Art degree in Proto-history and Near Eastern Archaeology from Hacettepe University (2001) and Master of Science degree in Settlement Archaeology from METU (2006). Has research on GIS applications on archaeological sites, asset tracking in Museums using RFID. nurdan.atalan@kultur.gov.tr; nurdanatalan@yahoo.com

AYŞE ELİTOK KESİCİ; B.Ed. M.Ed., Ph.D.

Has Bachelor's in Buca Education Faculty from Dokuz Eylül University; Master's and Ph.D.in Education curriculum from DEÜ (2000). Has research on hidden curriculum, cooperative Learning, Drama. aelitok@adu.edu.tr