Urban Maestro

New governance strategies for Urban Design

Architecture Driven Learning

in basic education in Finland (FI)

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Commissioned by Archinfo Finland

UN HABITAT
UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 831704

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1. INTRODUCTION

In Finland, children's architecture education is based on the understanding that architecture as an art and an everyday environment refers to the built environment from its smallest details to the largest entities. It is provided as part of a basic education in the arts at two architecture schools and several visual art schools alongside basic education in primary, secondary and upper secondary schools. A worthy addition to formal education is that organised by daycare centres, children's cultural centres, youth clubs, museums and individual enthusiasts. As is clearly visible, the ways, content and methods of managing the teaching of architecture are as diverse as the actors in the field themselves.

This paper will concentrate on architecture education within basic education, compulsory for all children aged between 7 and 16. Firstly, I will shortly present the Finnish education system. Secondly, I will describe how architecture is viewed and taught in the field of art education. Thirdly, I will discuss how the national core curriculum for basic education enables architecture education for children and young people, and how learning through architecture supports the aims of basic education. As case examples, I will finally present five different ways by which architecture education is realized in primary and secondary schools.

2. ARCHITECTURE EDUCATION FOR CHILDREN AND YOUNG PEOPLE IN THE FINNISH EDUCATION SYSTEM

The Finnish education system consists of early childhood education and care, pre-primary education for 6-year-olds, compulsory basic education for 7-to-16-year-olds in comprehensive schools, preparatory education and training in general upper secondary schools or vocational institutions, and higher education in universities of applied sciences and universities. Alongside these, the system includes basic education in the arts in specialised art schools and liberal adult education in adult

education centres, folk high schools, summer universities, study centres and sports institutes.[1]

In the context of architecture education for children and young people, basic education in the arts and compulsory basic education for all 7-to-16-year-olds play key roles, with those schools representing basic education in the arts being pioneers in developing methods and content, given that compulsory education reaches and affects everyone.

Basic education in the arts: Architecture as an everyday environment and art of space

Basic education in the arts (B.E.A) is provided primarily for children and young people on an extracurricular basis in specialised art schools and encompasses nine different art forms: architecture, circus, crafts, dance, media, music, literary art, theatre and visual arts. B.E.A is goal-oriented and follows an orderly progression from one level to another, thereby teaching children and young people skills in self-expression and instilling in them the capabilities necessary for vocational and higher education in their chosen art form. The Act and Decree on Basic Education in the Arts and the National Core Curriculum for Basic Education in the Arts regulate the art schools' teaching activities.[2]

The 2017 National Core Curriculum for Basic Education in the Arts[3] introduces architecture as an experiential art of space and as an ever-present built environment, the scale of which extends from individual objects to large entities. Additionally, it views architecture as a phenomenon that extends from the past to the future and from the local to global levels. The teaching introduces architecture as a field that broadly combines the perspectives of the arts and sciences, while the impact of architecture on society, nature and culture is examined from an aesthetic, ecological, and ethical perspective.

The core curriculum sets goals for four areas of expertise:

- environmental relationship
- built environmental literacy
- design and expression
- society and participation.

[1] https://minedu.fi/en/education-system

[2] https://minedu.fi/en/basic-education-in-arts

[3] Taiteen perusopetuksen opetussuunnitelman perusteet: https://eperusteet.opintopolku.fi/#/fi/tpo/3689874/tiedot & https://verkkokauppa.oph.fi/EN/page/product/national-core-curriculum-for-the-general-and-advanced-syllabi-for-basic-education-in-the-arts-2017/245304

The content of the teaching are selected from the following categories:

- own environment(s)
- current phenomena
- the world of architecture

Thus the purpose of architecture education for children and young people is to guide and encourage the students to strengthen their relationship with the environments that surround them, to deepen their environmental literacy, to improve their design and planning skills, problem-solving abilities and creativity, and to get them excited about development of the built environment while fostering an urge to participate in it. This art education approach also supports the implementation of phenomenon-based teaching and learning in basic education, aiming at transversal competence.

Today four schools, among the altogether 95 art schools in the visual field, offer basic education in the arts according to the general syllabus or the advanced syllabus of architecture. Two of these specialise only in architecture, while the other two also include other visual arts in their programme. Arkki, the School of Architecture for Children and Youth in Helsinki, follows the advanced syllabus curriculum (1300 hours) while Lastu, the School of Architecture and Environmental Culture in Northern Savonia, follows the general syllabus (500 hours). Alongside these two schools, the Jyväskylä Visual Arts School and Emil, the Visual Arts and Crafts School in Valkeakoski, follow the advanced syllabus.

The Arkki, Lastu and Jyväskylä Visual Art Schools are the Finnish pioneers in the development of architecture education for children and young people, having operated since the mid-1990s. As such, in the field of architecture, Emil is clearly a newcomer. In fact, the autumn 2020 term was the first term it offered architecture. Furthermore, the providers of B.E.A in architecture collaborate extensively in the field of basic education, and in addition to weekly classes for their students; they offer various short-term workshops and long-term courses to daycare centres, primary and secondary schools. Additionally, they arrange open workshops for the general public at various events and help drive the field's development in collaboration with other actors.

Basic education: The national core curriculum enabling architecture education

The Finnish National Board of Education published the latest National Core Curriculum for Basic Education in August 2016. This new curriculum aims to develop the school culture and promote education with an integrative approach. The aims of this are that pupils will come to understand the relationship and interdependencies

that exist between the different forms of learning content and that as such they will eventually be able to combine the knowledge and skills provided by various subjects in order to form meaningful entities and adapt and use them in collaborative learning.

The curriculum refers to the learning environments in spaces, locations, communities, and practices where studying and learning occur. A learning environment also includes the equipment, services and materials used; this expanded understanding of the learning environment supports architecture education.

The core curriculum describes seven transversal competence areas that epitomise education's aims and reflect the competencies needed in all life spheres. The competence areas, each of which is an entity of knowledge, skills, values, attitudes and will, are:

- thinking and learning-to-learn (L1)
- cultural competence, interaction and expression (L2)
- taking care of oneself, managing one's daily life (L3)
- multiliteracy (L4)
- ICT competence (L5)
- working life competence and entrepreneurship (L6)
- participation, involvement and building a sustainable future (L7).

The lessons of all subjects and the multidisciplinary modules that integrate them must aim to develop these competence areas, four of which (L1, L2, L4, L7) link directly to architecture education's aims and content.[4]

Architecture education promotes design-thinking and problem-solving skills. By researching, analysing, brainstorming, and designing, one can learn about the creative processes underlying architecture alongside the systematic way of exploratory learning (L1).

Furthermore, architecture education strengthens the personal environmental relationship while multisensory observation and aesthetic evaluation of the built environment further help to experience everyday spaces as meaningful places. By understanding the phenomena of architecture and the evolution of the built environment, one can learn to verbalise its cultural and historical meanings (L2).

[4] Eeva Astala, 2019. Tehdään kaupunkia! Arkkitehtuuri monialaisissa oppimiskokonaisuuksissa: https://opinkirjo.fi/wp-content/uploads/2019/08/Tehd%C3%A4%C3%A4n_kaupunkia_opinkirjo_pdf.pdf

Moreover, architecture education increases built environment literacy. By familiarising oneself with one's surroundings, its history, present and future plans, one can understand why our environment is created just as it is. In fact, learning to read and decipher messages from the layers of time, maps and design documents is part of multiliteracy (L4).

Finally, architecture education aspires to influence the development of the built environment. The participation of active and conscious citizens is therefore becoming increasingly important in urban planning. As well, housing and transport produce a significant part of an individual's carbon footprint. Thus, ecological thinking is central to architecture and land use in order to ensure a sustainable future (L7).

Architecture related topics are also addressed in many disciplines, most notably geography, social studies and the visual arts.

Geography teaches us about the interaction between nature and human activities and their connection to the state of the environment. Issues related to land use planning, construction management, urbanisation, environmental impact assessment and resident consultation are particularly relevant for sustainable development. As well, social studies addresses issues related to active and participatory citizenship, since a comfortable environment is created by the interaction of decision-makers, designers and citizens. A common language and understanding of the planning and decision-making processes is therefore a prerequisite for the dialogue. Moreover, visual art views architecture as part of a visual culture and an object of development, while multisensory observation, interpretation and valuation, and creative expression and design are part of the teaching.

Other subjects also have connections to architecture. Exploring the built environment can support the perception and understanding of phenomena related to, for example, mathematics, physics and chemistry. Ethics, philosophy and religion classes can lead to studying, for example, the meaning of architecture in the life of a human being, or sacred places and buildings of different cultures and eras. Meanwhile, health education discusses the impact of the built environment on human well-being. Clearly, there is enough to draw on from architecture, even for all subjects.

3. CASE EXAMPLES OF HOW ARCHITECTURE EDUCATION IS REALISED AT SCHOOLS

Architecture can be approached in many ways, and architectural education offers possibilities and means to different kinds of learners. One expresses himself best by words, another by drawings and a third by three-dimensional constructions. One finds the inspiration through literature and another through her own experiences. In school classes and workshops, I have seen pupils observing and documenting the living environment here and now, travelling in time both to the past and to the future, visiting architectural exhibitions and architects in work, telling stories and expressing great opinions, discussing architecture seriously, playing with space bustling and using their endless imagination. I have seen them planning and designing, painting, drawing and modelling interesting details and imaginary worlds, using many different materials. I have seen them formulating the environment for their purposes, building huts and other interesting structures at their own scale – and even taking part in real planning and designing of the environment together with architects.[5] (Jaana Räsänen, 2006)

[5] Play+Space=Playce, Architecture Education for Children and Young People. Architecture Education in Finland, s.16.

Case 1: Architecture as part of visual art teaching at school

In the elective course in the visual arts offered annually at the Pääskytie School, the key objectives are realised through the content found in the built environment as the core curriculum suggests. The course organised by the visual art teacher Titta Suvanto consists of three sections: “Learn the Language of Architecture,” “Design Your Own House” and “Examine a Topical Theme.”[6]

Peeks into architecture with an optional visual arts course at Pääskytie School: Alexandra explores change at school
© Titta Suvanto

Learn the Language of Architecture, held in the autumn term, covers the basic concepts of architecture and is taught through small exercises completed one at a time. Students observe spaces, search for the genius loci, study the effect of light in the room, produce various textures, solve structural problems, search for rhythms in façades, and focus on dimensions and scale. Having begun to master the basics of architecture, the students can continue their main task of designing their own houses.

[6] Suvanto shares ideas and experiences about visual arts and architecture teaching on her blog: https://paaskytienkuvista.wordpress.com/about/.

The starting point for **Design Your Own House** is to find a corner of the world where it would be fascinating to live, with the students searching for plots using Google Earth. Before deciding on where they should “settle down,” they study the natural conditions of the location, the prevailing culture, the living conditions, the available materials, and construction methods. Then, they imagine who the people living there are, how they live, and what they value. By this stage, the students have also considered the human life-cycle and the need for changes in living arrangements. This process continues by devising a layout and sketching proposals for the house. The final floor plans are scanned to a SketchUp-programme, which is used to complete the 3D-modelling of the buildings. The students then prepare their project portfolios as PowerPoint-presentations which are ultimately assessed by the group at the final presentation. Though it might be designed for a hypothetical scenario, each student's house is often a self-portrait and a representation of its time.[7]

Examining a Topical Theme in the spring term takes place outside the school. During this section, students photograph "lost places" and then exhibit them in the town library. They also analyse indoor air quality in kindergartens, and together with the children, design more cheerful appearances for the portable buildings that have been set up as temporary facilities, while also examining and photographing changes in their hometown's built environment.

During this course, students develop their skills in reading the environment as well as the management of dwellings and living situations, training their skills in 3D perception and modelling, while also cultivating their skills in problem-solving. Cooperation with local actors brings transparency to decision-making processes and enriches the range of visual art education options.

[7] The first two sections lean on the ABCs of Architecture – Basic Concepts teaching publication that presents inspiring articles and task tips for teachers (https://drive.google.com/file/d/0BwYhOKq9ezGuTUNRSzNoa2htZms/view).

Case 2: Workshops conducted by actors outside the school

The idea of the series of **City Agents** workshops was to determine how urban spaces could be explored and taken over temporarily to be used as learning environments. Artists from different fields who are interested in the built environment ran and organised the workshops for primary, secondary and upper secondary school students. The duration of the workshops ranged from two to six lessons in length.

The aim was to open up new perspectives and awaken the students' interest in the various phenomena within the built environment through artistic and creative processes. Teachers were also encouraged to approach architecture as a multidisciplinary theme. These City Agents workshops were launched as part of the **Children in the City** project supported by the Ministry of Education and Culture and coordinated by the Special Advisor for Architecture Education, Jaana Räsänen from Archinfo Finland.

Treasures of the Blocks took 5th-graders to the blocks surrounding the marketplace in the city centre. The pupils then observed the environment with all senses, drawing experiential maps on paper bags in which they also collected “treasures” they had found during the exploration. Afterwards, they used their findings to create a mind map of the blocks in the middle of the marketplace in order to stimulate discussion. Each group also introduced their work: How was their route? What did the treasures say about the block? Finally, the groups took the map apart and returned the treasures back to nature, or sorted them into the recycling containers. The pupils finally left the site carrying their paper bags.[8]

Light into Space introduced 9th-graders to the potential of using light art to liven up their academic environment. The students tested different kinds of lamps and lighting methods and then designed light installations in arrival and transit places. The students wanted to highlight their school's everyday spaces such as the entrance hall, main staircase, and assembly hall through their lighting designs, with which they

[8] Class 5A from Snellman School in Kuopio participated in the workshop designed and directed by Architecture Educator Mervi Eskelinen from the Architecture and Environmental Culture School Lastu. Video: https://youtu.be/asPYnrHCgHc.

created a festive atmosphere for the school's market day, during which the public also had a chance to enjoy the atmosphere the students had created.[9]

For **Spaces and Atmospheres with Textiles**, 8th-graders brought old sheets, clothes and garments to school. Their assignment was to use them to mark off spaces in an urban environment. Instead of built elements, the students chose as their starting point a group of trees in a park near their school. During the design process, they tested different textile treatments and determined how to bind separate sheets and clothes together and to the trees. As a final result, they took over the wintry park for a moment with their spatial installations and art pieces depicting their innermost thoughts. Finally, warm juice and cookies celebrated the final discussion and closing event in the darkening afternoon.[10]

Colour through Street Furniture guided 4th-graders to explore and assess the urban spaces built of grey concrete. After the study trip, the pupils designed colourful works of art and street furniture, including a book kiosk and a football goal, for the selected slot. They constructed the objects on 1:1 scale from corrugated cardboard and then carried the pieces to the location. Finally, the pupils discussed if and how the elements painted with basic colours affected the very grey urban space.[11]

Environmental Art in the Spirit of the Place guided 9th-graders in exploring and photographing urban places in their hometown and making interpretations based on the pictures. The aim was to find thought-provoking spaces for which they would like to create environmental art utilising the existing elements and respecting the spirit of each site. After the inspirational tour, the students designed their art pieces in the local museum and presented them to others once in place. The works of art made from natural materials stayed *in situ* for two weeks. Ultimately, it was highly interesting to follow how the weather and passing time added a new dimension to their art. In the end, the students felt they had become more familiar with their hometown and especially certain locations.[12]

[9] A visual arts group of 9th graders from Tesoma School in Tampere participated in the workshop designed and directed by Designer and Lighting Artist Reija Pasanen. Video: https://youtu.be/50f4UDfhStI.

[10] A visual arts group of 8th-graders from Myllytulli School in Oulu participated in the workshop designed and directed by Architect Tiina Sainila and Visual Arts Teacher Päivi Bräysy. Video: https://youtu.be/VKC78GznK2U.

[11] A group of 5th graders from the Eläintarha School in Helsinki participated in the workshop designed and directed by Designer and Artist Päivi Raivio. Video: https://youtu.be/S3d4eLg3vGo.

[12] Students from Kilpinen School and Jyväskylä Christian School participated in the workshop designed and directed by Museum Lecturer Mirkka Vidgrén from the Alvar Aalto Museum.

Exploring the Garden City started with a walking tour, during which the pupils examined urban places from a perspective of greenness and attractiveness. They used self-made green stencils as an observation and documentation tool. Urban spaces were also taken over by placing plants in sites that seemed to miss them. These plants were accompanied by messages that encouraged residents to observe their environments, save the plants, take photographs of them in the nicest locations and share their photos through social media. Finally, the participants examined their pictures and discussed the changes brought about by the increased greenness.[13]

Urban space agents from Taivallahti School using the city as learning environment: experiencing and exploring, discussing and debating, measuring and designing – looking for genius loci. © Jaana Räsänen

From a Chair to a Square guided 4th-graders with exploring an urban square and its various elements through activity-based observation. The pupils used chairs to create a variety of imaginary situations, wherein they sat in a both large circle and small groups as if at a cafe. Additionally, they sat in pairs as if they were riding a bus and sat in a row like they were at a theatre or cinema. The portable chairs helped them to assess the proportions of themselves in respect to the square itself. In addition, the pupils measured the size of the square by forming a human chain. Once they had familiarized themselves with the selected place, they sketched ideas on

[13] 7-to-14-year-old students of the Arkki, the School of Architecture for Children and Young People participated in the workshop designed and directed by their teacher Architect and Architectural Educator Niina Hummelin.
Video: https://youtu.be/W9Ef7EsSUVU.

how to liven up the location. What could happen there? Is it good as it is or should something change? Finally, they discussed whether the square had become their place during the day.[14]

In the **Sound in the City**, students from the first year of upper secondary examined the soundscapes of different urban spaces and the effect of self-produced sounds. They recorded sounds in two spots at each of the four locations to compare the flow of sounds and the impact of acoustics and reverberation. Finally, they listened to the recorded soundscapes, examined the photographs and videos, and discussed the thoughts provoked in them by the process. Exploring urban spaces as soundscapes, instead of visual landscapes, offered a new perspective on everyday phenomena. In particular, the students gained insights into the impact of structures and materials on the acoustics and atmosphere of urban spaces.[15]

In the **Interpretations of Urban Space**, students from the first year of upper secondary examined architecture from a genius loci perspective and then looked for inspiring places in the downtown area. They explored the sites through a multisensory approach and by utilising the methods of site-specific theatre. Based on their experiences, the students drafted scripts for short performances inspired by the atmosphere of the places and then carried them out at the sites. The sources of inspiration included the gurgle of water echoing in an entrance passage, the dirty surfaces of a recess in a facade, and an abandoned janitor's apartment. The scripts also left room for improvisation.[16]

The project demonstrated that public space can open up an endless number of learning paths that one can follow depending on their interests. The shared experiences of public urban areas, like those described above, can be a starting point for most individual phenomenon-based and multidisciplinary processes.

[14] The 4th-graders Estonian-language group of Latokartano School participated in the workshop designed and directed by Architect and Urban Activist Kadri Klementi from the Estonian Museum of Architecture. Video: https://youtu.be/EdKUfOTJF44.

[15] Students of the physics group of Kauriala High School's science line, from Hämeenlinna, participated in the workshop designed and directed by Musician Petri Keinonen. Video: https://youtu.be/Yh2qmknbl48.

[16] Students of a fine arts group from Kallio High School in Helsinki participated in the workshop designed and directed by Actress Veera W.Vilo. Video: https://youtu.be/1UgQa9b7JpQ.

The students were open to making Vartiosaari more Urban as long as the greenery is maintained. © Eeva Astala

The **Dream Block** project linked subjects like social studies, geography, mathematics, visual arts, and the Finnish language into a multidisciplinary learning module. By imitating a planning and design process this project allowed the 9th-graders of Porolahti School to explore the developmental history and zoning situation of their local environment, analyse the current situation, and plan for the future. The project focused on the nearby *Vartiosaari* island, which had provoked a great deal of debate and had also been discussed by the City Planning Department.[17]

The process, realised during the autumn 2017 term, consisted of five phases:

- introduction
- research
- analysis and planning
- implementation
- presentation.

[17] The project was implemented by Architect and Urban Planner Mari Jaakonaho and Porolahti school teachers Anu Ahlamo, Minna Lindblad-Hatamo, Mirja Marjala, Laura Niemi, Linnea Oljemark, Marjo Ollikainen, Tarja Paatero and Laura Parikka. The project was produced by Eeva Astala, the regional artist of the Arts Promotion Centre Finland. Architect Maria Isotupa from the City of Helsinki and Vartiosaari project acted as an expert.

The introductory phase encompassed the project's goals, schedule and the design process outline. Additionally, the participants learned about the principles of a sustainable city and the concept of scale. They also visited the City Planning Department in order to discuss the questions they had prepared in advance with design professionals.

During the research phase, the students first collected background material regarding the island's history and development. Then, they examined the current situation through the city plan and detailed planning maps and by observing and documenting the area. The students also discussed young people's opportunities to participate in and influence the planning of their environments. Finally, they discussed the elements that create the spirit of a place.

In the analysis and planning phase, the participants looked for reference sites based on the research results and considered the island's various interest groups. The students subsequently wrote insightful opinion pieces from the perspective of both current and future residents of different ages. The planning then continued by sketching the ideas for the block.

During the implementation phase, the students combined the best ideas into dream block plans presented as drawings and scale models as well as reports and efficiency calculations.

The presentation phase brought together the entire process and an exhibition compiled all the plans, while in the related event, the students presented their ideas to the city planners and decision-makers. Ultimately, the students wanted eagerly to protect the island's nature, though they also felt there would be enough room for new buildings. As such, their dream blocks were green and environmentally friendly.

The students were open to making Vartiosaari more Urban as long as the greenery is maintained. © Aino Salmi

The national core curriculum for basic education, aiming for transversal competence, emphasises phenomenon-based learning through multidisciplinary modules. As the exploration of built environments in cross-curricular projects supports the objectives of transversal competence in many ways, could these interdisciplinary projects linked to a school's activities bring the students' ideas and views extensively to city planners' attention?

Case 4: Architecture as an optional subject in primary school

Arkki´s LEGO®City Planning event brought all the pupils of Puolimatka School to reflect on the elements of the built environment. © Jaana Räsänen

In August 2016, architecture became one of the optional subjects for 4th, 5th and 6th-grade pupils of Puolimatka School in Hyvinkää. During this 38-hour course in the spring 2021 term, the pupils will focus on the relationship between landscape, town planning and housing.

Having architecture as an optional subject was initially the idea of the school's principal Lasse Luostarinmäki. He saw the potential of the built environment as a multidisciplinary phenomenon integrating the aims and content of various school subjects following the publication of the new national core curriculum challenging the schools and teachers to think differently.

Luostarinmäki contacted Arkki, the School of Architecture for Children and Youth in February 2016 for their help and expertise: Could the idea be realised in cooperation? Arkki gave an affirmative answer, and subsequently asked other specialists[18] to join the collaboration, and then applied for a grant to make it happen. The aim was to develop together with the teachers a programme that meets the

[18] The project was realised in cooperation with Special Advisor Jaana Räsänen from Archinfo Finland and Regional Artist Eeva Astala from Arts Promotion Centre Finland. The experts from Arkki the School of Architecture for Children and Youth were architects Niina Hummelin, Jere Keskinen, Pihla Meskanen and Teresa Winter.

Arkki´s LEGO®City Planning event brought all the pupils of Puolimatka School to reflect on the elements of the built environment. © Jaana Räsänen

objectives of national and local curricula, integrates the content of different subjects from an architectural point of view, and acts as a wide-ranging learning entity.

In April 2016, an event was held where all the primary school pupils experienced a "world tour of architecture" in the form of an inspiring slideshow and a city planning workshop where the students were presented with a huge pile of Legos to launch the process of creating the optional course. The idea of learning through architecture excited and seemingly inspired both the pupils and the teachers alike.

The next step was to arrange training for the entire teaching staff which took place in May 2016. During the 6-hour-long training session, the teachers studied the basic elements of architecture, aspects of sustainable architecture and the meaning of architecture in society, alongside goals, content, and methods of teaching architecture education. The training session also pointed out the connections between the built environment and different school subjects and presented existing teaching material. Following the presentations and the discussions they raised, there was time to work on the themes in hands-on workshops. All of the ideas stemming from this training day were refined into a piloting curriculum that consisted of 12 content themes and an extensive array of methods ranging from writing and drawing to observation and photgraphy, and from model building to dance and drama.

The schoolteachers and the experienced architect-teachers of Arkki realised the pilot phase during the August to December 2016 period in close collaboration with one another. This solution opened up the possibility for the teachers to learn more about the processes of architecture education. It was also a way to develop the aims, content, and methods of the course so that the school’s staff could carry out the teaching in the future.

This project illustrates how just one enthusiastic person, such as the principal of the Puolimatka School, can make a difference. With the help of the pedagogical material produced during the process, the teachers are now developing the course further. According to the principal, the optional subject of architecture will remain in their school's curriculum as he finds it necessary to learn about one's environment and that it is very easy to combine the aspects of architecture with various school subjects. In the 2021 spring term, the principal himself will lead the pupils into the world of architecture.

Case 5: Cultural education plan for architecture

In the urban space architecture workshop, the 5th-grade students of Jouppi School renewed the downtown area of Seinäjoki. Architect Mia Kellberg-Hakala directed the workshop. © Katariina Vestergård

A cultural education plan is a plan that details the systematic implementation of culture, art and cultural heritage in education. Concerning grades 1–9, it guarantees equal opportunities for all children and young people to experience their local culture in a versatile manner. In fact, about 20% of Finnish municipalities have drawn up a cultural education plan, with the local building culture included in most of them.

The cultural education plan of the city of Seinäjoki offers all 5th and 7th-graders in the area an exploration into architecture. As one of Finland's Alvar Aalto cities, it has the most excellent conditions for this.

All of the 5th-graders have the opportunity to participate in an urban planning workshop led by a local architect. During the workshop, the pupils use their imagination and creativity when re-designing and reconstructing the blocks of their hometown on a ready-made template of a map. In addition, they are encouraged to explore their surroundings and learn more about the world-famous architect Alvar Aalto and his portfolio with their teacher.

The 7th-grade students will also get to know Alvar Aalto and the Aalto Center in Seinäjoki via guided tours with the Seinäjoki-guides and Aalto-pilots. The students will then become acquainted with Aalto's production and its special features alongside the development and construction of the city of Seinäjoki. They will receive instructions on how to continue with the topic at school. Their task is to design and

build scale models of public buildings and then outline urban spaces. As well, with the Fine Arts elective classes, there is an opportunity to visit the city's zoning department.

Both entities engage young people with their local building culture and provide an opportunity for them to discuss issues related to the construction of the everyday environment. Packages also include architecture-related assignment proposals and useful links to various educational architectural materials that offer topics that cover a wide range of subjects.

On an annual guided tour, students of Seinäjoki secondary schools visit the Seinäjoki Aalto Center, designed by Alvar Aalto. The visits coordinated by the Cultural Services Manager Aila Taivalmäki are part of the City of Seinäjoki's cultural education plan. © Katariina Vestergård

4. CONCLUSIONS

Will every subject bring its own separate piece of information to architectural education in the future? Will visual art teaching at school stay alive and continue its struggle for good environments? Will architecture be a subject of its own? Do the future teenagers at secondary and upper secondary schools have a possibility to use at least one six week period for a larger integrated environmental and architectural project? We`ll see... We can start with appropriate and inspiring additional education and by taking architecture near to the everyday life of teachers and students. Thus we can encourage teachers to explore architecture from their own point of view, relying on their own experiences, with the help of the already existing teaching material. (Jaana Räsänen, 2006)

The previous national core curriculum (2004–16) set the main emphasis on architecture within the visual art curriculum that divided the teaching content into four main courses, one of which was Environmental Aesthetics, Architecture and Design that was obligatory for pupils from the 1st through the 7th grades while being vocational for 8th and 9th-graders. It was disappointing to note however that there was no such compulsory course in the new core curriculum (2016–). However, the content and experiences from this time still comprise part of the teaching in many schools. As well, the current core curriculum also encourages or even obliges the use of phenomena from both nature and the built environment as sources of inspiration and starting points for artistic work. In fact, the visual arts comprise one of the subjects taught by all Finnish schools. Thus, architecture education is implemented to a certain degree at all of them. However, how extensively and deeply architecture is addressed depends on the teacher. The example offered by the Pääskytie School's elective course (Case 1) in the visual arts is certainly among the most comprehensive. Additionally, the City Agents workshops (Case 2) are further examples of inspiring short-term activities that create interaction between the schools and professional artists and architects.

Architecture can be viewed from the perspective of almost all basic education subjects, however getting grains of information from here and there is not enough. Fortunately, the current core curriculum, with its ideas of multidisciplinary modules and learning environments reaching out from schools, opens up the possibility of viewing architecture as a holistic and meaningful phenomenon that integrates various fields of science and art as well as everyday life. Multidisciplinary entities are now being developed actively, being implemented as week-long intensive courses, over six-week periods, or even as semester-long entities depending on the academic

level. Urban planning, as a multidisciplinary entity (Case 4) is a further example of an entity implemented over six weeks, while architecture as an optional subject (Case 5) represents an entity lasting the entire semester. The cultural path of architecture (Case 6), on the other hand, offers the opportunity to supplement the school's teaching with a study trip, artistic or architectural visit, or a workshop. In all of these, urban planning and exploration of the school and its immediate surroundings are at the very heart of the work.

The expanding understanding of the learning environment also binds the various actors in architecture and culture to the teaching even more strongly than before. With the support of the ministries, arts councils, foundations and other financiers, the actors in the field of architecture are eager to assist schools with achieving the aims set forth by the national core curriculum. The architecture schools for children and young people alongside the museums of the field are at the very forefront of this developmental endeavor. For example, Arkki, the School of Architecture for Children and Youth, is currently developing multidisciplinary learning through architecture in cooperation with classroom teachers in Taivallahti School in Helsinki. The results of this three-year-long project will be published in spring 2021. In the museum field, the Alvar Aalto Museum is cultivating a network of Alvar Aalto Schools around Finland, while the Museum of Finnish Architecture and the Design Museum have joined forces to establish a learning centre for architecture design at the New Architecture and Designmuseum in Helsinki. It is interesting to see how these museums will serve basic education in schools.

Lastly, teachers of the visual arts teachers treat architecture as an art of construction and an art of space alongside other visual arts. This approach is close to one of the specialised arts and architecture schools for children and young people. This is because one’s artistic viewpoint is key when cultivating creative thinking, which is seen as one of the most important skills, associated with future planning. In certain contexts, such as multidisciplinary entities in basic education, one's neighbourhood and urban planning perspective are often emphasized. This is an important aspect from the point of view of developing participatory skills, as both creative thinking and participatory skills are needed when constructing a sustainable future in cooperation with the field's professionals and decision-makers. Also, it is absolutely vital to understand the interaction between people, nature and the built environment.

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This paper was drafted as an external contribution to the Coordination and Support Action "URBAN DESIGN GOVERNANCE - Exploring formal and informal means of improving spatial quality in cities across Europe and beyond", also known as "Urban Maestro". The Action was funded by European Union's Horizon 2020 research and innovation programme under grant agreement No. 831704 and implemented from 2019 to 2021 by a consortium comprising the University College London, Brussels Bouwmeester Maître Architecte and UN-Habitat.

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ACKNOWLEDGEMENTS

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Design and layout: Kidnap Your Designer, Brussels Bouwmeester Maître Architecte (BMA)