Designing with Children

13th Primary School, Amperia

Providing for girls and boys aged 6-12, and adjacent to a secondary school, the 13th Primary School is located in Amperia, a quiet, green suburb on the outskirts of the city of Chania in northwest Crete. The school has two and three storey buildings, built in the 1960s/70s and set within a large hard-standing playground. The school accommodates 250 children with 6 elementary grades and a kindergarten. The Transformable Intelligent Environments Laboratory (TIE Lab), where architects Marianthi Liapi and Kostis Oungrinis are based, is within the Technical University of Crete's Kounoupidiana campus, around 4km to northeast of Chania.

An existing relationship between the school and the architects at TIE Lab led to the library design, the collaborative project described here. TIE Lab became known to Chryssa, head teacher of 13th Amperia School, because of two parallel sets of TIE Lab work: one with 14 local kindergartens, making low or no cost interventions in their spaces and another with Architecture students from TUC making playful interventions for children to use in the immediate landscape around the University.

Motivation

The library design and build project was informed by motivations and methodologies for *better learning spaces and better learning experience*, according to Marianthi. Chryssa's personal interest in developing a school ethos of collaboration between the classes and age groups and in making positive changes to the school environment linked up with what she had heard of the Marianthi's and Kostis' work. Christofia, teacher at the 13th Amperia Primary School, with an interest in environmental matters and working on an eco-school project, became a close contact and working partner for TIE Lab's projects within the school over the next year. Subsequent projects included school grounds

What
Design and build for a school library space

Where
Chania, Greece

Age
11 years old

Group Size
20 children: 13 boys and 7 girls. 15 children present in the build session

Project Stage
Brief, Concept, Construction, Design Development, Pre-Brief

Children's Roles
Builders, Creative Inspirers, Expert Consultants

Timescale
2 morning sessions, October 2014

Partners
Marianthi Liapi (Architect, TUC TIELab Research Director)
Konstantinos Alketas Oungrinis (Architect, TUC TIELab Director)
Elli Gkologkina (Architect-engineer, facilitator)
Ioanna Fragkaki (Architect-engineer, facilitator)
Ourania Altouva (TUC student, facilitator)
Christofia Mpountrogianni (Grade 6 class teacher, facilitator)
Chryssa Terezaki (Headteacher at 13th Primary School, Amperia)
20 pupils, 6th Grade, 13th Primary School, Amperia (Participants)

improvements (playground games, recycled water bottle planters, colourful playground decoration) and a refuge space within the school building for a child with additional needs.

Behind the two sessions we discuss here lay TIE Lab's intentions to work together with children around a co-created 'challenge'. Working with the children's interest in a computer game for which the phrase 'challenge accepted' became common parlance for children and architects together, Marianthi wanted to present the library design in the form of a problem solving exercise to the children which would culminate in construction and a ultimately a physical library area for use by Grade 6 and other children.

Whilst TIE Lab architects were familiar with involving children in what they called a 'co-concept' phase of design (thinking and planning together, perhaps later constructing together whilst leaving much of the *design* to designers), they openly spoke about their unfamiliarity with children being brought into a 'co-design' phase. The opportunity to be involved in the Leverhulme project prompted TIE Lab architects to experiment with a new kind of engagement with children. Marianthi and her colleagues entered the project feeling inexperienced with this new phase of work but enthusiastic for this kind of work with children.

Children's involvement

Prior to our visit, Marianthi, Kostis and their TIE Lab colleagues had, for more than 1 year, worked on easy, low cost school grounds improvement projects in connection with themes of environmental education and social cohesion which were already important within the 13th Amperia School. Session 1, held some weeks before our visit and not fully documented by our research process, marked the start of a new programme of design with a view to build. That session involved a visual presentation from the architects, showing unusual and inspirational designs and creative re-use of found and recycled materials, and was accompanied by a discussion about the need for a shared reading area/informal library space within the school. School homework was set for children to draw their own personal design for a library space.

Session 2 was observed by us, researchers, on a Thursday morning of October 2014: children in 4 groups of 5 presented to the whole class, the teacher and the architects their individual ideas for a school library area, which each child had drawn at home as part of their homework. These ideas were then analysed and grouped according to themes by the architects.

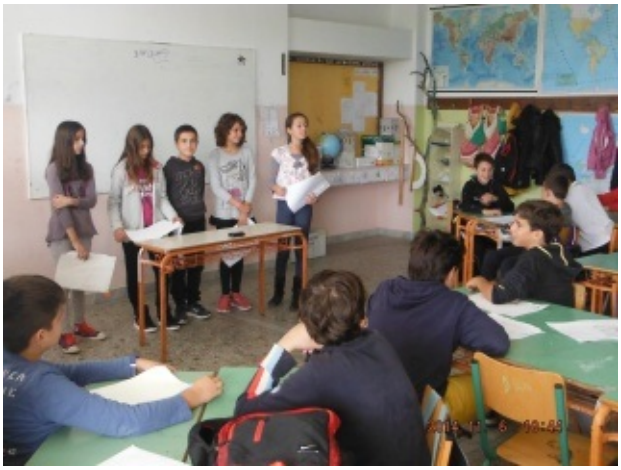
In Session 3, 15 of the 20 children in the class, plus their teacher, attended the session – all being used to quite regular Saturday work and activities being held within school. This building session began with 5 architects setting out the found and reclaimed card materials (heavy-duty laser cut card, strong tubes, strings). Without prior briefing about intended outcome, children began work at 'stations' of material preparation: pressing out the cut shapes of card; measuring holes in tubes; or, cutting string. Children chose to work individually, in pairs or friendship groups.Once everything was ready, children were invited to experiment with the making of some structure(s), which would hold books.

Outputs and outcomes

The children were particularly excited because their school had set up this link with the architects and by the time we observed, TIE Lab visitors had become welcome friendly faces always bringing with them the promise of exciting and practical activities in which to take part.

The chief contribution from the children was, in reflection, recognised by the TIE Lab architects to be a bringing in of additional uncertainties – breaking up the usual way that architects worked. The involvement of the children on Thursday when they gave presentations, similar in format to a ‘crit’, was working as a designer-in-training would.

By the end of the last building session that we observed, the children reached workable conclusions; back at the studio, the architects built a final useable set of bookcases, which was brought into school and set up for use.

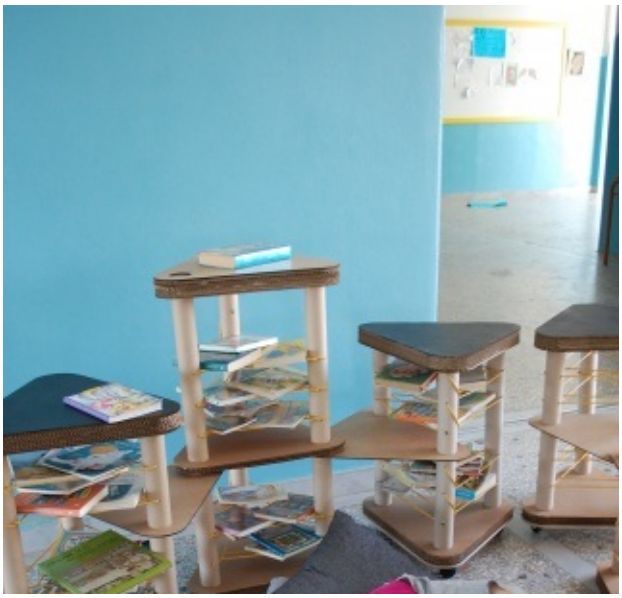


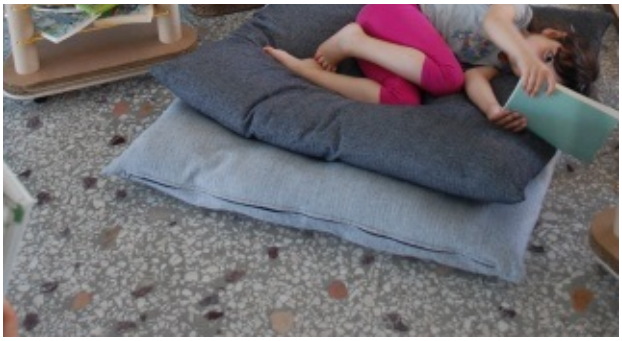
Children presenting their ideas for the library space to their peers, architects and teacher.

Hands-on tasks during the building session.

Working together.

A creative use of string to create shelves for the bookcase.





'Not your usual study area'.