Public Summary

Apply a Makerspace as an educational tool for primary schools

The "Lessonlab" is the result of the bachelor assignment "Apply a makerspace as an educational tool for primary schools.". This report covers the process and results of the assignment. The project is derived from a case study performed by nine Industrial Design students, including the author of this report, commissioned by the KONOT foundation. KONOT is the umbrella organisation for 22 primary schools in north-east Twente. The two-day case study's goals was to design concepts for a "new kind of classroom". KONOT based the idea for this classroom on the University of Twente's Designlab. However, two days turned out to be too short of a period of time to produce workable concepts. Due to this, the case study was transformed into a bachelor assignment with the goal:

"Design a space wherein the child is offered the opportunity to develop itself optimally"

An analysis was conducted to come to valuable requirements and insights concerning the design process. This analysis consists of a SWOT analysis, a stakeholder analysis, an analysis of the preliminary research conducted during the case study, literature research and interviews. This resulted in a number of valuable conclusions. In particular it was concluded that the assignment is extremely complex. The problem the assignment presents required solutions on different levels. These levels were defined as a result of the analysis phase. Apart from that, it was concluded that teachers should be invited to participate in the design process to stimulate enthusiasm for the project within the foundation. Due to this the conclusion was made to plan four contact moments with teachers during the design process.

Following the analysis, three concepts were generated: Techplay, the "Lessonlab" and Make-it. These concepts differ from each other in terms of what the pupils will do within the space and which activities are facilitated. The concepts were evaluated during a feedback session conducted with teachers. Next, a test setup was produced which consisted of aspects from both the "Lessonlab" and Make-it.

Subsequently, pupils from a school within the foundation were invited to participate in a testassignment within the test setup. A total of thirty pupils fulfilled a design assignment, supervised by their own teacher. The tests were evaluated by both the pupils and their teacher. The tests were also documented by use of a scenario. The documentation and evaluation of the tests were central to drawing conclusions concerning the test setup. This resulted in the "Lessonlab" Being chosen to further develop.

The conclusions from the test phase were determinative for the completion of the final design. Necessary adjustments based on the test results are discussed within the conclusions section of the report. Besides this, the used method, proposed implementation and future plan are discussed. Finally, a number of recommendations are made concerning the future development of the "Lessonlab".