



Blitz Beton Workshops & Ateliers, Industry and Education

The Blitz Beton Program is developed in a close collaboration between the ENCI, the Netherlands Cement Industry and bureaubakker, an independent architectural firm specialized in architecture education. In our experience it is exactly this independence - some would say interdependence - that is crucial for the progress of our project. bureaubakker operates as an intermediary, functioning as a buffer for the political and cultural differences between commercial enterprises such as the ENCI and the academic world. Translating the specific wishes and particularities of curricula into workable programs for sponsored initiatives and vice versa. Also of decisive importance is the ability of the industry to offer a comprehensive product, including well-devised workshop programs and all the necessary teaching and supervisors. All this in addition to ensuring the contribution of many companies in the form of specialized technical assistance, materials and tools. In this way we are able to offer different schools a relatively simple opportunity to sample this program. Each workshop and atelier organized by us is tailored to the needs and wishes of each school and group of students.

Although our aim is to set up a collaboration in which there is no overlap of expertise and in which the involvement of the school is much more extensive, practice has taught us that a gradually shift from this initial aim of a comprehensive product towards our intended role as a truly supporting collaborator seems to work well.

So what is it that we do exactly? The Blitz Beton Program consists out of the Workshops and Ateliers.

Once a year we organize a Blitz Beton Workshop. Students from different schools - from more and more countries - are invited to participate in this one-week event. Each year different supervisors develop a theme around a specific material and technique. Each year huge efforts from many different companies guarantee an intensive and innovative workshop, with professional assistance at all levels.

The Ateliers are more modest in scale, though certainly just as intensive. However, their main characteristic is that they are incorporated into the curricula of the different institutes of education, both universities and academies of architecture. These Ateliers are specifically geared to the varied needs and wishes of each institute and thus form a direct extension to their existing curricula. They tend to blend more and more with the programs of the schools. Often the Ateliers are not a separate component of the program but an integral part of a design or analysis studio. In terms of objectives they are similar to the Workshops, offering a real - i.e. practical - introduction to the materials that are central.

Both the Ateliers and Workshops are the products of the same ideas and conviction about teaching a true understanding of materials. Their format - a workshop resulting in a 'real' product, scale 1:1 - provides the basic structure. Instead of a mainly theoretical approach, the Workshops offer a necessary complement to many existing study programs. The set-up offers to students a chance to gain practical experience. They have a limited amount of time in which to see their ideas through to implementation. Ideas are immediately tested in a way that is more intensive than a purely theoretical approach. They are confronted with the consequences of their own decisions. When working with concrete this often is even more intensive. The result of their efforts, from architectural design to solving practical and

technical problems to making the product, is only revealed after the molds have been removed. The end result is then fixed. There is no possibility of improving it during execution. That, in our view, is a very important lesson in fully considering the consequences of all kinds of decisions taken during the design and production process.

In addition to the choice of this format two main concerns about architectural education are embedded in both initiatives.

Firstly, the idea that to master the profession, students must understand the tools and materials they work with. The Workshops and Ateliers are organized with this in mind. Traditionally, educational institutions are extremely capable of creating an academic environment in which students learn about and investigate (at a mainly theoretical level) their future profession. There is ample scope to explore their fascination for many different fields of expertise. However, partly because of this continuously expanding stock of knowledge that has to be gained, specific knowledge about materials often remains purely theoretical. Students become expert in constructional data, cost-effective solutions, environmental issues and the like, but an understanding of materials - especially in an architectural and tactile sense - rarely extends beyond a few lines on paper and perhaps some images of surfaces.

The Workshops and Ateliers aim to fill a gap. To give students a real experience of how they can use, control and 'prescribe' materials as they develop as designers. A 'hands-on' learning program in which they are asked to discover and explore the possibilities of materials and techniques. IN which they learn how materials can be deployed to meet design objectives instead of adjusting their ideas automatically to the seemingly well-known and generally accepted limitations. They learn to explore, gathering knowledge in the process of making. A program in which techniques and materials - both old and new - are combined with an often-unorthodox design assignment and which always results in a 1:1 product. To experience and understand the process in which building components are used is, in our view, an important asset in extending the ability to design with these materials and to gain a fascination for both the technical and architectural aspects.

Developing this fascination is of extreme importance in ensuring that students keep exploring, even after the Workshops and study programs have ended. Particularly owing to the overloaded curricula, this becomes even more crucial. Short introductions have to have a long-lasting and wide-ranging impact. It is not the fascination for a specific material or technique that is the prime motivation in doing this. Of greater importance is to develop an interest in how to study and explore ideas. Once students have experienced a format that broadens their capabilities they can reap the benefits when confronting other subjects and issues.

The second main idea is based on the belief that multidisciplinary collaboration leads to fruitful results, especially where the different partners have individual, complementary characteristics. In this case the combination of educational institutions and industries. In educational institutions there is an abundance of eager and fresh minds that are trained to investigate and question everything they are confronted with. The industries can offer 'real-life' experience and experts, and are capable of providing the necessary materials and tools in a more flexible and pragmatic way. These Workshops and Ateliers are one such combination of different partners that can develop and take advantage of each other's specific contributions. On the one hand an interesting and necessary extension of an already busy and seemingly complete curriculum, on the other hand the possibility of gaining insight into materials and products. To illustrate this last aspect it is interesting to note that some results of the Ateliers are currently being investigated further to see if they can lead to commercial use - an important development that justifies more extensive input from different partners.

Together with the collaborating schools, we were able to show the advantages of a critical approach from both the industry and educational institutions. Such collaborative ventures can benefit from the

expertise of both parties. We have been steadily developing a more interesting and close partnership with the Dutch colleges of training. We are also currently investigating possibilities of extending our knowledge and efforts through collaboration with both European partners of the ENCI and other schools and academies. After all, the success of these programs depends on the enthusiasm, fascination and close interaction of a wide range of companies and institutions.