Improving pedestrian mobility trough bottom-up strategies (EiABC – ETH Zurich student workshop)

Description of workshop: Focus, goals, target group

The workshop built on a long-standing collaboration between ETH Zurich, the Ethiopian Institute for Architecture, Building Construction and City Development (EiABC), as well as other Swiss and international partners. The exchange has resulted in a variety of research, teaching and construction projects.

This workshop sought to address the challenges of the status quo of pedestrian mobiliy with a bottom-up approach. Under the assumption that such interventions could potentially improve the pedestrians' daily economic activities and provide a basis for sustainable, as well as economic, development, the workshop participants were asked to design low-cost, adaptive and easily applicable ways of improving pedestrian mobility in Addis Ababa. The workshop was structured along three phases. During the first phase, the participants would carry out field work according to given tools, as well as their own devised methods to thoroughly understand the assigned neighborhoods and study areas. The second phase focused on a process of joint problem definition through team work. All data and findings were collected and presented to the whole group in order to identify the major problems and challenges. For the third phase, the participants were asked to create hands-on prototypes of possible solutions to improve pedestrian mobility in Addis Ababa at multiple scales. Based on punctual desk reviews and feedbacks the teams had the opportunity to iterate on these initial designs and present their process and outcome in a final presentation. Incorporating these discussions, the group has ultimately compiled their findings, texts and projects into a final report.

The workshop was open to all motivated EiABC and ETH Zurich Bachelor, Master and PhD students out of which the organizers chose ten from the EiABC and ten from ETH Zurich. Working experience in developing countries and/or profound knowledge in architecture, building construction, urban and transport design, environmental science or political and social science were strong selection criteria. Besides technical expertise, applicants were also evaluated according to their social skills and their creativity.

Workshop participants discussing their findings from the field trip

Learning outcome for participants

The workshop provided the participants with the folling mein learning results:

First, students improved their critical thinking skills by learning how to adapt classroom-based, scientific thinking to a real-world problem. This allowed students to confront the complexity of given problems in an interdisciplinary, holistic, and systems-oriented manner – an approach rarely taught in formal learning environments.

Second, students were encouraged to develop solutions, not only through technical optimization, but also by developing a deep understanding for the needs of those who will be affected by their solutions. Through this process, the participants were stimulated to reflect on the implications of their current research as students, and their future work as professionals.

Finally, by encouraging consensus processes throughout the class, students learned to effectively and respectfully communicate and negotiate with one another. This provided the students a chance to develop their skills in both leadership and mutual learning.

We believe that this integrative and reflective approach will have a profound impact in the participants future careers and decisions.

Following the workshop, students:

- Learned transdisciplinary approaches to integrate stakeholder inputs and scientific knowledge into their problem-solving process
- Improved their abilities to frame and understand problems contextually and effectively
- Developed design-thinking skills to create potential solutions for real-world problems
- Gained experience to work in a multicultural team and an interdisciplinary environment
- Learned how to better communicate scientific work to the lay community, experts, and peers in meetings, critic sessions, and during group work

Student team observing the traffic situation at the La Gare intersection

Participants quotes

"After an introduction in Zurich, we met at the Airport in Addis Ababa and our adventure began. The interdisciplinary workshop was very well organized. The daily work with the Ethiopian students was accompanied by lectures of local and Swiss urban planners. After the interesting, theoretical input we were able to participate actively. Fieldwork on different sites, presentations and discussions in multicultural teams enriched the unique experience. We learnt how one can develop ideas and mount a project through different tools in a short amount of time. Working with Ethiopian students made us understand so many cultural processes. We experienced local traditions, which were important to develop a project on. Along the work we had a great time watching dance celebrations and taking part at food ceremonies and hikes to old churches. We still keep in touch and meet as well in Zurich in Ethiopian restaurants."

Aurelia Müggler, MSc student in architecture at ETH Zurich, Switzerland

“I applied for the workshop because of the topic 'Improving Pedestrian Mobility through Bottom-Up' Strategie' and it deals with bottom line activities in Addis Ababa to look for alternative mobility development options in the city. The fact that different peoples with various professional background become part of the workshop helps me to broaden by way of thinking towards specific challenge thorough the discussion we had, the site analysis we have been doing till the proposal we come up with. I am very delightful with the time schedule that the team come up with and the full execution of the expected out put at the end with great team spirit. We all were exchanging the experience we got from the different sites we visited, the different way of interpretation we developed and the flow of the work was successful to me. I have also cultivated much about how to come up with a problem statements and filter targets through the high light given from the organizers. Beside this the fact that the workshop handled between two groups of students from two universities and two different countries enrich the workshop to share and exchange the way forward. The closing of the workshop with a presentation of each group having an audience of the team, different professional invited from the practicing sector, students and the stake holders linked the out put of the workshop to the real environment. We had essential discussions and exchange afterwards. In all I was very much happy about the workshop and I believe such kind of crucial activities will be continued in the future.”

Aknaw Yohannes, BSc student in architecture at EiABC, Ethiopia

Participants testing a proposed intervention

"For me, the workshop was a great opportunity to get to know how pedestrian mobility is arranged in a complete different setting. It was great to work in this international and trans disciplinary team, I learned a lot from this. I hope that some of our ideas from this workshop will also be applied in reality."

Ernst Bosina, PhD student at the Institute for Transport Planning and Systems at ETH Zurich

The bottom-up strategy learned from the perspective of pedestrian mobility improvement can be very important in my country. It is one that I hope to see implemented in Ethiopia's various development schemes that are still yet to come. By using the bottom-up strategy we can incorporate the society into solving problems. We as professionals should be based on their ideas, thoughts and problems. After all they as end users know what is best for themselves. I will also use this strategy in my own future and the remaining of my learning years.

It was a great idea to have thoroughly discussed our solutions first within our groups and then with professionals who gave us consistent feedbacks. The other dimension of the project that stands out for me is the group work. We were discussing and arguing about our different ideas fiercely and with intent throughout the project because we came from different backgrounds. As a result of that differing ideas within a group were inevitable. But at the end of the day our integrated solutions were the best ones we could ever come up with by ourselves.

I also like that it was 2 weeks, not short and not too long, and that it was intense. That allowed us to be fully concentrated at the tasks at hand. The last point that I liked about it was its multidisciplinary nature.

Firehiwot Nesro Kedir, BSc student in Construction Technology and Management at EiABC, Ethiopia

Teaching material and outcomes of workshop

Link to final report >> (KFPE Website?)
Link to film documentation >>
Link to student reader >> (KFPE Website?)

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