**Feedback analysis**

Some of the feedback can be more lengthily than needed, has spelling mistakes or aim at experimental procedures (not part of support feedback but experiment). Therefore, the following changes have been:

1. Spelling/grammar: mistakes were corrected, and sentence structure improved, without changing the intend of the sentence.
2. Adjustments: some of the comments were written in a hurry and sometimes unclear or even difficult to understand at all. Based on the end-interviews (also used in the next section) the answered were made slightly more comprehendible.
3. Disregarded: the feedback on the design, execution of any other procedural aspects of the experiment (not the support),

#### Introduction Section (five chapters)

**Chapter III, Introduction (feedback page 14, support tool)**

1. Daily sessions should either be prolonged, or the weekly session should be held on Saturday.
2. Add a short section that a clear indication of the observer role is only necessary when you notice that the family has difficulties to remember.

**Chapter IV Explanation Key Topics & Chapter V Pilot Projects & Travel Preparations (feedback page 29 & 32, support tool):**

1. The statements made in the key topic text should be nuanced.
2. The Introduction chapter should inform which parts of the support could be read in preparation to the project.
3. An online lecture should be provided on how the support works and how you can prepare for an upcoming project.

**Actor Section (ten chapters)**

**Chapter I, Introduction to the family** **(feedback page 46, support tool):**

1. Change section to include introduction of the family to the team.
2. Change in the observer section that the macro observation can be more flexible (does not have to be on the same point all the time). The importance of the macro observation from a fixed point is mainly in the building process.
3. In the foreword and introduction, the support should state more explicitly that it was developed for engineers and architects operating in a foreign country. However, that some sections might be useful for locals.
4. A general diagram indicating the various chapters, steps and outcomes needs to be added at the beginning of the support. A flowchart per chapter would help understanding the logic of the chapter itself and therefore should be added.
5. Remove the initial introduction to the family and just start immediately with the section in which the teams introduce themselves to the family.
6. Change the actor section where they have to swap roles and remove the observer section.
7. Extend the explanation in this chapter on appropriate clothing, check the description in the introduction chapter and make an overall check if notions are described extensively enough throughout the support.
8. Check if games, playing or other activities could be added to the introduction with the family. For example: a dice game in which every number reveals something about the team and the family.

**Actor Section, Chapter II Interview Daily Routine (feedback page 54, support tool):**

1. The interview guide and chapter should be adjusted to a more freely interpretable format. Here the users are requested to formulate all questions by themselves and only examples are given.
2. Remove the repetition of the interview instruction in the chapter.
3. Suggest making this chapter interchangeable with the next chapter. The dreamhouse chapter is a playful way of getting to know the family and could make them more comfortable.
4. Add in the section that differences in findings are actually positive. The chapter should explain how different findings can be weighed to pinpoint the actual fact.
5. Make an online lecture(s) available on the application of the support. Make a flowchart on the layout of the chapters and the expected outcomes. Clearly explaining the overlap between the chapters and the overall application.
6. Clearly state in the result chapter of the dissertation that the feedback is limited to the time constraints and should state that further research is required to get more fundamental understanding of the application of the support. Reducing the overall support (combining chapters) would increase available time and level of detail of the feedback.

**Actor Section, Chapter III Family’s hopes and dreams, (feedback page 64, support tool):**

1. The chapter should give more alternatives in types of approaches to collect the wishes and demands (extend state of the art analysis), materials and tools. Offering the users, the option when one type does not work or makes the family uncomfortable, with alternative approaches. This would also mean that the framework should become more ‘optional’
2. The support should separate the observations of the children and parents and weigh them according to their priority. Although the children’s desires and dreams are very important, they should be fitted according to the preferences of their parents.
3. Change the title of the chapter and adjust all words in the chapter (dreamhouse) for desired housing.
4. Add a section in the chapter in which a zoning plan is made based on the program of demands.
5. Make the final step of the session optional & add a description why this session is of importance for the family to negotiate desired and preferences.
6. Create different options, also addressed feedback number
7. Elaborate more on what a program of demands is, how it can be used and show examples.
8. Add description that the workshops should be held individually in privacy. Here children can be combined, but parents should not be present. In the final session at a section where the children present their ideas and the parents reflect on what they seem valuable/usable. The team can then list these findings and use them into the solution articulation.

**Actor Section, Chapter IV Mapping, Measuring and Drawing (feedback page 65, support tool):**

1. Explain the importance of small shrubs in identifying borders how this relates to building orientation and an effect cause small private and semi-private outdoor space for a wide range of functions. Add an explanation why a specific radius is needed in this type of context (immediate social/cultural dimensions).
2. Try to combine this chapter with chapter VI.
3. Explain how the different capacities (layers) can be used in the solution articulation and why a broad inventory is essential not to miss anything.
4. Make terrain addition in the 3D-file optional and suggest possible alternatives such as making sections on a larger scale.

**Actor Section, Chapter V Observe Daily Routine (feedback page 82, support tool):**

1. Add explanation why observation is similar to the interview and how it helps to confirm or reject statements made by the family.
2. Add a clear description that a personal relation and involvement is positive. However, that the observer should try to remain participant and not leader/activator of activities.
3. Change the observer role for this chapter in a second observer following a different family member. The observation could be reduced to one day to reduce the time needed to understand the individual activities. Questions should be added to understand the differences between the days (especially the weekend).
4. Emphasize in the introduction of the chapter that the goal is to understand everyday life with a little more focus. Finding additional capacities is of secondary importance.

**Actor Section, Chapter VI Context Depth Analysis** **(feedback page 106, support tool):**

1. Add explanation why analysing capacities before design is important.
2. Combine and condense chapters IV&VI
3. Adjust and improve the soil test by: adding salt, use straight bottles and apply different types of soil tests.
4. Make the chapter more participative for family and community member to explain the various aspects to the team.
5. Add an approval section from the families who own the land where the team wants to take the soil tests.
6. Add information on soil interpretation and how this relates to various earth techniques. Moreover, where additional information can be found.

**Actor Section, Chapter VII Interview Capacity Analysis** **(feedback page 124, support tool):**

1. Add a feedback loop in chapter IX where the capacities are reavaluated in the design meeting with the family. Some materials/tools might not be available during this project and therefore changes should be made accordingly.
2. Add sections in the interview questions addressing materials and tools if and for how much they will need to be acquired.
3. Add an overview/checklist of possible skills which can be exanimated.
4. Adjust the chapter in order for the users to articulate their own questions.

**Actor Section, Chapter VIII Capacity Impact Analysis** **(feedback page 133, support tool):**

1. Adjustment chapter: add a more detailed description how the budget can be monitored and adjusted along the project.

**Actor Section, Chapter IX User/community participation planning (feedback page 159, support tool):**

1. Adjust chapter: this chapter will need to change work form and decisionmaking processes. In such a way that the family understands the challenges and that compromises have to be. Moreover, that they accept them and are willing to let desired solutions go.
2. Adjust chapter: advise teams to plan 10-20% extra time and use a string to keep track of the project progress.
3. Adjust chapter: advise teams to start as early as possible with getting tools and materials in, when the solution is identified.
4. Adjust chapter: advise teams that there can be a substantial difference in cultural understanding (by giving examples) and that they should estimate more time then normally required.

**Actor Section, Chapter X Start of Activities (feedback page 168 & 311, support tool):**

1. Adjust chapter: simplify the methodology and let the teams per day decide who they trained, what they taught and how this contributes to the understanding of the introduced building solution.

**Adjustments to entire Support**

1. Adjustment all chapters: add to the introduction of every chapter a short description what is the expected outcome.
2. Adjustment all chapters: rewrite the entire chapter and remove all abundant information. This should chapter should be a lot easier/faster ot execute.
3. Adjustment all chapters: add explanation why the presence of the family is important in relation to chapter X (knowledge transfer). Here small activities train the families for the required skills later on in the building process.
4. Adjustment all chapters: use as many of the teams outcomes in making the support more specific in its applications
5. Adjustment all chapters (observer): this chapter should be moved to the observer section of the support and divided over the entire project.
6. Adjustment all chapters: the depiction of the community as a very traditional community/lifestyle should be removed in all chapters. This includes the: average typology, willingness to ex-change capacities and the actual willingness to help each other (very low). The community is an economy (capital based) society where money has become the sole form of exchange.
7. Adjustment all chapters: the users experience the support design as a very rigid model. The chapters should be used more fluidly to generate an overlap between analysis and design. They are now to clearly separated.
8. Adjustment all chapters/support/experiment: the support will need to emphasize more on the difference between affordable and desirable housing. In the current support design this issue is not solved and therefore the teams struggle to get honest answer.
9. Adjustment all chapters/support/experiment: same as mentioned in feedback
10. Adjustment all chapters: all chapters should be rewritten to also fit families with higher financial capacities.
11. Adjustment all chapters: all chapter will have to be checked that they consider low community involvement and paid labour in the construction phase.
12. Adjustment all chapters/support/experiment: to help individual families has seem to have a negative effect on the outcomes of the project, involvement of community and have gravely disturbed inner community relations. The support should be adjusted to either realize a community project (also see testcase, church kitchen, 2014, Smits) or to train fundi’s (informal builders).
13. Explain throughout the support that it is advised to use the chapters in the presented order, but that certain parts can be disregarded if needed.
14. Provide at the beginning of all chapter a list of products, outcomes and documents to be used in the chapter.
15. The support should advise the users to involve a local builder in the project, try as much as possible to seek the feedback of a trusted local builder throughout the project and in future experiments demands a substantial change in the experiment design (combining local students/builders into the team).
16. Make the chapter less forceful and advise the users to get as many of the capacities as possible.
17. Adjust chapter to the actual housing situation in the area.
18. The increase community involvement, the support should aim at realizing a public building support by local builders. The gathered knowledge can then as a result be shared and replicated afterwards.
19. The focus of the support should not focus on articulating a housing solution for one family but should introduce a building solutions widely applicable.
20. Change support to include local builders in process.

**Adjustment to Experiment**

1. Additional batteries and chargers were bought for all the equipment.
2. Add a section in the project contracts which states that there might be age and sex differences, that the family accepts the teams’ expertise and opinion (this is also an important topic for other comments in relation to the families disregarding the opinion of the teams as they are not local experts)
3. The language criterium in family selection should have a heavier weight in relation to the other criteria. This criterium should not only apply to one family member but for the entire family.