

# From Bauhaus to DESIS: exploring solution-focused methodology for social design education

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**Abstract:** *What are the social responsibilities of design schools? In order to explore this question, we employed action research methodology. Through our on-going collaborations with different design schools, our main research goal is to investigate the social role of designers and further of design schools and the design education system as a whole. 'Ageing in place', the overarching concept for these labs, was to enable participants to experience and question how the life-course approach to ageing could inspire new community design processes. So far, we have engaged different types of design schools and in this paper, we reflect on one of our design labs with a vocational training college in Hong Kong. We worked with staff members and students teaching them how to employ design as a means to engage housing estate residents in their neighbourhood. In-depth interviews and observations of stakeholders who participated in our design actions have been conducted throughout the process. To conclude, three tactical actions on how an individual designer's responsibilities relate to the systems of design education will be suggested and shared: confrontational tactics, empathy and imagination of replacement.*

**Keywords:** *Solution-focused, Civic Education and Design Lab*

## 1. Introduction - what are the social responsibilities of design schools?

Education has particularly been regarded as a means to train young people to achieve more social growth and development while in fact it has been channelled towards marketization. Commercial benefits have been prioritized while people's

needs have not been thoroughly interpreted. This is also going in opposition to the ideals of design education. In this paper, we also reflect on an alternative teaching module that was conducted for a vocational training design collage to question the responsibilities of design schools towards social development. As Cunningham (1979) argued the formation of schools of design was *'not simply a prototype of technical education, established for commercial reasons.'* Instead, we argued that it should occur against *'a background of increasing public encouragement of art, which laid emphasis on the national prestige, and social benefits, as much as on the commercial advantages to be derived from art'*.

From Bauhaus, the most famous design school in the modern history, its main purpose was to train designers for industries. According to its founder, Gropius (1965), the school was founded with the 'idea of the fundamental unity underlying all branches of design.' In the introduction of Gropius's book, *The New Architecture and the Bauhaus*, Frank Pick praised Gropius's approach that *'[t]he designer for industry must be placed alongside the architect, with a training equivalent and in character, if directed towards another end, and a status and authority equivalent, too'* (ibid, 10). Worked like an experiment and it only operated for 14 years (from 1919 to 1933) the German term Bauhaus, literally "house of construction" stood for "School of Building" set a benchmark for modern design schools with its fundamental role of design education: *'... the principle of training the individual's natural capacities to grasp life as a whole...'* (ibid, 52).

Our project should be seen as a response to this calling for training individual's natural capacities to grasp life as a whole. However, to us, education should not be confined to the boundary within the campus of any educational institutions, but extends beyond, as design is with people. We follow the spirit of participation research to involve people who might be the potential users of any design ideas. We also maintain that design has a particular nature, which needs abductive logic to accomplish more venture and discovery, just like Dewey and Cross's ideas that appositional thinking would bring us more insights into our future. This project is about engaging both young people and potential users in design, with the application of solution-focused method of design. We take the form of design lab as an alternative-learning module to ask participants to work for indigenous sustainable change. This is an echo to what Manzini (2011), DESIS (Design for Social Innovation and Sustainability) founder and international coordinator, suggested that *'design schools now have the potential to play a second important role: that of agents of sustainable change: of critical and creative actors in the on-going transition towards sustainability'*. This new role as agents of change requires a new mode of collaboration: *'peer-to-peer mode, as intelligent actors in the new design (school) networks...they can use design classes and academic and professional design research to stimulate and support design networks...'* (ibid).

In our design labs, we invited students to investigate how we could engage local people in design activities. The aims are both training and engagement; training young participants with solution-focused design strategies and engaging local people to achieve sustainable social development through design.

The details of each project will be delineated in the related sessions, but the overall aims of these two projects are the same. We asked participants to focus on how indigenous people design their lives with a view to enjoying ageing. The first concern is to see if they are aware of the changes in their body experience. The second concern is to see how they make use of local community resources. We expected to see the process by which participants search for more insights from the local people who are themselves 'ageing in place'.

## **2. Why do we practice solution-focused design?**

From a star-institution like the Bauhaus to a network of DESIS Labs within design schools, how does teaching and research methodologies in design education change? Our team comprises a design researcher and a sociologist and we have collaborated to explore answers to the question or have even worked to reframe the question.

We referred to the solution-focused approach to design promoted by Nigel Cross (2006), chairman of the DRS. Cross pinpointed four core features of design ability:

1. Resolve ill-defined problems
2. Adopt solution-focusing strategies
3. Employ abductive/productive/appositional thinking
4. Use non-verbal, graphic/spatial modelling media

The use of solution-focused strategies is related to the nature of problems in design practice as *'design problems are inherently ill-defined, and trying to define or comprehensively understand the problem (the scientists' approach) is quite likely to be fruitless in terms of generating an appropriate solution within a limited timescale'* (ibid:18-19). Underlying the solution-focused strategies is the abductive logic in the sense that while *'...induction shows that something actually is operative; abduction merely suggests that something may be...It is therefore the logic of conjecture'* (ibid:19). In our view, design should not start with any propositional logic or scientific hypotheses then employ scientific methods to identify the 'real' nature of the problem, and finally put forward designers' solutions. Conversely, we start with a view put forward by Cross that which emphasises *'the role of the conjectured solution as a way of gaining understanding of the design problem, and the need, therefore, to generate a variety of solutions precisely as a means of problem-analysis'* (ibid:17). Moreover, we highlight Schon's ideas of 'a reflective conversation with the situation' and situations where designers are encouraged to use non-verbal ways of knowing. This is because design works might happen outside the boundary of verbal discourse.

In light of the combination between solution-focused design process and non-verbal means for reflective communication, we would highlight the limitations of designers themselves. Our reason is related to our understanding of the concept of experience. Certainly, the design process in the form of solution-focused ways of knowing could be regarded as a kind of experience. Actually, it is a kind of learning experience. This echoes Dewey's (1916) idea of education and experience that true education can only happen with the empirical situation and a reflection of the real world. Once we work in the real world, we know that we are dealing with a real social situation in which it is not only designers but also ordinary people, potential users and many other stakeholders. As design activist, Papenek (1971) also encouraged designers *'to pay by*

*giving 10% of our crop of ideas and talents to the 75% of mankind in need.* When we carry out inquiries into the problem in our hands, we, together with potential users and even the public, constitute a community. By conceptualising the context in which designers encounter potential users as 'the community of inquiry', we encounter the issue arising from the nature of such a community.

In a traditional scientific domain scholars and researchers play a dominant role in designing and monitoring the process of research; the community of inquiry in design is completely different. Abductive logic opens up the communicative space in the community. The term 'opening up' could be interpreted in two senses: firstly, it implies a more 'open' attitude in performing conjecture; secondly it implies a more democratic arrangement among the members, i.e. both designers and the public (or the potential users in the narrower sense), of the community of inquiry. Such an understanding of 'opening up' falls in line with Reason's tenet of action research in which the major concern is not about accurate representation of the external world, but about whether our knowing, our belief, could provide reliable guidelines to getting what we want. This is the reason why the traditional role of science and the dominant positions of social scientists have been challenged. Designers are not looking for any triangulation to support or validate their hypotheses, but are attempting to accomplish the target set by the 'community of inquiry'.

### **3. How did we practice solution-focused design?**

'Ageing in place' is the overarching concept for our labs. This concept enabled participants to experience and question how the life-course approach to design could inspire new community design processes. So far, we have engaged different types of design schools: postgraduate art & design college, vocational training college and art & design academy within a university. Along with formal institutions that teach design, we also began to engage public organisations to deliver civic education for diverse learners: people with spinal cord injuries, young entrepreneurs for ageing innovation and participants for social design awards.

#### ***3.1 Process: from problem-solving to solution-focused***

One of our on-going collaborations is with a vocational training college in Hong Kong, which recently reformed into a formal design institute with a new campus built in 2010. Here all the students are freshly graduated from high school and in the last years of their teens. The collaboration is well situated between civic and formal design education. Originally, we were invited to conduct a research project about developing design implications for the ageing population. With concerns about the limited life experiences of our learners, we decided to expand the focus from aged people to the ageing process and local community. Instead of focusing on educating young students, we set out to collaborate with staff members and the overall school strategy by asking three layers of research questions. The questions aimed to stimulate a rethink of the design implications for our future selves informing a new perspective for the design school, developing a long-term vision:

- What is the research direction in ageing and community?
- What is the NEW research methodology for investigating ageing and design? How to get from a problem-solving or solution-focused approach.

- Who are the research targets and how to describe the relationships with them? i.e. design for older customers, design with local ageing communities, or design by ingenious aged people/amateur designers

Our aim was to address the specific subject of ageing and social inclusion and we conducted a three-week Design Lab with staff members. Their new campus is surrounded by six different housing estates where over 20,000 households are residing in this new town of the city. Six teams were formed with over 30 Higher Diploma students from three design disciplines: Interiors, Products and Graphic Design. A three-week design workshop was organised for students to experience solution-focused design and participatory methodology in design with local communities. Students were briefed to act creatively about the concept of design outside their disciplines and beyond. Each team is responsible for designing 'something' with the residents of an estate close to their design school.

There are three stages to the workshop. In the first week, we were inclined to allow more free space for the students to practice problem-solving methodology. Here they were given the freedom to employ their favourable methods of investigation, such as visits, interviews and data mining. We conducted short design exercises (Figure 1) giving students a chance to present their tentative results and build team spirit. In the second week, we intended to challenge students' habitual ways of knowing. Therefore, we invited a social designer from Brazil as part of our team, to conduct games with students in order to understand the significance of non-verbal experiences. In this stage students were asked to invite residents from their assigned estates to join a tea party at the design school (Figure 2). In the tutorial section, we began to present our ideas about solution-focused methodology and participatory design. In the third week, students were responsible for setting up six design booths, creating a Chinese New Year Market to 'sell ideas' to the local residents. The aim of the 'market' was to build bridges between the design school and local residents of the six housing estates in the neighbourhood.



*Figure 1. 2D-3D workshop to challenge students creativity in form building as well as building team spirit (left)*

*Figure 2. Tea Party for local residents – first time for residents to visit the design school (right)*

### 3.2 Result: designing participations

The brief to young students was unlike ordinary design projects during their study. We did not ask for a final design proposal. We commissioned a local bamboo structure master to build six traditional temporary market stalls for the six teams to install their designs. Instead of designing objects for sale to celebrate Chinese New Year, students were asked to design means of participation to engage the local community. Each team was guided to identify an object to represent their experience (Figure 3) and design their booth around the object. After two days of construction, the final task for each team was to 'operate' their stalls and develop operation ideas for further interactions with residents. There was a team who aimed to encourage residents to have more physical interactions than online debates; they used balloons as a way to invite people to leave messages for others.

Similarly, one team focused on developing methods for residents to express their wishes especially those with a disability. Here they collected fallen leaves for people to write messages on and then send them back to others. A large lantern was constructed with colourful colanders, attracting visitors to make Chinese New Year wishes. Recycling was a popular issue around design students and two teams collected waste from their housing estates and reconstructed items back to the community. One team used newspaper to recreate plant plots for fresh plants, giving them back to local residents. Another team collected unwanted furniture and deconstructed them into new pieces of furniture, demonstrating new uses.

## 4. Discussion: Issues of the problem – solving approach

Deviating from the instrumental view of participation, the advocates of co-design/participatory activities have maintained that participants (other than designers) in design research are partners and so involved in selecting the problems and

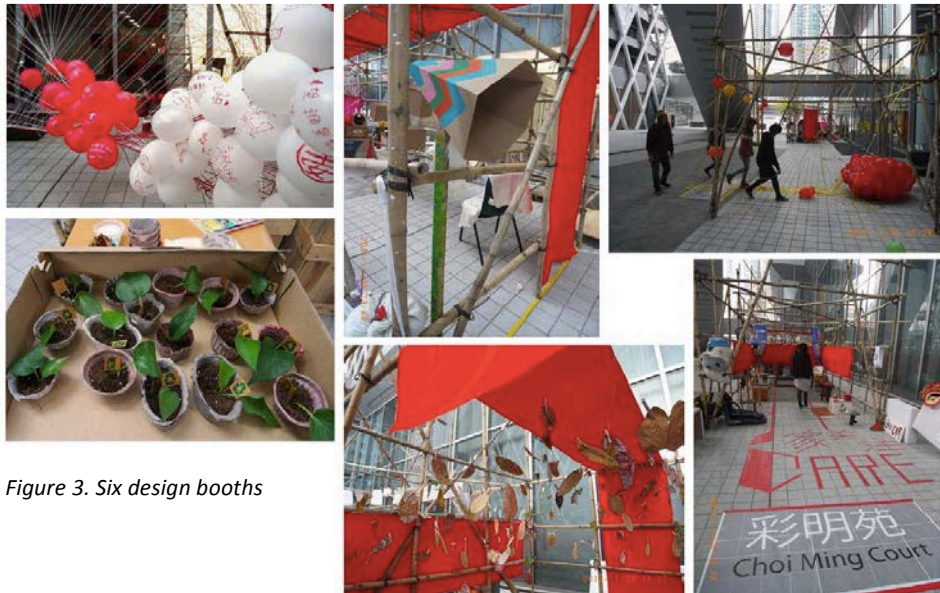


Figure 3. Six design booths

sanctioning the search for solutions. Recently, the role of people in the process of design has been re-shaped as that which is tantamount to professional practitioners, termed as 'extreme users', 'active design partners', 'experts of their experiences' or 'co-designers'. They are regarded as crucial in knowledge development, idea generation and concept development (Sanders *et al.*, 2008; Visser *et al.*, 2008). There has been a more extreme version about the role of participants, as suggested by Banham (1972) that the only real Design Participation is 'do-it-yourself'. This configuration of the roles between participants and designers is based on the idea that users should have total autonomy to invent their rules in order to enhance the efficiency of the designer-user game. In other words, Banham suggested that designers are relegated to a considerably passive position.

Inspired by the solution-focused method, we argue that the participation of users is more methodological. As Reason *et al* argued, the de-monopolisation of knowledge led to full involvement of participants that *'the action turn in the social sciences is a turn toward a kind of research/practice open in principle to anyone willing to commit to integrating inquiry and practice in everyday personal and professional settings'* (Reason and Torbert, 2001:7).

However, the natural attitude of design students has been identified as one of the barriers against the practice of opening up the design practice community. In our view, the pre-reflexive designerly attitudes, or what phenomenologists refer to as natural attitudes, are *"our original, world-directed stance, ... the default perspective, the one we start off from, the one we are in originally"* (Sokolowski, 2000: 42); or simply put, our taken-for-granted attitudes. This natural attitude of designers is usually more visible when we observe designers in action.

## **5. Intervention: Practicing Solution-focused Method**

Our ways of doing design research is basically informed by Reason's action research. We know that the research process does not emerge in a tidy and linear manner. The outcomes may not be eventuated how they were planned. Some intervention tactics and advice as well as comments to students may be on an ad hoc basis. However, three components are essential. First, it is necessary to find channels to work with potential users whose practical knowledge and practice in daily life are valuable for design ideas. Secondly, outcomes are tentative, always ready for modifications, and thus design is a process through which solutions are continuously proposed, tested and evaluated. We are not looking forward to 'design in one go'. As with Thomas and Carroll (1979), after a number of experiments and protocol studies of designing 'a fundamental aspect is the nature of the approach taken to problems, rather than the nature of the problems themselves' (Cross, 2006, 19). In other words, focusing on continuous modification and evaluation of the proposed solutions is not owing to the necessity of checking the nature of the problems, but examining the nature of our approach taken to problems. The third element is the awareness of pre-reflexive thinking. Our preliminary findings have shown in the last section that problem-solving methods encourage the dominance of the expert-driven role of designers and discourage reflexivity. Students also easily took design education as a kind of

craftsmanship rather than a process of exchange between designers and people. We also found that students took design as a kind of technical profession that would be translated into a number of roles as problem solvers, craft makers, active citizens, and opportunistic entrepreneurs. However, all these roles are built on the foundation of the expert-driven role of designers at the expense of users' participation. We argued that reflexivity and awareness of this kind of pre-reflexive being are needed in order to accomplish participatory design.

Here we attempted to ask designers to identify their pre-reflective being which to a large extent 'unconsciously' shapes designers' orientations and interpretations of roles, needs, natures and the kind of lives toward which participants should live up to. In order to achieve this, we make use of three tactics, namely, confrontational tactics, empathy and imagination of replacement. We practiced these tactics in this Design Lab with the design students throughout the third week of the event.

### 5.1. Confrontational tactics:

It is a common practice that novice designers would take their work as the final product of the design process, leaving little room for modification by others, let alone by users. In our design lab, one group revealed a



Figure 4. Modification of one of the 'designs'

strong inclination to treat their work as a 'monument'. In day two of the market, they left their created lantern as a monument there unnoticed. We, together with a guest, found it strange to see the absence of responsible design students there and decided to dismantle, or re-modify, the work. Cutting down all the ropes hanging the sieves, which are supposed to be the place where residents could place their Chinese year greetings (Figure 4). The design students thought that it was a design as it provided a tool by which residents could communicate, and of most importance, it is aesthetically sound and acceptable. Twenty minutes after the 'intentional attack', one of the students from this team came back and asked the 'destroyer' for the reasons of the attack. She said the work is 'sacred' and deserved 'respect' from all people. We enquired about this, supposed that we were residents, whether we would be granted the right to 'modify' or 're-design' the work. She looked speechless. We further asked her about their coded message underlying their work. She revealed that it was a tool for communication and a place for putting and sharing Chinese New Year greetings. She further explained that they would stand by the work and tell any onlookers the way to use the piece. A few minutes later, three more students came back and expressed their grievances. Clearly, novice design students really treasure their work, but in the context of participatory design, they gave no room for manoeuvre to any potential users. Users could participate in 'using' and 'expressing their feedbacks', but not in any process of design.



Our reaction to their unhappiness, we asked the students to think about the objective of their design. As our rationale of our workshop was to design with the people who are believed to be protagonists to enjoy the fruits of design, we should work out a way for both the designers and the potential users to know what the best design is. We asked the students to think about what kind of a design could at least make both parties happy.

Our co-tutor, a Brazilian social designer at this moment started using the sieves as footballs and invited other groups to play together. Those design students really felt embarrassed, as it seemed that their work was insulted. But they found that the participants were really happy playing together. Then, they attempted to transform the 'monument' into a game-like activity. They used the robes to make a net and participants were invited to write their greetings on a small piece of paper, put the paper into the sieve and throw the sieve onto the net. After that, participants could pick one sieve and take the greeting paper home. Although this game was not designed by any local residents, it was co-designed with other participants who are onlookers, their classmates and some guests. At least, they found that participants could enjoy the activity of throwing and picking, and at the same time have a chance to share Chinese New Year greetings. Of most importance, the novice design students could understand that they have a pre-reflexive habit that their work would be treated as sacred and not allowed to be modified. However, this is one of the major hurdles against participatory design.

## **5.2. Empathy**

In our view, empathy based on intersubjectivity helps us understand user experiences. The view of phenomenologists is that there is ultimately something in common with individual's intending toward a thing in the world, this shared realm of experience can be achieved through reciprocally understanding self-experience when experiencing alongside the others. Understanding self-experience, however, is not easy, because it takes reflective efforts to transcend the immediate experience and natural attitudes. Husserl suggested that individuals are expected to transpose themselves to the other's place so as to achieve the meditation of empathy. Therefore, it is necessary for the researcher to experience how subjects experience their lives *in situ*. As Husserl (1989) suggested: *'I secure [the person's] motivations by placing myself in his situation, [with] his level of education, his development as a youth, etc., and to do so I need to share in that situation; I not only empathize with his thinking, his feeling, and his action, but I must also follow him in them...'*

We have accordingly broken this phenomenological task into three layers. The first layer is to listen to the details of the others' discourses. This is the initial step of constituting intersubjectivity. As Finlay (2005) suggests, *'the researcher's task is not simply to listen to another's story: the researcher also needs to be open to being with the participant in a relationship.* 'Following this initial activity, the researcher should practice 'doing empathy' by a connection of the other's embodiment to one's own. Essentially, it is to achieve empathetic understanding of the other's embodied experience by intimately connecting to the lived experience of the researcher's own. Apart from the two layers, the third empathic act of acting into the Other's bodily experience brought forth the *imagination of replacement*.

In our design lab, however, the first failure is the low participation rate of residents. The novice design students were upset as they could not find effective promotion channels to attract more residents to their booths. Hence, we were not able to practice the first layer of empathy. In the final days of the event, we asked students to try the second layer, namely 'doing empathy' by making connections with the other's embodiment to one's own. We asked students to recollect their experiences, which are supposed to be similar to those of the residents. We could illustrate such a process in our workshop by focusing on the group whose members collected dumped furniture at the estate.

The design students reported that they found a large pile of dumped furniture in the estate. They commented that the residents had wasted a lot of useful resources, so were intended to educate the residents to live sustainably. They recollected the dumped furniture and placed them in their booth. The setting was decorated like a furniture showroom as those run by IKEA. Lines were on the floor to indicate the distinction between exhibition areas, and customers' path. Things were re-built and put orderly on the floor or on the wall. Signage was also provided. It seemed that participants were customers who should follow the signage and designated path to 'appreciate' the re-built work and finally acquired a moral statement that dumping is a kind of waste.

We gathered the design students one afternoon and asked them to choose one item from the booth and imagine where that item could be placed in their home. The basic requirement is that they should be true to themselves and really willing to 'use' the piece of furniture. Finally, few showed their willingness. The students were further asked if they were willing to re-use some pieces of furniture, which were supposed to be dumped by their neighbours. Moreover, they were asked if they felt embarrassed once their dumped furniture was known by their neighbours. After that, the students were invited to walk along their designated path, act like another participant, and feel the journey. Finally, they reported that it was a very strange experience, as they seemed to be acting like a customer looking over something 'useless'. The journey was somewhat unpleasant. This indicates that novice designer would find it difficult to go beyond their expert-driven role as a professional designer. Once they leave their designer role behind and take over a new one, they could discover something different.

They found that residents would not be pleasant either when walking along this path. We asked them to try to recount their experiences, especially searching for the moment when they were shocked by the large pile of dumped furniture. They had to search for the astonishing feeling at that time. We asked the novice designers to connect the moment of astonishment to the potential users' possible feeling. Then, they decided to re-arrange their booth and began piling up the pieces again. They just wanted to re-build the pile just as the one they discovered in the estate at their first visit. After that, more participants, mostly their classmates, joined in and asked why they did it. The students gave no answers and just recommended the participants to try to choose one and use it immediately. Some students re-built the 'things' and sat on them. After a short period of time, it seemed that participants were no longer conscious of sitting on their own designs. Most of them chatted there for a rather long time. The booth was extended into its front area and transformed into a temporary

public area. One student commented that it seemed to be a kind of magic that more participants found the dumped furniture interesting and some even could immediately 'design' its alternative usages. At this moment, we asked the student to try the third layer of empathy, that is, the third empathic act of acting into the other's bodily experience which brings forth the *imagination of replacement*, that means, we asked the students to imaginatively change their identity from designers to participants. This tactic is to encourage the designers to think about the bodily experience of participants when using their design, and in this process the student designer is the participant. We asked the students if we could understand why participants were willing to sit on the dumped furniture publicly, and under what circumstances the participants are willing to 'design' their own furniture. The design students however could not make sense of the tactic of the imagination of replacement while this tactic has been performed well by another group.

### *5.3. The imagination of replacement*

We learned this concept from Finlay. The original interpretation is to perform a kind of empathic act through which an observer and observant would become one, each is absorbed into the other. The imagination of replacement is the moment the practitioner takes up two roles at the same time, i.e. in the practice of design, a designer and a user. In other words, the design student performs as 'a DIY designer'. The idea was introduced to one group of students after they finished construction of their booth. The booth was titled 'shouting-out', an area where different forms of paper-made speakers were placed. Participants were invited to use the speakers to express their grievances. The idea came from the experiences during their visit with residents living in the estate. They found residents, were very unhappy with many restrictions of the environment set up by the estate management. However, after they successfully mounted up all the speakers, only a few people went into their booth and tried the speakers. We asked the students to give some reasons about why the residents would come over and use their design. They had no ideas about the residents' preferences. We further asked the students, given some residents came, if the residents would have some grievances that should be vented out. One final question: who needed their designs? After the questioning time, the students were instructed to try out their own design. They shouted, yelled, and roared. The content mostly revolved around inviting people to come join them, making some noises and testing their personal vocal capacity. They began finding this activity meaningless. There was no impact. Then, they were asked to use their designs their own way. They began persuading their schoolmates to come join them. They expressed their dissatisfaction with their academic assignments, their grievances against their lives, etc. One of the students found that the speakers could be used to amplify her voice. She then went around the campus to test the effects of using different paper-made speakers. She further found that the speakers were not only for venting but also for making wonderful sounds in the campus.

This experiment went no further. But one student expressed that it was possible for them to use it to persuade the residents to design their own audio instrument to make different kinds of sound within their estate. According to this student, they could think of possible ways of designing with the residents to improve the living quality through better audio environment. Surely this idea comes from their experience of the imagination of replacement. It is not only from the empathic act of putting one's feet

into other's shoes, but also from the empathic act of being that user. To us, this tactic is important, as this would facilitate us to move onwards in the direction of 'designing by the user'.

## 6. Conclusion

Design schools as a place for knowledge transfer are inevitably responsible for the production of knowledge. The aims of knowledge production could be for the development of this profession to meet needs arising from production industries. It seems to be running for the needs arising from economic needs. As has been pointed out, this view of design schools for industrial and economic purposes is a dated one and the design professions should be responsible for social change, i.e. from designers for industries to designers for societies. This leads to the question – what is the role of designers in the process of social change? The traditional view in this respect will point to designers as a group of pioneers who are guided by knowledge and expertise towards helping others. Nevertheless, digging into the nature of knowledge could find that designerly ways of doing may be an inherent popular expertise by which every ordinary person could employ their own designerly wisdom when designing for social change.

From our research, we aim to promote the idea that designers should act as facilitator when grooming ordinary people's natural ability. Thus, design schools are the institutions by which design activities are organised and both designers and people work together to try out creative ideas for making social change better. In this process, there are a number of necessary skills required when dealing with the power dynamics between users and designers - use of power over the ordinary people by designers, and the use of power to protect designers' so-called 'original ideas'. To us, the use of power is the major social factor that would ruin the establishment and operation of communicative space and suffocate the community of inquiry. In this respect, we advocate the use of confrontational tactics, empathy and the imagination of replacement to dissolve the mechanism of power employed by designers in the process of knowledge production.

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