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# Adapting Co-Constructing Stories to the Mindset of Teenagers

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**Abstract**

Teenagers are sometimes difficult to engage in meaningful conversations. We introduce a user study with teenagers where we utilised Co-constructing Stories, a participatory design method using past and current experiences of users to stimulate their visions about a new concept. We argue that Co-Constructing Stories can be helpful when working with teenagers, if adapted to the mindset of that user group. We explain how we adapted the method while working with teenagers and give recommendations for designers who might use the same method with teenagers.

**Author Keywords**

User Experience; Storytelling; Persuasion; Teenagers

**ACM Classification Keywords**

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**Introduction**

Storytelling is often used in UX design, empowering designers to think in terms of users' experience [4]. When designing for teenagers, it might be challenging to engage in meaningful conversations with them which would elicit stories revealing their needs and values. Teenagers might be bashful when talking about their feelings or might become defensive when faced with probing questions. How can we overcome inhibitions and thresholds that some teenagers might have, and

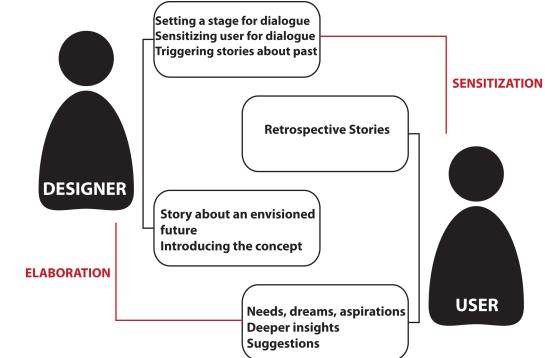
elicit useful user reflections from them?

The Co-constructing Stories method [3] aims to get input from potential users in the early stages of a concept, through eliciting users' real life stories and their visions about how the concept would be valuable for them in the future. We thought that the Co-constructing Stories method would be suitable to talk with teenagers as it is non-directive yet structured. Moreover it aims to elicit information about the current context and users' envisioning about the future, revealing their needs and values.

### Co-Constructing Stories

The Co-constructing Stories method is a technique to evaluate concepts in early stages of development, together with the intended users. It produces in-depth qualitative user feedback, revealing important values and motivations of users. Assuming that memories, experiences and dreams are closely linked, users can make better judgments about novel design concepts if they link them to their own past experiences.

The technique consists of two phases: sensitisation and elaboration (Fig. 1). The sensitisation phase aims to make participants think about their past experiences. In this phase the designer tells a (fictional) story introducing the context of interest. Then the user is asked whether he recognises the story and invited to tell his (lived) experiences akin to the one in the story. In the elaboration phase the designer tells the story explaining the proposed concept. Then he asks user to retell the stories he told in the first phase by introducing the concept in the scenes. How this event would look like if you had the concept back then? These stories enrich designers' understanding about the current situation and users' needs and values.



**Fig. 1:** Phases of the Co-Constructing Stories technique

### Case Study: LightScribe

The case where we applied the method was the design of a LightScribe application for teenagers (Fig. 2) [9]. For this project we wanted to confirm favourite activities of teenagers (12-18 years old) in their free time and evaluate how they would react to the concept of painting with light as an activity to be done in their leisure time.

To elicit this information we wanted to talk with teenagers. Intuitively, we thought that imposing a strictly structured interview would be met with resistance. We looked for a method to help us facilitate an open dialogue and encourage teenagers to speak their minds. The Co-constructing Stories method provided a solution by being neither restrictive nor unstructured.

### Co-constructing Stories with Teenagers

In the original Co-constructing Stories method, the dialogue starts with a fictional story about a recognisable situation, told by the designer to set the stage for dialogue. In our case, we also started with a story, but

in the form of a music video-style clip. It showed 'cool' activities like playing football, going to parties, chatting with friends or looking at videoclips together [8]. We preferred introducing the topic via such clips to show the activities as recognisable and attractive enough to help the participants say 'I do that too', eliminating feelings of social awkwardness as much as possible.

The second half of a Co-Constructing Stories session is devoted to eliciting fantasies, ideas and stories about the proposed concept. To evoke interest for LightScribing, a video of a famous light-graffiti artist was shown [2]. Afterwards the participants went outside for a live tryout of painting with light, to provide insight in how LightScribing works. They were very involved, inquisitive and surprised by their own work. Afterwards, the participants talked about how they would use the concept, what it meant to them, how it would be received by their friends, how it could work technically.



**Fig. 2:** The LightScribe App

Although the Co-constructing Stories method recommends one-on-one designer-user dialogue, our session was done with all participants together. It was thought that this might invite more spontaneous conversation,

as they would talk amongst each other as well as to the interviewer. Indeed, the participants also interacted with each other, and this provided different stories than we would otherwise have gotten, but the teenagers were also aware of peer pressure to not say 'stupid' things. Perhaps in a one-on-one interview situation, the participants might still be anxious about this, but also holding back more because of talking to an outsider. Future research should provide more insight into this.

During video analysis of the session, those parts were selected where participants talked more lively and enthusiastically, as it was assumed that this was when they would be likely to talk about the subjects most important to them. Within these parts, we looked for underlying values [4], keeping in mind known psychological needs for positive experiences [5].

Three themes were apparently important for this user group: feeling related through keeping in touch with friends, and feeling competent by doing activities that they feel good about or by producing something that they can be proud of. Autonomy, in freedom of choosing location and company was also important [6].

### **Recommendations for Designers**

Getting teenagers to cooperate enthusiastically with a user evaluation might require some subtle persuasive techniques. A well known compliance principle is reciprocity [1]. The Co-constructing Stories method uses this by starting with 'giving' an attractive story, so the participants are compelled to 'give' something in return. Another compliance tactic that could be working here, is social proof. The designer provides a model of how to act by starting to tell a story. It is then easier for the participants to follow that lead. Working with participants in a group might enhance social proof, which can

be a positive influence provided that (nearly) all participants actively cooperate.

Making a user session as appealing as possible is also very important. The use of different modalities is recommended, for example combining interviews with music, images, videos and activities, as this comes much closer to teenagers' normal social behaviour [7]. It can provide a break in the talking session, keeping the participants interested and refreshed. Also, the designer should act as an equal of the participants, in a non-confrontational way.

### **Results, Conclusions and Future Work**

We introduced the Co-constructing Stories method, and a case study where the method was adapted for teenagers. The basic structure of the method was kept intact, only specific materials and activities were changed to fit the user group. It was important for this user group to see behaviour modelled before they would freely talk about it, for example with a video clip. Also, in this case working in a group added a positive group dynamic. Doing a fun, subject-related activity as part of the session provided a break in the interview, and fresh ideas afterwards.

From earlier experiences with interview techniques like value laddering, it appears as if these techniques lack the possibilities for empathy and bonding between researcher and participant, required to work with teenagers. Asking a list of questions or repeating 'why' questions, made participants noticeably more reticent and sometimes even irritated. It did not reveal deep insights. Although it might also be due to the skills of the interviewer, we believe that in general teenagers do not like constant probing.

To be able to say that Co-Constructing Stories is a suitable research method for working with teenagers, more research needs to be done on how this method compares to others. Also the effect of different adaptations of the Co-constructing Stories method should be evaluated more thoroughly.

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