Implications for Designing with Young Apprentices: Methods and Personas

Abstract
The involvement of teenagers in the design process of Digital Media requires appropriate methods and personas. In order to call more attention on the target group of teenagers, who are in the beginning of their professional life, this paper proposes a new persona. We present a new method approach to involve teen-aged apprentices in the design process of Digital Media. The method combines dot voting, scribbling and paper prototyping for engaging teenagers in social network design. The approach was iteratively developed and applied in workshops with the target group.

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ACM Classification Keywords
H.5.2 [Information Interfaces and Presentation]: User Interfaces - User-centered design.

General Terms
Design, Human Factors
**Introduction**

The heterogeneous group of teenagers is different from children or adults in many ways such as personal interests, state of life, and media literacy. Among other challenges, teenagers face the transition between school and professional life. In some nations, they are 15 years old at this stage of life. Hence, Digital Media addressing this target group require special methods to engage them to actively participate in the design process. Only few scientific papers exclusively focus on this target (e.g. [2][6]). In this paper we aim to contribute to this topic.

**Target Group and Personas**

Our research focuses on the target group of teenagers, who start their professional life after school with an apprenticeship¹. The teenagers are 15-19 years old and their school grades are not sufficient to receive a school leaving examination needed to apply for college and/or university. A general characteristic of this target group is that they finished school and need to find a profession they would like to fulfil in the future. For the first time, they enter regular employment, which implies very different requirements in behaviour, appearance, learning techniques etc. from going to school. Hence, we suggest to extend the ChiCI Teenage Personas [1] by personas representing this group of teenagers entering professional life and generally argue to broaden the perspective on the target group (for a short version see side bar²).

**The expertAzubi Project**

The research project expertAzubi aims to foster learning and networking of teenagers entering professional life. Therefore, a web platform with social network functionality and web 2.0 technologies is developed. Among others it provides private messaging, grouping tools, posting and commenting articles, tagging and rating. Apprentices, teachers, experts, and institutions can exchange knowledge and build a network that supports learning processes.

**Methods and Workshops**

We regard the participation of the future users as crucial during the design process. Therefore, the implementation of the platform has been following an incremental approach in conjunction with regular focus group workshops. During the last 18 months, we conducted 7 workshops with 4-15 participants each at the age of 15-20 years to gain implications for the specification, requirements engineering, functionality, design, and structure of the platform.

Due to a lack of methods for co-designing with teenagers in literature, we started to develop our own set of methods [7], considering methods recommended for designing with children [3][4][8] as well as methods used with adults [5][10][11]. Throughout the workshops, we iterated on our methods. Thus, the combination described in the following was applied in the last workshop we conducted. It is a general result of the previous workshops (details are published in

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¹ In German educational system an apprenticeship is the most common way of job training after school and bases on practical learning. An apprentice has a full time working contract with a company and also attends vocational school to receive the theoretical background needed. After two or three years of apprenticeship teenagers receive their examination.

² A second persona with a male apprentice, a future bricklayer, was created as well.
At the time of the workshop the participants had been using the platform in a school context for about one year. Therefore, they were acquainted with functionality and design. The purpose of the workshop was to collect the teenager’s feedback about navigation and interface of the platform (figure 2).

**Our Method Approach**

In order to engage the teenagers in actively participating as designers, we developed a method approach, that combines dot voting, scribbling, and paper prototyping. The method dot voting is more known in business than in scientific context (e.g. [10]). The idea is to choose favourites from several alternatives by applying sticky dots. At the workshop we presented two design print-outs, that altered from the current platform design and asked every teenager to arrange 9 sticky dots in three colours representing like of the design, like of the content elements, and dislike (figure 4). With like and dislike we applied metaphors from the teenagers’ daily practice on Facebook and other networks. Afterwards we discussed the results. The session proved dot voting as promising, in particular to gain opinions about design and navigational structure, as well as interface design. Moreover the concept is easy to understand and lowered the barriers for the teenagers to actively engage in the workshop.

In order to let them get more specific about their design ideas, we extended the dot voting with a paper prototyping session. Paper prototyping is an established method used in interaction design [10]. For our purpose, we handed out paper templates with the current design of the platform and blank content areas printed on. We had laminated the sheets so notes could be wiped out in case of changing ones mind. We further handed out pencil markers and asked the apprentices to modify the design templates according to their personal taste and expectations on the platform by scribbling (figures 3 and 5). The session was completed by a discussion of the results among the apprentices, moderated by two researchers.

**Outcomes and Findings**

From the workshop evaluation we gained very useful results regarding our design method approach as well as the social network platform. Dot voting proved to be a good starting point to activate the teenagers, scribbling on templates seemed to be a good extension getting more information out of the dots. The teenagers created suggestions how to restructure the content and navigation of the website and how to change the look and feel. They furthermore shared the underlying motivations with us. An additional result was that we got insights into the teenager’s concerns in mastering their apprenticeship. They prefer a clear distinction...
between leisure and professional life and thus they stressed their preference for a clear and serious design for the expertAzubi platform.

**Conclusion**

In order to find appropriate methods to engage teen-aged apprentices in the design process of a social network platform, we presented a method combination of dot voting, scribbling, and paper prototyping. Our method fulfilled the expectations and is a promising starting point for further exploration. A new persona represents the group of teen-aged apprentices emphasizing the transition from school to professional life. In the future we continue to examine further participative design methods with our target group.

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**References**


