

ElicitationMethods

We, although unknowingly, used the Secondary Research technique. The objective of our project was to digitize an educational game with the purpose of reinforcing the arithmetic skills of 6-7 year old children. The choice of the game was based on a series of studies by Dr. Rocio Ballote and colleagues on the use of educational games to reinforce mathematics for elementary school children.

We didn't have the opportunity to work directly with children, so we couldn't use more direct elicitation methods such as Field Studies or User Interview. However, we had free access to research documents by Dr. Rocio, so we informally used indirect elicitation methods such as Secondary Reseach.

This technique involves using previously conducted research, compiling and analyzing it to identify relevant information about users, such as characteristics, problems, work methods, and motivations. The advantage of this technique is the opportunity to compare information to increase the effectiveness of user research, although the main drawback is deciding what is worth summarizing. We implemented the technique reviewing all of Dr. Rocio's research articles with the goal of extracting the main characteristics of children between 6 and 7 years old, especially the limitations we might encounter, such as their cognitive ability, their interest in the game, the social influence of playing directly with other children, the game's outcomes, and what they found fun about the educational game.

One artefact generated by this method was the creation of User Profiles. The following attributes were identified for the user profile: name, age, gender, academic level, location, technological knowledge, technological devices, family, and description.

The correct development of the technique should generate a theoretical framework for us to support design decisions. The difference in our work is that a completely formal document was not generated to compile this information, it was something that each member knew and shared with the team. This was reflected in the example artifact, the user profile has "Technological Knowledge" attribute, but how it was measured and how it was interpreted weren't defined. Similarly, preferences and main difficulties (they are easily distracted, don't like math, etc.) weren't explicitly defined.

The technique could have been improved by following a less informal approach. This would create more useful artifacts, such as the analysis document that would define the theoretical framework for decision-making. It would also improve defined artifacts, such as the user profile and personas, by adding attributes such as those mentioned above and, above all, a way to interpret the information. The greatest advantage is in the definition of a theoretical framework that supports decision-making, such as the defined quality and usability attributes and design patterns, considering the primary users. This would generate additional effort in terms of time and in defining roles for analyzing and processing information, but it would allow for informed decisions and savings in correcting incorrectly defined attributes.