(Martina Johanna) Anika van der Sanden

Interaction & Experience Designer, Developer and Researcher

PERSONAL DETAILS

Date and place of birth September 22, 1993 in Drunen (Netherland)
Current address Karel de Grotelaan 136, 5653HB, Eindhoven (Netherland)
Contact anikavandersanden.nl | anikavandersanden@gmail.com | +31 638713247

PROFILE

In my work, I like to empower individuals by providing them with tools (and insights) to solve their problems, face their challenges and develop their ideas.
When designing, I use theoretical knowledge in an intuitive way to find innovative design opportunities. I translate research findings into practical applications (like tools or services) and/or theoretical frameworks. Combining a scientific with an artistic approach in my design, allows me to work on different levels of abstraction and concreteness. This allows me to meet complex challenges while keeping an eye on details.

EDUCATION

MASTER |
University University of Technology Eindhoven
Study Industrial Design
Period 01/09/2014 - 01/07/2016

BACHELOR |
University University of Technology Eindhoven
Study Industrial Design | Cum Laude
Period 01/09/2011 **-** 10/07/2014

EXPERIENCE

WORK |
Job Design Researcher | Developing, designing and researching a new educational method for primary education; creating a theoretical framework and web-based tool.
Employee User Centered Engineering Group at University of Technology Eindhoven
Period 01/07/2016 – 01/06/2017
Paper A tool for developing DBL activities for primary school teachers | EC-TEL 2017

INTERN |
Job Design Researcher | (Re)design and conduct research at the ALICE installation
Employee Design Intelligence Group at University of Technology Eindhoven
Period 01/09/2013 - 01/02/2014
Paper Interactive Storytelling in a Mixed Reality Environment | ICEC 2014

SKILLS

LANGUAGES | Dutch (native), English (fluent)

DESIGN | Interaction design, User experience design, User centerd design, Design research, Creative problem solving, Design thinking, Creative programming, Prototyping (experiential and representational), Designing for social change (transformative design), Concept development

COMMUNICATION | Visual design, Information design, Graphic design, Scientific writing, Agile design processes, Multi-stakeholder (participatory) workshops, Co-creation

SOFTWARE | Adobe Illustrator, Adobe InDesign, Adobe Photoshop, HTML/CSS/jQuery, Java (Processing), C++ (Arduino), Blender 3D and Microsoft Office

Design Researcher - User Centred Engineering at TU/e

Teachers face the challenge to incorporate 21st century skills in their lessons while also reaching the learning goals (such as mathematics and language). A suitable approach to teach these skills is Design-Based Learning: a teaching approach in which students learn by collaboratively creating solutions to open (societal) challenges by means of design. The development of DBL teaching materials, is challenging and time-consuming; teachers often are unable to pinpoint the appropriate level of openness of the challenge given to students, and experience difficulties matching the activities to the development of basic skills.

In this project I was responsible for solving practical and educational problems that occur when implementing this new method into the context of primary education in the Netherlands. In order to solve these problems I performed multiple activities.
My main task was researching how I could support primary school teachers in creating their own, 21st century-focused, educational material. Using an iterative design-research approach, I developed the method 'design-based learning' further and designed a tool that teachers could use to create 'design-based learning' material for Dutch primary education.

I performed the following activities:

- Formulating theoretical concepts with regards to 'design-based learning' and curriculum design/development in primary education in the Netherlands.
- Developing a, 21st century focused, method for primary education in the Netherlands.
- Designing, developing and programming a web-based tool for primary school teachers (content and technical aspects).
- Formulating and conducting research, in collaboration with my supervisors.
- Analysing, interpreting and implementing the results from research, for further developments of the method and tool.
- Organizing, giving and reporting multi-stakeholder participatory workshops.
- Preforming literature study (including research about design-based learning, educational curriculum design and other 21st century or design methods).
- Writing text proposals for scientific publications and summaries.
- Developing a project-website (content and technical aspects).
- Arranging the communication between all the involved parties (*2 Supervisors from the department Industrial Design at the TU/E, 2 Educational experts, 3 Primary school directors and 3 Primary school teacher*).

Design Researcher - Design Intelligence Group at TU/e

The ALICE installation exists out of context aware and interactive mixed reality characters and environments. This installation consisted out of three stages that represented different chapters of the Alice's Adventures in Wonderland narrative. In the installation the participant underwent immersion that consists of real and nature mimicking, virtual and augmented reality.

Within this project I was responsible for redesigning parts of the installation, setting up and conducting my own research and contribution to the research of a PhD student.

I performed the following activities:

- Redesigning parts of the installation based on research results.
- Co-conducting and analysing research, set up by the PhD student.
- Formulating, conducting and analysing my research, in collaboration with the PhD student.
- Writing a scientific publication in collaboration with PhD student.
- Designing 3D models (modelling, rigging and animating) using Blender and Unity.
- Documenting the communication between the hardware and software in the installation.