

APPENDIX

A SERVICE DESIGN TOOLKIT FOR A MORE INCLUSIVE ENERGY TRANSITION

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APPENDIX 1: DESIGN BRIEF

future

IDE Master Graduation

Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

! USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT

Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME

Save this form according the format "IDE Master Graduation Project Brief_familname_firstname_studentnumber_dd-mm-yyyy".
Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !

family name Van Eck 4538
 initials E given name Eva
 student number ██████████
 street & no. ██████████
 zipcode & city ██████████
 country ██████████
 phone ██████████
 email ██████████

Your master programme (only select the options that apply to you):
 IDE master(s): IPD Dfl SPD
 2nd non-IDE master: _____
 individual programme: - - (give date of approval)
 honours programme: Honours Programme Master
 Medisign
 Tech. in Sustainable Design
 Entrepeneurship
 specialisation / annotation: _____

SUPERVISORY TEAM **

Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair Ingrid Mulder dept. / section: HCD, DCC
 ** mentor Abby Onencan dept. / section: SDE, DfS
 2nd mentor Marlou de Jong
 organisation: Service design studio Zeewaardig
 city: Rotterdam country: The Netherlands

comments
(optional)

Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v.
 ! Second mentor only applies in case the assignment is hosted by an external organisation.

! Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

Procedural Checks - IDE Master Graduation**APPROVAL PROJECT BRIEF**

To be filled in by the chair of the supervisory team.

chair Ingrid Mulderdate 28 - 10 - 2020

signature

Ingrid
Mulde
r - IO

Digitally signed by
Ingrid Mulder
- IO
Date:
2020.10.28
15:47:32
+01'00'

CHECK STUDY PROGRESS

To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: 47 ECOf which, taking the conditional requirements into account, can be part of the exam programme 30 EC

List of electives obtained before the third semester without approval of the BoE _____

YES all 1st year master courses passed

NO missing 1st year master courses are:

name CvdB/MvM date 02 - 11 - 2020 signature _____**FORMAL APPROVAL GRADUATION PROJECT**

To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **. Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: APPROVED NOT APPROVED

Procedure: APPROVED NOT APPROVED

comments _____

name Monique von Morgen date 09 - 11 - 2020 signature _____

A toolkit and inclusive design approach for a fairer energy transition

project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date 28 - 09 - 2020

05 - 04 - 2021

end date

INTRODUCTION **

Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

The energy transition is one of the biggest challenges from this century. The effects of climate change are becoming evident with CO2 emissions as one of the biggest issues. At the climate summit of Paris 2015, 195 countries agreed to a new climate treaty that aims to reduce greenhouse gas emissions, so that the average temperature will not rise more than 2 degrees celsius. According to the international energy agency, the consequences of climate change are still manageable with this increase in temperature. [Klimaatakkoord] , [nu.nl]

The Netherlands is aiming for a 49% CO2 reduction by the year 2030, compared to 1990, by the year 2050 the CO2 should be reduced by 95%. [plan van aanpak rotterdam] Looking at the current CO2 emissions, there is still a lot to be improved in the housing sector. In 2050, 7 million homes and 1 million buildings will have to become gas free. This means that the homes must be insulated and replaced with sustainable heating and electricity. Municipalities play a central role in this. Together with residents, they determine what the best solutions are for each district. [kvk minder co2]

To meet the climate target, 263,000 gas connections will have to be replaced by 2050 in Rotterdam. It is impossible to wait any longer because such a change can not be made from one day to the other. An average of 8,000 gas connections per year will have to be replaced, to reach this goal. [Rotterdam] The municipality of Rotterdam assigned five neighbourhoods to work as testing grounds for a natural gas-free neighbourhood, Reyeroord is also one of these neighbourhoods. [Rotterdam energie besparing]

At the moment the municipality of Rotterdam is bridging the national regulations and the practical outcomes of these regulations on neighbourhood level. In this approach the city's aim is to include the citizens in this transition. But connecting these two is still a challenge. The municipality sees resistance and scepticism in the residents of the neighbourhood, or people with the right intentions, but no clue on where to start. In order to change behaviour, it is crucial to understand what drives the different target groups in this transition and then deploy the right intervention for the right target group.

In the neighbourhood, the project approach 'Reyeroord Aardgasvrij' has been started to investigate the energy transition. In the coming two years, the municipality will work together with service design bureau Zeewaardig, strategic agency Noorderwind and architecture firm Personal Architecture. Together they explore which interventions are the most appropriate and effective to involve and activate residents in the energy transition.

The aim of the project approach is to support the municipality to develop an inclusive, effective approach for the neighbourhood Reyeroord, looking at housing typologies and resident groups as well as the activation aspects at neighbourhood level. [Zeewaardig] The graduation assignment will be part of the Project approach 'Reyeroord Aardgasvrij' at which Service Design agency Zeewaardig is the external graduation company.

space available for images / figures on next page

introduction (continued): space for images

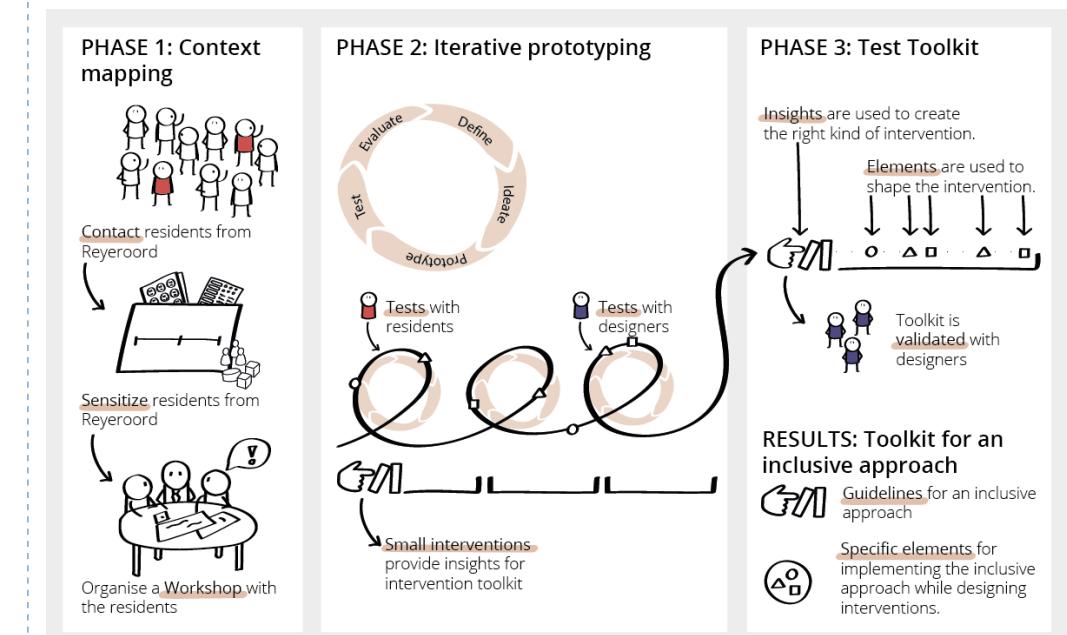


image / figure 1: Process visual graduation project



image / figure 2: Collaborating with residents in Reyeroord

PROBLEM DEFINITION **

Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

In the two-year project approach 'Reyeroord Aardgasvrij', the municipality and supporting design agencies, are looking for an effective approach to the energy transition. The aim of this project is to activate as many residents as possible in the energy transition. They are trying to include all residents in this transition, but are aware that this is a challenge. People might be overrun, not reached or not involved thought the interventions that are realised in the neighbourhood currently. While these people are important to reach in order to eventually make the energy transition possible. It is important to hear the voices of these people as well, so that society benefits as a whole.

In this graduation project, I want to target residents who do not feel easily approached to take action in the energy transition. The target group is a slightly hidden group of people, since they would normally not be the first to respond to activities regarding sustainability because of various reasons. They might think that the energy transition is not for them, because of financial reasons, misunderstanding of the topic or having other issues that appear more important to them.

By involving this group in the topic of energy transition, the transition itself becomes a fairer process with more equality across groups of people. Since this target group is currently excluded (either on purpose or unconsciously), their wishes and motivations are not included in the solutions that are created. But by involving them at an early stage, more understanding can ultimately result in a broader solution space for the energy transition.

Problem statement

There is a need to establish a fairer energy transition by enabling designers to create interventions that are more inclusive.

ASSIGNMENT **

State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

My assignment is to design a toolkit that enables designers to practice a more inclusive approach when designing intervention for a fairer energy transition in the neighbourhood Reyeroord.

This assignment examines how excluded residents, can still be included in the energy transition. The solution space will be a tool for designers to use so that they can reach these people.

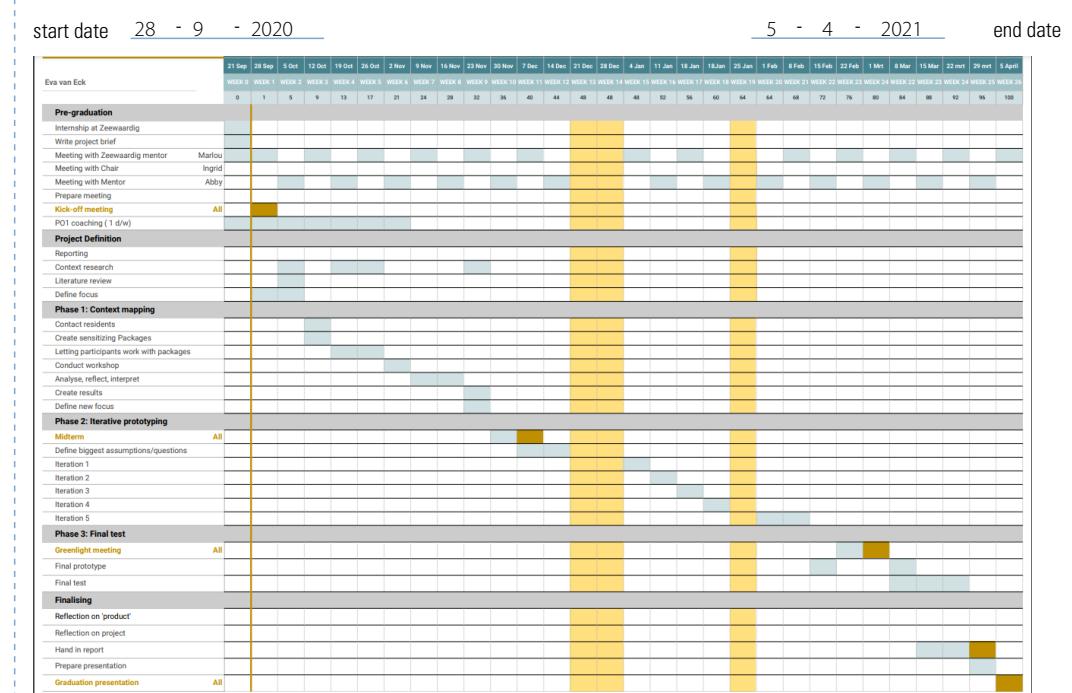
The project will benefit from an in-depth study of the residents currently not reached. First of all, the group will have to be defined. What is important for these people should be investigated. By researching this, the interventions can better connect to them. In addition, I am convinced that it is important to involve the target group in the design process. By designing iteratively, I hope to collect more insights about both the motives and interests of the residents. Also I want to improve the tool to fit the designers at Zeewaardig.

The toolkit for an inclusive design approach will enable service designers to make their current and new interventions more inclusive. The toolkit will be tested with the designers of Project Approach 'Reyeroord Aardgasvrij'. At the end of the project I want to deliver the toolkit that can be used by designers to create interventions that will include a broader range of residents, which contributes to a fairer energy transition.

The process of the project is visualised in image 1.

PLANNING AND APPROACH **

Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.



In the first phase, I will include elements of context mapping. I want to use this approach to get to know the residents of Reyeroord, and to learn about their needs, motivations and concerns. This method will mainly be used during the first phase of the project, where I am identifying the different resident categories and to select a specific target group. During the 2nd phase, I will use an iterative approach to be able to learn fast and learn a lot. By creating a lot of smaller tests and prototypes, and testing those with residents of Reyeroord, I expect to gain insights that would be difficult to discover by just interviewing or reading literature. This approach also allows to design together with the residents, by organizing co-creation sessions, or events. The insights gained will be input to create the guidelines for the intervention, tested at the end of the project, in the 3rd phase of the project.

The graduation assignment will be conducted part-time because of extracurricular activities during the course, to financially support myself. There are two weeks of Christmas holiday, and one week of Skiing vacation planned during the assignment. Based on the total of 100 days for this project, the graduation date will be around the 5th of April.

I plan to spend most of the time on iterative prototyping during this project. I plan to do several iterations on prototypes before designing the final intervention. These prototypes will involve the target group, to create a final result that fits with these people. For this reason, the first phase, is relatively short. Also the last phase, the finalizing phase, is shorter, since by then there will be a clear understanding of the final test.

The midterm meeting is planned two weeks after I started the iterative prototyping process. At this moment the whole graduation committee will sit together to make sure we are all on the same page for the next few iterations. This meeting will take place in the week of 7 December. After the Green-light meeting (to be scheduled later) the final product will be tested and reflected upon. Before rounding off the project with a report and presentation.

MOTIVATION AND PERSONAL AMBITIONS

Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, Stick to no more than five ambitions.

I believe that Industrial Designers are real problem solvers. During my studies I was taught to design products and services to improve our everyday living. But why would we limit ourselves to improve the everyday? With the same skill set we can improve our future and the social problems. By zooming out and adjusting our contexts designers can tackle complex problems.

During this project I want to explore my role as a designer in designing for complex systems. I feel it is important to use my skills on projects regarding society's problems, on both social and sustainable level. The context of Reyeroord catches both these elements in an interesting problem.

For me, people are always central when designing. It is impossible to create impactful solutions for people without including them in the process themselves. During this project I want to include the residents of Reyeroord as much as possible. To be able to create solutions with them instead of for them. For this reason I choose to use methods like context mapping and iterative prototyping to be the main methods to use during the process. These methods will give me enough opportunities to reach out to the residents and include their thoughts and motivations in the solution.

My personal learning goals are:

Improve project management skills, including scheduling, communication, project planning, zooming in and out. For me it is difficult sometimes to keep track of the bigger picture of the project, and the main goals. I get easily overwhelmed while working on complex topics. During this project I want to learn how to track these different levels and not to get lost in the project.

Writing skills. I am a visual thinker, which can be useful when I am ideating or conceptualizing ideas. But it has a downside that I have difficulty in structuring my own story, and writing reports. I want to learn how to write effectively. I already ordered a book on improving writing skills.

The use of methods. During my studies I was taught a lot of different methods. I notice that some are more useful than others. I want to make conscious choices about which methods to use, and learn about which methods are useful for me in the future.

Discover my personal strengths. Since this project is an individual project, this is the perfect opportunity to learn about my own strengths as a designer. I want to become more aware of the things I am good at, and what I enjoy doing.

FINAL COMMENTS

In case your project brief needs final comments, please add any information you think is relevant.

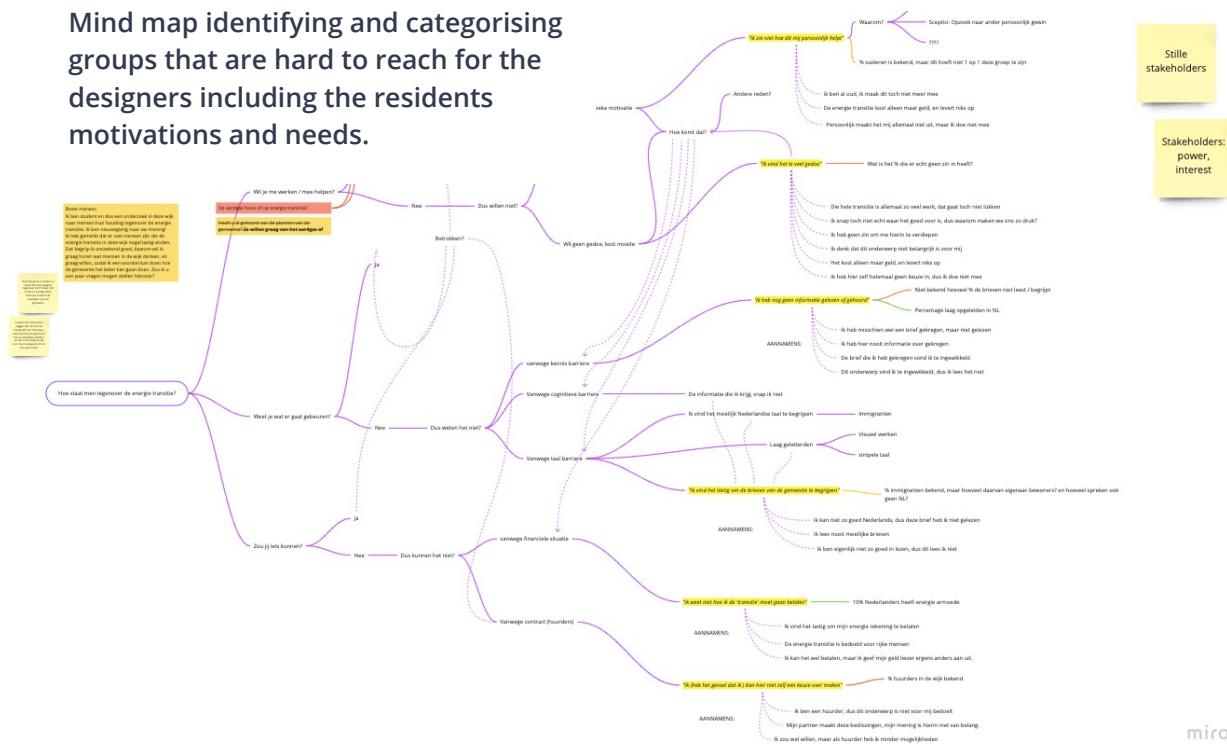
APPENDIX 2: INTERVIEWS WITH THE MUNICIPALITY OF ROTTERDAM

LIST OF INTERVIEWS AND PARTICIPANTS IS

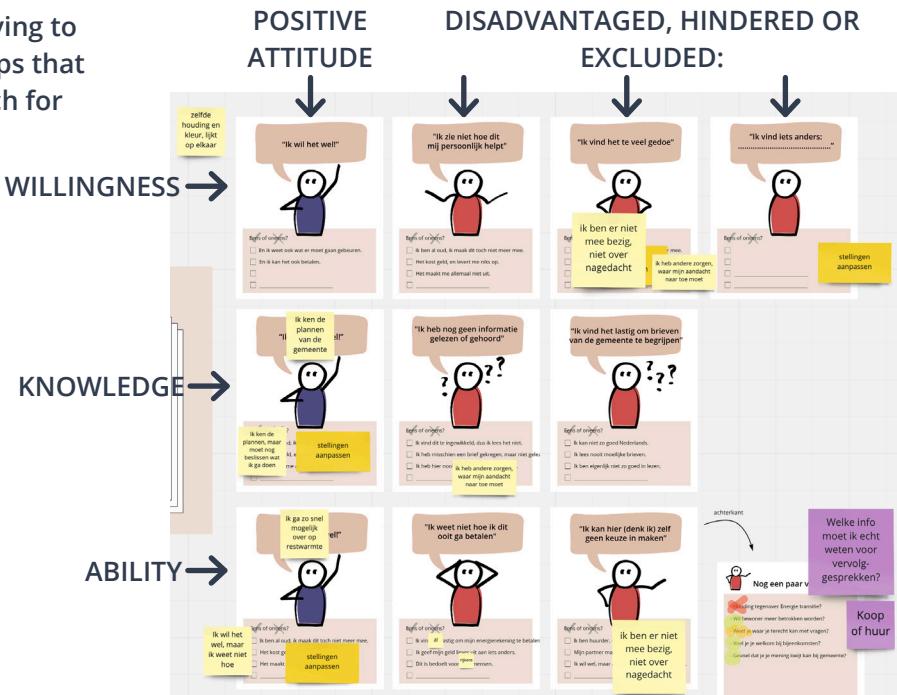
**ANONYMISED FOR PUBLICATION AND AVAILABLE
UPON REQUEST.**

APPENDIX 3: IDENTIFICATION OF EXCLUDED AND DISADVANTAGED GROUPS

Mind map identifying and categorising groups that are hard to reach for the designers including the residents motivations and needs.



First version trying to categorise groups that are hard to reach for the designers:



Collection of data and information about different target groups

Cijfers voor doelgroepen + Add a view					Search	New
Aa Doelgroep	Percentage doelgroep	Bronnen	Relatief percentage i...	Bronnen2	opmerkingen	
Huurders			Ongeveer 40% van Nederlanders woont in huurhuis. Ongeveer 10% van woningen is particulier verhuur	https://digitaal.scp.nl/ssn/2018/wonen/		
Laag inkomen / energie armoede	18,7% van huishoudens met een laag inkomen in Rotterdam. 13% onder armoede grens in Reyeroord. 15% onder armoede grens in Rotterdam.	armoede grens: plan van aanpak 20190415	10% in nederland heeft energie armoede 7,9% leven in armoede in Nederland	http://energiemoede.nl/ https://www.nibud.nl/beroepsmaatschap/half-miljoen-nederlanders-leven-in-armoede/		
Ouderen	20% in Reyeroord is een ouderen	plan van aanpak 20190415	18% van Nederlandse bevolking is 65+	https://www.volksgezondheidenzorg.info/onderwerp/bevolking/cijfers-context/vergrazing#node-totaal-aantal-ouderen		
Andere problemen aan hun hoofd	-		Iedereen heeft tijdelijke omstandigheden die voor veel stress kunnen zorgen, 17 miljoen Nederlanders. 7 miljoen nederlanders psychische aandoening. 100%	stress meter" https://www.stress.org/holmes-rahe-stress-inventory		
complot denkers / anti-energie transitie	?		16% van Nederlanders vind verduurzaming geen goed idee. 23% van nederlanders denkt dat klimaatveranderingen niet aan de mens liggen. (2018)	https://www.klimaatakkord.nl/actueel/nieuws/2019/09/11/motivation-onderzoek https://eenvandaag.avrotros.nl/panels/opiniepanel/aanle-uitslagen/item/onderzoek-kwart-denkt-dat-opwarming-aarde-niet-door-mens-komt/		
Begrijpt brieven niet			12% van bevolking heeft moeite met lezen/schrijven. Op sommige plekken in Rotterdam kan dit zelfs 30% zijn.	https://vng.nl/sites/default/files/Sociaal_Domein/2019/BeeldbrievenNL.pdf		
Cognitieve barrieref / licht verstandige beperking	?		1 miljoen mensen in Nederland is (licht) verstandelijk beperkt. dat is 6%	https://inclusie.gebruikercentraal.nl/doelgroep/licht-verstandelijke-beperking/		
Spreekt geen Nederlands	?		Ongeveer 1 miljoen mensen die in Nederland wonen spreekt geen Nederlands	http://taaluniversum.org/nhoud/feiten-en-cijfers		
Laaggeletterd	21% in Rotterdam is laaggeletterd	https://www.rotterdam.nl/wonen-leven/onderzoek-laaggeletterdheid#:~:text=Uit%20de%20cijfers%20blijkt%20dat,%20belangrijkste%20factor%20voor%20laaggeletterdheid.	18% van Nederlandse bevolking (16-65) is laaggeletterd	https://www.letonenschrift.nl/informatie-over-laaggeletterdheid-nederland#:~:text=In%20Nederland%20hebben%2025,1%20op%20de%206%20mensen!	Zie factsheet voor nog meer informatie	

APPENDIX 4A: INPUT SESSION 1

INPUT SESSION 1 (22/10/2020)

Two questions to the team:

Wat betekent een inclusieve energie transitie voor jou?

What does an inclusive energy transition mean to you?

Waarom is inclusiviteit belangrijk? Why is inclusivity important?

Results

Input sessie ontwerpteam 22/10

Raw data

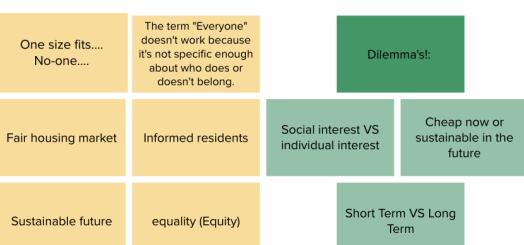


Insights

Inclusiveness in the energy transition is a difficult concept. On the one hand you want to get as many people as possible, because that makes the “deal” better and cheaper, which means that more people can join (=more inclusive), for example people with a smaller wallet. It will also cost the municipality relatively less per household if more households participate. This means that it pays to appeal to the largest “groups” and get them on board, this is where the most can be gained and achieved. Smaller groups that are behind, for certain reasons, can quickly take too much energy / effort to get along. This is a dilemma.

Because on the one hand, the social interest is: as much as possible = as cheaply as possible = more options for more people. the other side is individual interest: are residents still seen as individuals? As people with wishes, needs, that they want to be heard. Even if this is not the opinion one is looking for, or if the behavior, expressions are different than "normal".

Clustering on the right page provides the **most important insights listed below**.



Stappenplan ZW analyse:

- 1) Terug luisteren wat er is gezegd in de meeting
 - 2) Postits bekijken, aanvullen en clusteren
 - 3) aannames maken, extra vragen oopschrijven
 - 4) Conclusie (tot nu toe)



APPENDIX 4B: INPUT SESSION 2

INPUT SESSION 2

What?

For the design team of Reyeroord, I prepared an input session. In this session the goal was mainly to get insights about their understanding of inclusion in the neighbourhood and to learn about their expectations for an inclusive toolkit.

In this input session I asked the team a few questions about what they expect and what they see as the main problems. The session took place during the biweekly meeting of the team, where we discuss the overall process of the project.

the designers for an inclusion toolkit.

2. gain insights about what the designers see as main (inclusion) issues.
 3. Have the team thinking of solutions that might tackle the most important issues

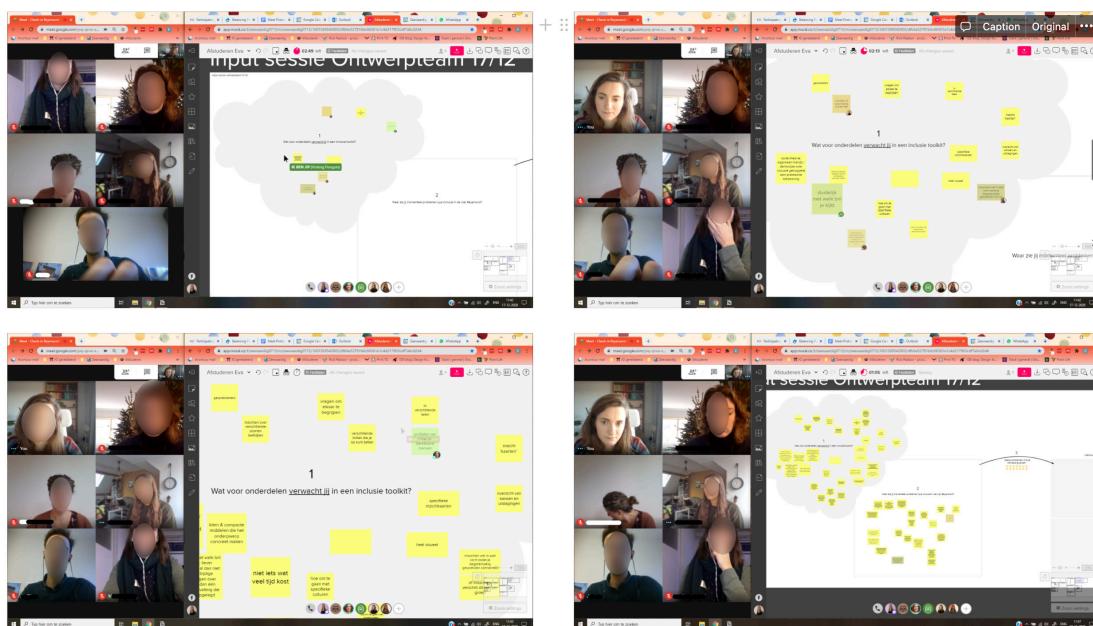
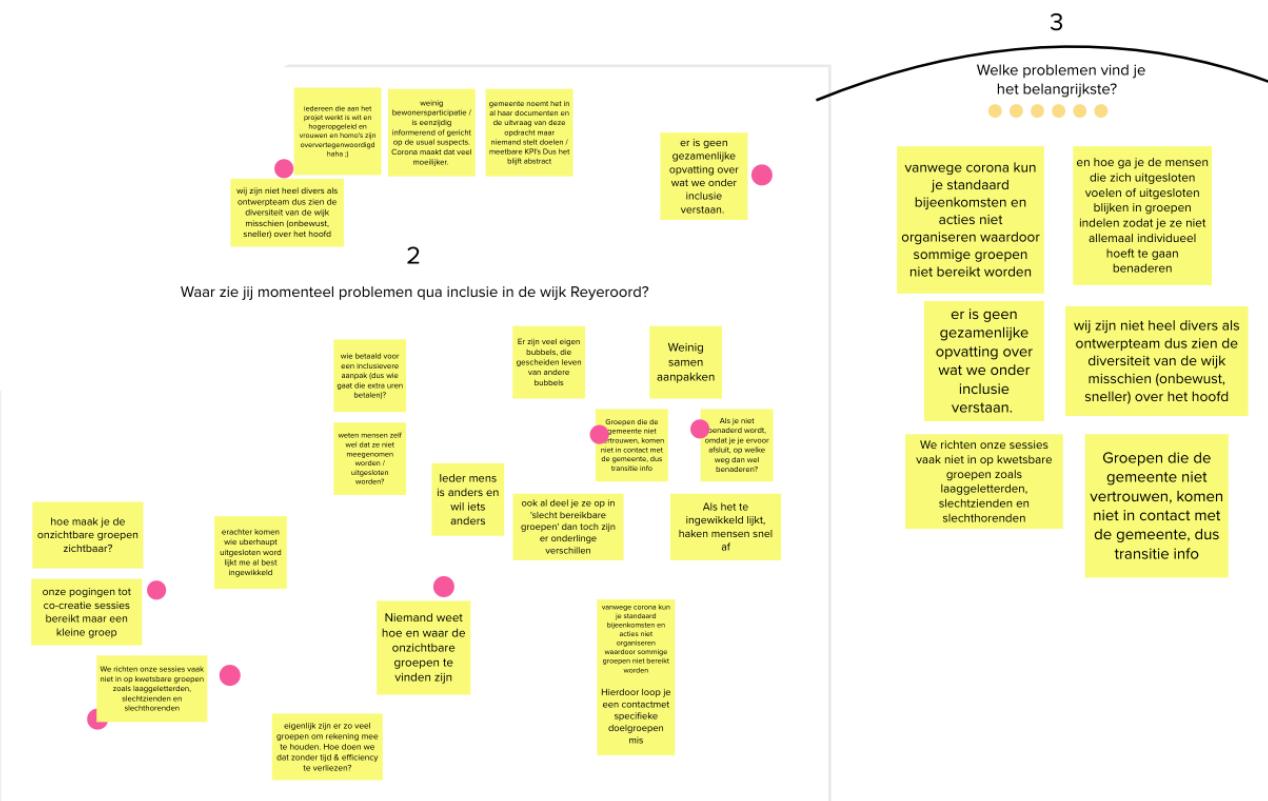
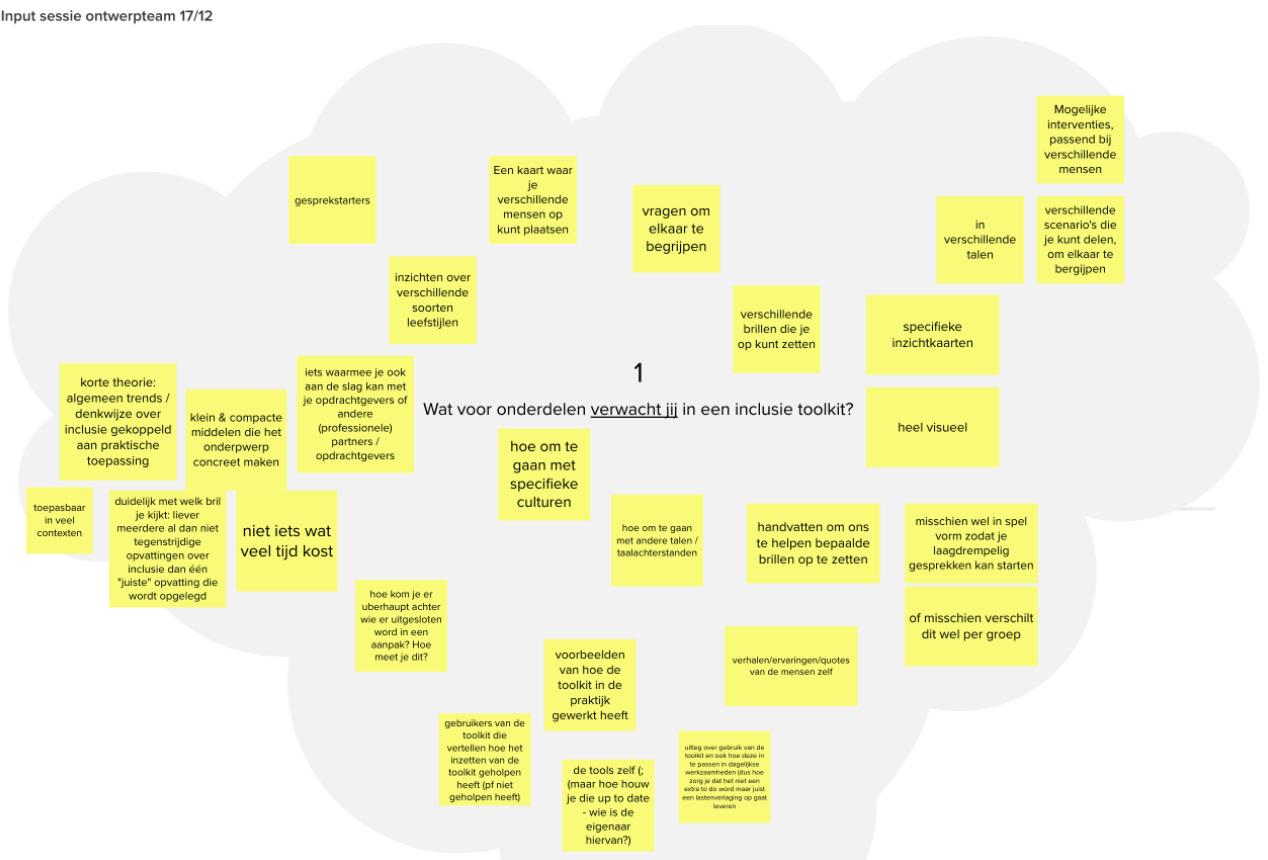
Due to time it was not possible to cover point 3: think of solutions. For now, it doesn't matter so much, because I will create a generative design session where this can be implemented.

Results

A mural full with postits (next page)

The goals of this input session were

1. Gain insights about the expectations of



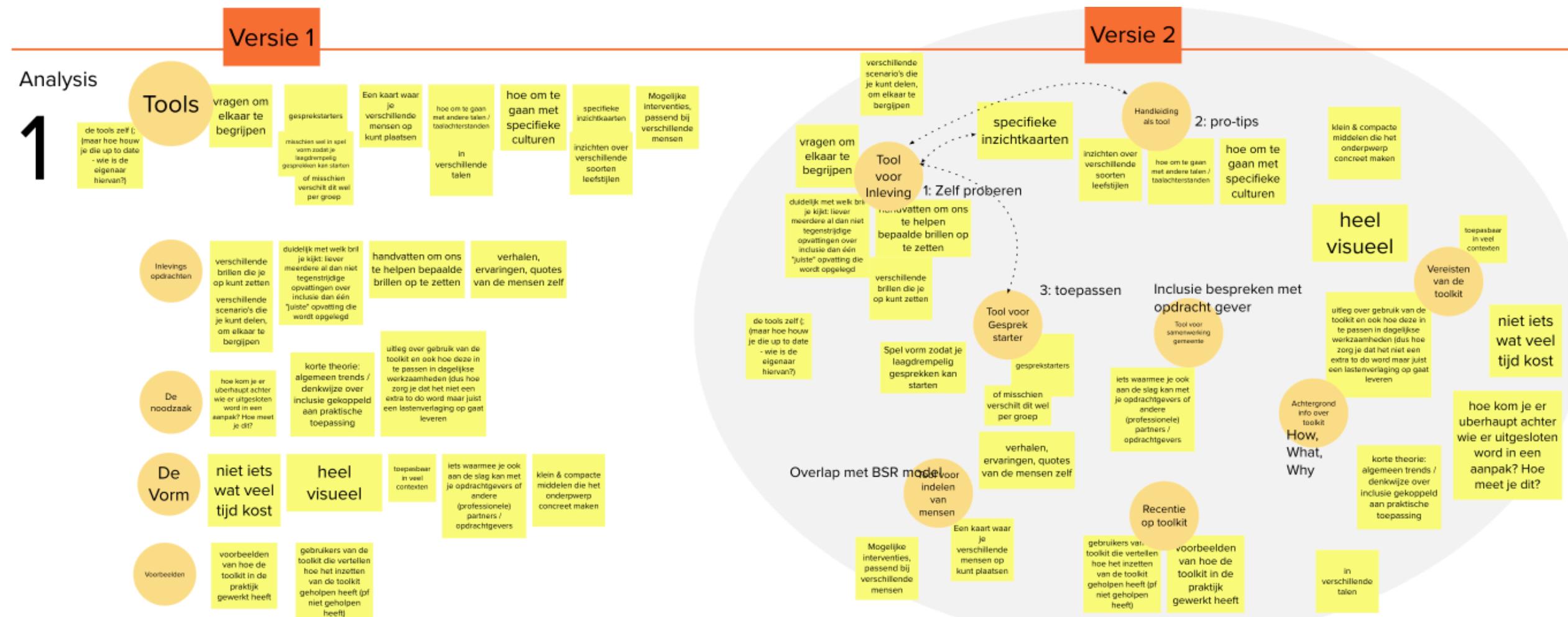
Analysis

What do the designers expect from the toolkit?

The results of the analysis are shown in the image below.

Next steps

- [] SCOPING: what belongs to my assignment and what does not?
 - [] Which issues can I tackle in this project?
 - [] How can I tackle these issues?
 - [] Organise a brainstorm session to find solutions, methods to tackle issues
 - [] Find small solutions that can be implemented straight away!
in the current process
 - [] Find opportunities to implement!
eg. Campagne, de wijk in.



APPENDIX 4C: INPUT SESSION 3

TRANSCRIPT OF INPUT SESSION 3

Vraag aan groep

Welke groep vinden jullie het interessantste / meest belangrijk om op te focussen?

Which group do you find most interesting/important to focus on?

Vraag Boukje: Wil je juist de moeilijke groepen of juist niet? Zoals mensen die geen nederlands spreken of psychische problemen hebben, die kunnen het moeilijkst zijn. Misschien kan je ze nog indelen in welke kan je nog relatief makkelijk bereiken, of waar moet je echt iets nieuws voor doen.

Renate: Ik denk dat de klimaatontkenners echt heel moeilijk kan gaan worden, dus dat kan je zien als een uitdaging of nu even buiten beschouwing laten. De groep 'ik kan hier denk ik geen keuze in maken' heel interessant., wat geeft hun net het zetje dat ze hier wel een keuze in kunnen maken?

Boukje: Weet je hoeveel groepen hiervan kopers en huurders zijn? Ik kan me voorstellen dat mensen met psychische problemen zullen waarschijnlijk ook geen kopers zijn. En waarschijnlijk ook bij mensen die helemaal geen Nederlands spreken, want dan wordt het lastig om een huis in Nederland te kopen. Dat is misschien nog wel een interessante voorselectie, want voor ons zijn de kopers veel aantrekkelijker.

Maar Pamijer is actief in Reyeroord, dus via pamijer zou je mensen met een psychische achtergrond kunnen bereiken. Dus die zijn dan meer interessant in hoe krijg je ze mee, hoe krijg je dat ze er positief tegenover staan, dan dat ze voor ons belangrijk zijn voor dat aanbod wel of niet.

Wies: Wat ik nu dacht, mensen die geen geld hebben, dat is gewoon dat je heel snel in oplossingen komt, dan moet je op een andere manier tegemoet komen. De mensen van 'het boeit me niet'. wat ik interessant vind is die groep 'ik begrijp

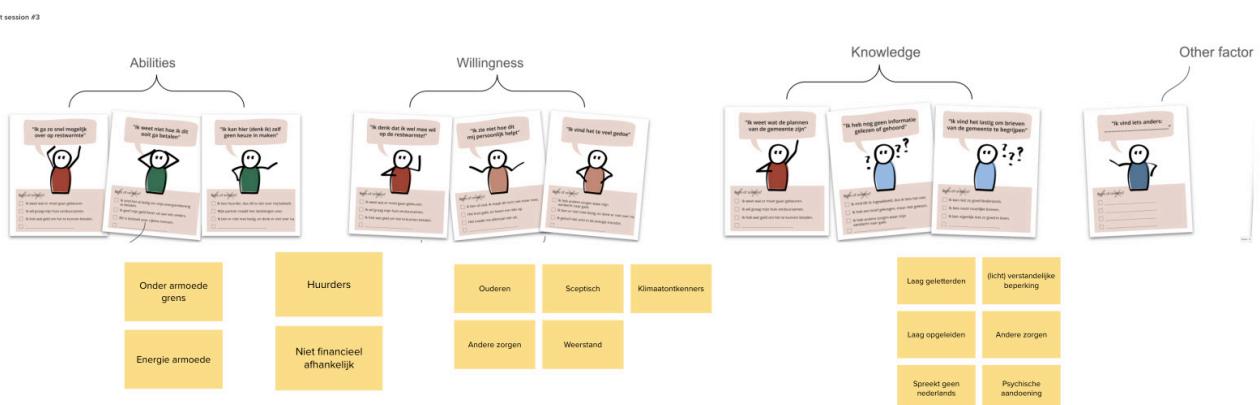
het niet, ik krijg die informatie niet'. hoe kan je mensen die de taal niet spreken, de brieven niet snappen. Misschien zit er wel een welwillendheid, maar dat het gewoon niet tot zich kunnen nemen, zelf vind ik dat een interessante groep. Omdat we het vaak noemen, maar net niets mee doen. Wel moeilijk ook.

Jip: Ik vind dus die groep 'ik denk dat ik wel mee wil'. op restwarmte, ik weet niet hoe het mij persoonlijk helpt, te veel gedoe, vind ik denk ik wel interessant. Want de echte armoede , de mensen die er echt niet bijkunnen daarvan acht ik de kans wel heel klein dat ze echt zelf die beslissing moeten gaan maken. in dit specifiek geval. Dat gaat het veel meer over persoonlijk contact dat de woningopzichter heeft, dat is ander dan ze echt meenemen in de transitie. Dan vind ik die groepen toch interessanter, want die andere dat zit je ook weer snel aan dat er heel veel overloop is met bestaande maatschappelijke kanalen die er al zijn. En jij hebt een groep die wel koopt, die zich zelfstandig in onze maatschappij beweegt, zonder al te veel hulpinstellingen misschien die daar over de vloer komen, die dan toch niet mee kunnen hierin zeg maar. Dat lijkt mij echt interessant.

Marlou: ik deel heel erg wat er gezegd wordt dat mijn interesse uitgaat naar mensen die wel zelf de beslissing moeten maken. Dus of ze huiseigenaar zijn of ehm... Dus ik ben zelf vooral getriggerd in de mensen die een beetje hun hakken in het zand zetten. Het is

moeilijk, maar dat vind ik wel interessant.

Franca: Ik ben het daar wel mee eens, verder niet zoveel toe te voegen.



APPENDIX 5: CREATIVE SESSION WITH STUDENTS

CREATIVE SESSION ON TOOLKITS, METHODS AND DESIGN PROCESSES

A session with 7 graduation students (designers and non-designers) about their experiences using tools and methods, on Monday 23 November from 15:00 - 17:00.

The goal of the session

- Gathering insights about what inspires people to change approach in the future.
 - What does inspiration bring people?
 - Get a mutual understanding of the differences between a method, tool, model and approach.

The MURAL board for the creative session:

The image is a collage of screenshots from a digital toolkit for 'Brainstorming I'. It includes sections for 'Welkom' (Welcome), 'Voordelen en omgeving schetsen' (Sketching benefits and environment), 'Inspiratie onderzoeken' (Researching inspiration), 'Inspiraties delen' (Sharing inspirations), 'Purge' (Purging), 'Brainstromen' (Brainstorming), 'Jullie ervaringen' (Your experiences), and 'Afsluiting' (Conclusion). Each section contains text, images, and numerous yellow sticky notes with handwritten ideas and sketches.

Find answers to multiple H2 questions:

- How to create a clear understanding of the goal of a method?
 - How to use a tool for the first time?
 - How to explain different steps?
 - What are the building blocks of an approach?

Results

How to use a tool for the first time?

- Once you know what you want to do, or achieve, you can find the correct tools to do so.
 - The first time it is often just learning by doing.

How to explain different steps?

- Interactive
 - clear

How to create a clear understanding of the goal of a method?

- insights: the goal of what you want to reach and where you end are not always the same
 - to understand the goal you need to have an explanation, and understand this well.
 - To understand the explanation well, It might help to do a small pressure cooker or trial and error.

What are (some of) the building blocks of an approach?

- warming up to start
 - Creating empathy
 - realising
 - call to action
 - a perspective of the wished results
 - Background information
 - "doing"
 - evaluation

What's next:

- Creating questions for design team, and find the answers
 - Create first attempts of a toolkit: how can it look like? What could be the different elements?

The participants of the creative session



APPENDIX 6: DEVELOPMENT OF THE SOLUTION SPACES

REVERGING AND CONVERGING PROCESS OF CREATING THE SOLUTION SPACES

Multiple brainstorm sessions

I did multiple brainstorm session:
 Brainstorm 1) What tools could be in the toolkit? and what can help solve the inclusion problems in the neighbourhood?
 Brainstorm 2) How can the toolkit look like? which topics are tackled? what purpose does the tool achieve? And how do the tools create a whole?

Main insights:

- I see a lot of opportunities that can lead to a more inclusive approach.
- There are multiple tools per opportunity that I can think of.
- I don't know what will help the design team most. I have to propose some things and ask them what they value. - I need a user journey to make sure that the different tools can be used in the design process of the design team.

I started with clustering the ideas from the brainstorm, and this took me much longer than I expected. Instead of the planned 1 day, it took me 3 days to finish just the clustering! But it helped me to get a good overview of all the ideas I have and where I still have gaps.

A little bit about clustering process

Normally brainstorming and clustering are activities that are best done with more than 1 person. For the brainstorming I solved

this by having multiple brainstorm session, both with fellow students and alone. I didn't want to do the same with clustering, since this is often a very time consuming process, that is not so fun, and only valuable for myself. Also I wanted to do this physical, in a corona-proof way.

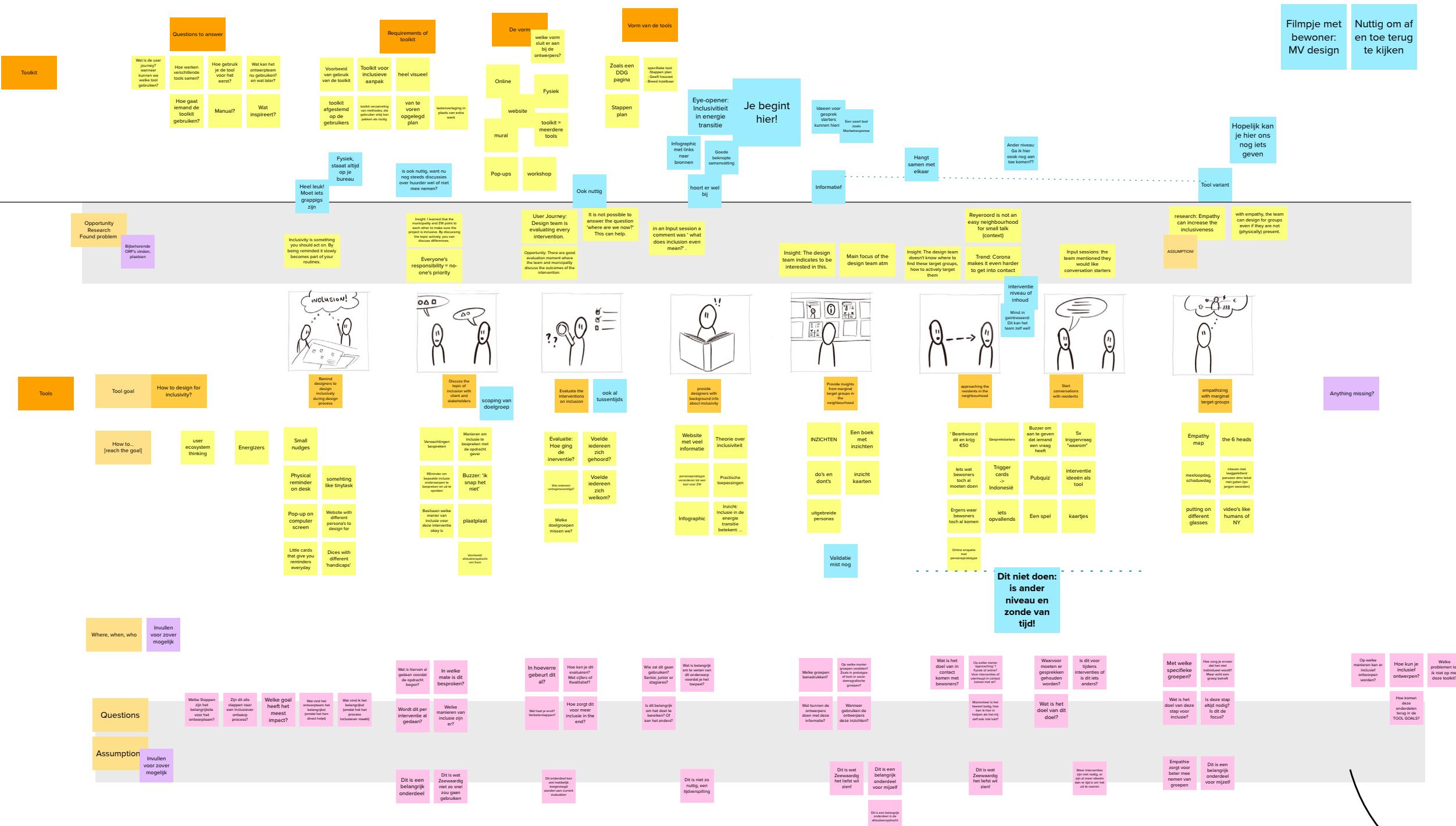
Therefor I decided to do several rounds of clusters, using the same post-its. This resulted in a broader perspective, instead of the first ideas I had. After two rounds of clustering I invited a friend to listen to the results and share her thoughts of the outcome. This way I still have an outsiders perspective on the results.

I ended up with 8 solutions that can enable the designers to design more inclusively. Each of these 8 solutions could be made into a tool for the toolkit. For most of the solutions I already have some ideas what the tools could look like, but for some I still don't know. (the ideas are the yellow post-its in the Mural image)

On the next page, the reverging and converging phase is illustrated.



5. Concluding the converging phase with transferring all insights into the MURAL. Only the relevant elements stayed, irrelevant or individual ideas are removed in this final verison.



3.4.1 SOLUTION SPACES EXPLAINED

Solution space 1: Providing background information about inclusion

Key insights leading to the solution space:
The design team mentioned that they are not fully aware of what inclusion means in the energy transition.

Insights from research create a clear vision of inclusion in the energy transition.

Each tool needs to be explained in a detailed way to help the designer to utilise the tools effectively.

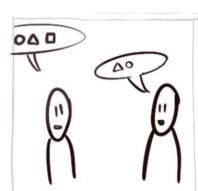
Solution space 2: A conversation guide to discuss inclusion with the client

Key insights leading to the solution space:
The municipality and design team consider each other as responsible for inclusion
If a task is everyone's responsibility, there is no-one's taking it as priority

The definition and expectations on inclusion need to be discussed.



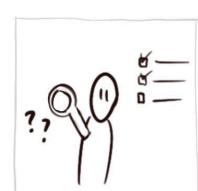
1. Remind designers to design inclusively during the design process.



2. Discuss the topic of inclusion with client and stakeholders.



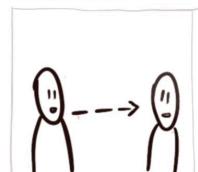
5. Provide insights from marginal target groups in the neighbourhood.



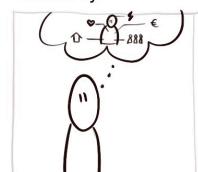
3. Evaluate the interventions on inclusion.



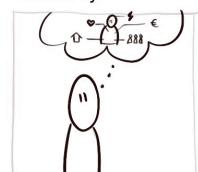
4. provide designers with background info about inclusivity.



6. approaching the residents in the neighbourhood.



7. Start conversations with residents.



8. Empathizing with marginal target groups.

Solution space 5: Approaching methods to reach a diversity of residents in Reyeroord

Key insights leading to the solution space:
The neighbourhood has many small bubbles.

Due to COVID, approaching residents has become even more difficult.

How to reach residents is a question that keeps coming back.

Solution space 6: A conversation starter to introduce the topic of energy transition

Key insights leading to the solution space:
The design team suggested multiple options to approach residents that can solve their challenges.

There is a need to easily introduce the energy transition topic.

Solution space 7: A reminder to design inclusively

Key insights leading to the solution space:
Inclusion is a skill that designers can train to improve on.

Designers can lose track of the task to design inclusive.

This solution can be implemented during the development phase of designing.

Solution space 8: An evaluation of the inclusiveness of an intervention

Key insights leading to the solution space:
At the end of every intervention, the design team evaluates the outcomes

Currently, it is impossible to answer the question of how inclusive the team is designing, because it is difficult to measure.

By evaluating the team will get more and more insights into their current inclusivity.

By evaluating and reflecting, there is room for improvement

APPENDIX 7: BRAINSTORMING SET-UP ITERATIVE DESIGN PROCESS

BRAINSTORM ON POSSIBLE TOOLS FROM THE SOLUTION SPACES

Goal: Brainstorm and select ideas for each solution space.

HOW TO-Questions:

How to facilitate a conversation with the municipality and other stakeholders?

How to provide information about marginal groups?

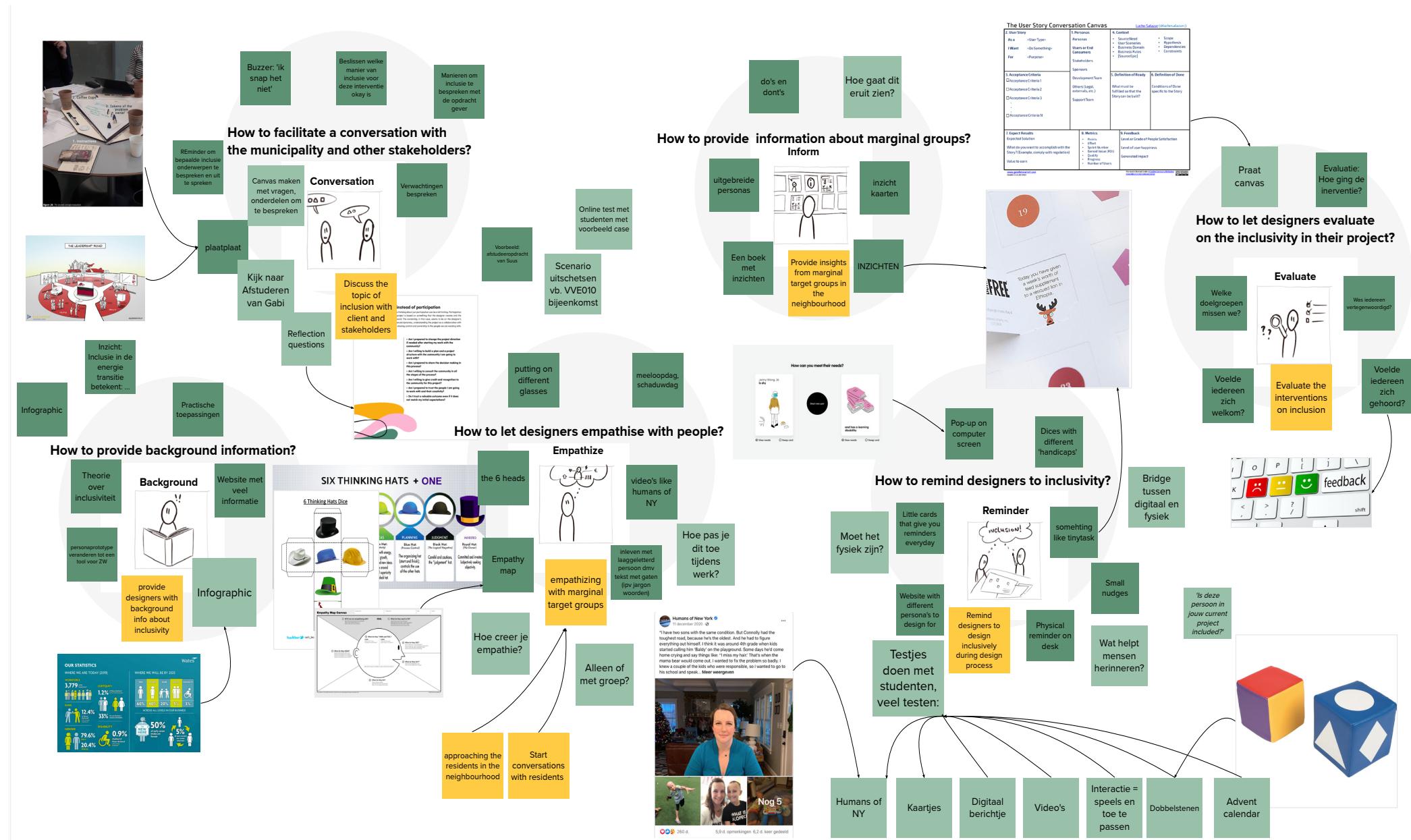
How to let designers empathise with people?

How to provide background information?

How to remind designers to inclusivity?

How to let designers evaluate on the inclusivity in their project?

The image of the side shows the results of the brainstorm session from the solution spaces. The ideas generated formed the start of the iterative design process.



APPENDIX 8: MVP TESTS SET-UP

ITERATIVE TESTING:

REMINDERS AND EMPATHY

The goal and the expectations of the test

'How to know where best to start? Just starting somewhere!' Since the brainstorm resulted in many ideas for reminders and empathy, it was a logical step to start testing if these ideas resulted in the desired outcome. The expectation of the test was to be able to answer a number of questions. Like, which way of reminders works for designers to make inclusivity a priority while working and designing? How can empathy best be used to delve into new target groups? and, is inclusivity a skill that a designer can train in?

Approach

Over the course of three days, the participants received two reminders a day with a small assignment, concerning empathy exercises, delving into disadvantaged groups and looking at inclusivity issues in their current projects.

Research questions

Test 1: Reminders and empathy (what information?)

- Do you think more inclusively because you are remembered more often?
- Does it work better if you are reminded more often? Is it getting better?
- What is better? physical or digital, active reminder or passive
- Does the reminder help you to act on it?
- How would it become part of your working routine?
- Which of the different tools works best?

Why?

- Individual or duos?
- Is this (inclusion) a skill you can train?
- emotions during exercise
- How often reminded by the physical object on desk?

Reminders

- Do you start thinking more inclusive when you are remembered regularly?
- Does it work better if you are reminded more frequently?
- What kind of reminders work the best?
Physical or digital, active or passive reminder
- Does the reminder help you to act on it?
- How could it become part of your working routine?
- Is it better to do individual task or work in duos?
- Is it better to discuss the outcomes or reflect on it yourself?

Empathy

- Which of the different tools works best for creating empathy?
- What way of creating empathy works best? (referring to research on empathy)

Inclusion

- From literature: Is inclusion a skill that an individual can practice? How do people see this?

Who? 2 Junior designers (L, B), Msc. Industrial design engineer (J), Graduation design student (J)

Timeline? Preparing assignments: 2 days, **Executing test**, 3 days, 4x 1 hour evaluation interview, 4 days, analysis.

When?

12 Feb

How? Test: Combination of physical and digital tests, though email, whatsapp, agenda, post, digital evaluation interview

The test

3 days, 2 times a day a reminder.

Digital tools:

- 2) Humans of NY (inspirational)
- 4) Cards for humanity (training creative inclusion)
- 3) Whatsapp message / email tinytask (active reminder)
- Task in agenda

Physical tools:

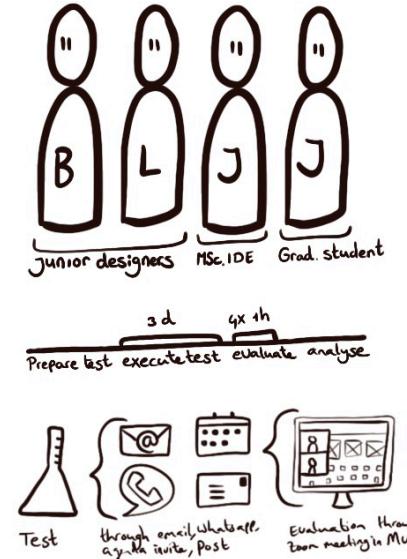
- 3) Tiny tasks (exercises: 'Try eating with left hand')
- Dices (training creative inclusion)
- 1) Placing an object on work desk (super passive)

Results

This first iteration was a success since the interviews provided many qualitative insights that wouldn't have been discovered in another way. This was a great starting point for the following iterations.

Clear preferences for the use of reminders
The small assignments were preferably shared with colleagues by all participants, this stimulated designers to learn from each other. Quote J: 'False assumptions are not so bad, but they can have unpleasant consequences' [if designers don't verify them].

The reminder should be an active reminder (3 out of 4 participants). B: [with a passive reminder], 'you leave it to chance, instead



of consciously taking it into account. If you want people to be truly inclusive, they have to be constantly reminded to do so. The physical reminders were popular by all participants. J: 'Because you literally see it, It does not disappear somewhere behind windows.'

Insights about applying empathy for designers

Superficial information is neither useful nor inspiring. Designers need deep insights about motivations or needs. The use of videos was mentioned to be the most inspirational because showing a real face and giving them a voice helps to empathise.

which way of reminders works for designers to make inclusivity a priority while working and designing?

During the test it was learned that a reminder is an important step, but information is missing. In order to apply this themselves, designers will have to be aware of which groups are excluded, so that they can then apply it in their project.

The video and the dice are preferred in this

Eerst een paar vragen

The image is a collage of screenshots from a user study, likely a design sprint or user research session. It is organized into six main sections corresponding to the days of the week:

- Woensdag ochtend**: Shows a reminder about being a good role model and a photo of a smiling woman with a pink headscarf.
- Woensdag middag**: Shows a reminder about making a difference in people's lives and a photo of the same woman with the text "so Muslims aren't all bad."
- Donderdag ochtend**: Shows a reminder about making a product accessible and a screenshot of a digital interface for creating a persona.
- Donderdag middag**: Shows a reminder about completing a task and a screenshot of a digital interface for creating a persona.
- Vrijdag ochtend**: Shows a reminder about describing a person and a drawing of a person holding a watering can.
- Vrijdag middag**: Shows a photo of three small cards labeled "Fysiek", "Digitale", and "Interactieve herinnering".

Below these sections are two rows of participant feedback and reflection questions:

- Row 1 (Feedback):**
 - Wat vond je van deze opdracht? (Scale from Seiz to Interessant)
 - Wat vond je van deze opdracht? (Scale from Seiz to Interessant)
 - Wat vond je van deze opdracht? (Scale from Seiz to Interessant)
 - Wat vond je van deze opdracht? (Scale from Seiz to Interessant)
 - Wat vond je van deze opdracht? (Scale from Seiz to Interessant)
 - Wat vond je van deze opdracht? (Scale from Seiz to Interessant)
- Row 2 (Reflection):**
 - Hoe heb je deze opdracht uitgevoerd?
 - Hoe heb je deze opdracht uitgevoerd?
- Row 3 (Reflection Questions):**
 - Wat voor goedeken kreeg je hierdoor?
 - Wat voor goedeken kreeg je hierdoor?

To the right of the collage is a legend titled "Evaluatie" (Evaluation) which maps colors and shapes to different types of reminders and their characteristics.

Color	Shape	Type	Description
Green	Circle	Fysiek	Wet vond je leuker, en vond je het belangrijk?
Purple	Circle	Digitale	Wat voor soort herinneringen werkten de beste voor jou?
Yellow	Triangle	Actieve herinnering	Deze zijn voor mij belangrijk omdat ze mijn gedrag beïnvloeden
Blue	Triangle	Pasieve herinnering	Waarom?
Red	Circle	Informatief	Dit is de belangrijkste en ook de meest belangrijke herinnering
Orange	Circle	Interactief	Is er iets wat ik nu niet kan bedenken dat later nog overkomt?
Grey	Circle	Liever alleen	Heb je dit belangrijk gevonden?
Grey	Circle	Liever samen met anderen	Waarom?
Grey	Triangle	Resultaat bespreken	Welk resultaat heb je bereikt?
Grey	Triangle	Resultaat voor jezelf houden	Waarom?

test. The video is inspirational, beautiful and shows a real face, but it will need more background information. The dice are interactive and can be a good way to open a discussion. But they will need to be planned as active reminders. Questions arise how this tool can be used in Covid lockdowns.

How can empathy best be used to delve into new target groups?

A combination of reading information and experiencing personally is the best combination to create empathy. Watching video's of real people talk about their personal experiences makes most impact and is most inspirational.

It is helpful to share thoughts and insights with colleagues to reflect and improve a designer's inclusivity. When searching for prejudices, it is the best to discuss and check this with the specific target group afterwards, to discover new insights and mistakes in personal reasoning.

and, is inclusivity a skill that a designer can train in?

According to Kat Holmes, 'with any skill, inclusion is a practice that gets better over time' (Mismatch 09:19). For the duration of three days, the participants didn't experience a difference yet. But most participants think that they can improve

their inclusivity as a skill, by practising more often.

Insights from iterative testing

During the first iteration different insights emerged about empathy creation:

- A combination of reading information and experiencing personally is the best combination to create empathy.
 - Watching video's of real people talk about their personal experiences makes most impact and is most inspirational.
 - It is helpful to share thoughts and insights with colleagues to reflect and improve a designers inclusivity.
 - When searching for prejudices, it is the
 - An active reminder
 - For empathy a combination of information and experience
 - A moment to share insights
 - reminders for inclusion in general, to improve this skill (other tools for energy transition specific)

best to discuss and check this with the specific target group afterwards, to discover new insights and mistakes in personal reasoning.

APPENDIX 9A-B: SET-UP CO-CREATE SESSION CANVAS

APPENDIX 8A: CO CREATE SESSION 1

CANVAS WITH STUDENTS

Conversation and evaluate can go together in a scenario play. Testing canvasses with students with a small scenario for designing an intervention.

The main goal of the conversation tool is to have an open conversation with all stakeholders of an intervention to discuss the inclusivity of that intervention. During this conversation three topics should be covered including expressing expectations, making a clear decision for which groups to target and dividing roles and responsibilities.

At the end of the design process the intervention is evaluated using the evaluation tool. The objective of this tool is to reflect on the reached target groups, goals, and to discuss how to improve inclusion for the next intervention.

Since both these tools involve various stakeholders, who currently meet online due to the COVID pandemic, these tools should be digital tools, that can be used in an online meeting session. That is why a canvas was chosen. To start iterating on the conversation and evaluation tool, two preliminary canvasses were created, to test if the main goals of these tools are being reached.

The goals of the conversation tool:

- Compare expectations on inclusivity
- Decide on who is being targeted with this intervention? (avoid saying 'everyone')
- Divide roles and responsibilities

The goals of the evaluation tool:

- Reflect on which groups have been reached and who not
- Reflect on the goals reached, especially the goals of the residents (since they are not in this backend meetings, represented)
- Reflect on how to improve the inclusive approach
- Decide on the focus for the next interventions

Research Questions:

- Do the socio-demographics help to decide on a target group?
- Do the need-based profiles help to decide on a target group?
- Can the expectations be discussed with a similar canvas?
- Can it be made clear who the target group is for a intervention?
- Can the responsibilities for inclusion be discussed?
- Does reflecting help to become more inclusive?
- Can a role play simulate the project context?
- Can the right intention be reached using a canvas?
- Do the participants need extra explanations using the canvas?

Method

To test and iterate on the preliminary canvasses a role play was introduced. Three students played out the three different roles as designer, municipality and additional stakeholder. A case scenario was played in which the three parties were discussing an intervention in the neighbourhood Reyeroord. First the students were introduced into their roles and given background information about the context, followed by a role play using the preliminary canvasses to have a conversation and evaluate. After using the canvasses, there were reflective questions asked by the facilitator to reflect on the use of the canvasses and to co-create a new version.

Preparations

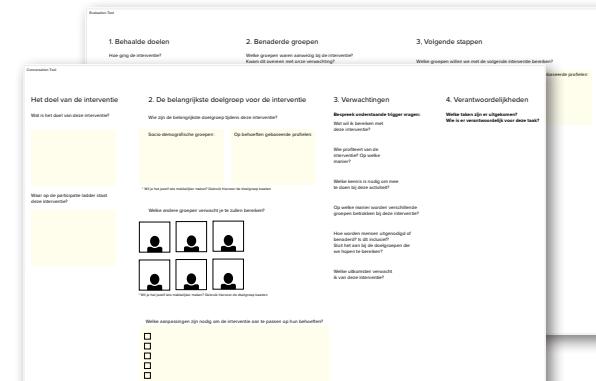
For this occasion the canvasses were printed out, and the role play took place physically. The role play, discussion and co-creation were recorded for analysis.

Results

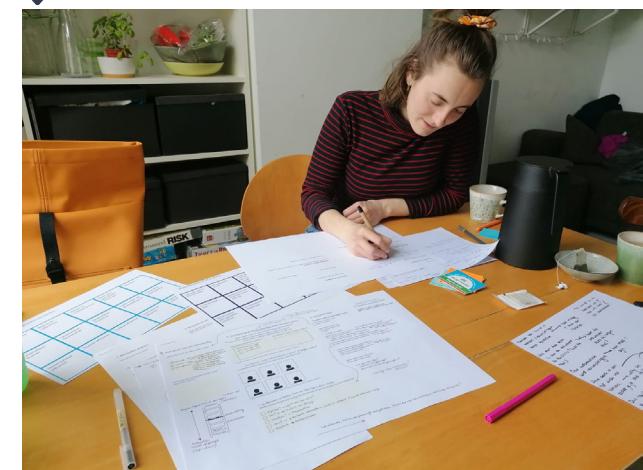
The co-creation resulted in an abundance of insights, comments and adjustments. These were gathered on the canvas sheets and later collected in a MURAL. Analysis of the co-creation session resulted in an updated version of the canvases.

There were some big changes to the canvases, for example:

Including known design methods for common components, like using the



First version of the canvasses.
To be tested with 2 IDE students.



Co-creation session with two IDE students: Role-playing and improving the canvas. Analysing the results.



WWWWWH method to define the intervention and the STARR method to reflect on the outcome.

Adding a section that is prepared beforehand by the facilitator, so the meeting can get straight to the point. Adjusting the steps to take by the design team and municipality from ideal situation first, to realistic situation later. Giving more space for input from residents, their opinion and reflection on the evaluation canvas.

Conclusion and insights

The goals of the discuss and evaluate solution spaces were reflected in the canvases, although improvements should be made in a next iteration. Role playing the context appeared to be very difficult. It was hard for the students to act out the different roles, since motivations

and positions were not always clear. Consequently, a next iteration should be done with the design team themselves.

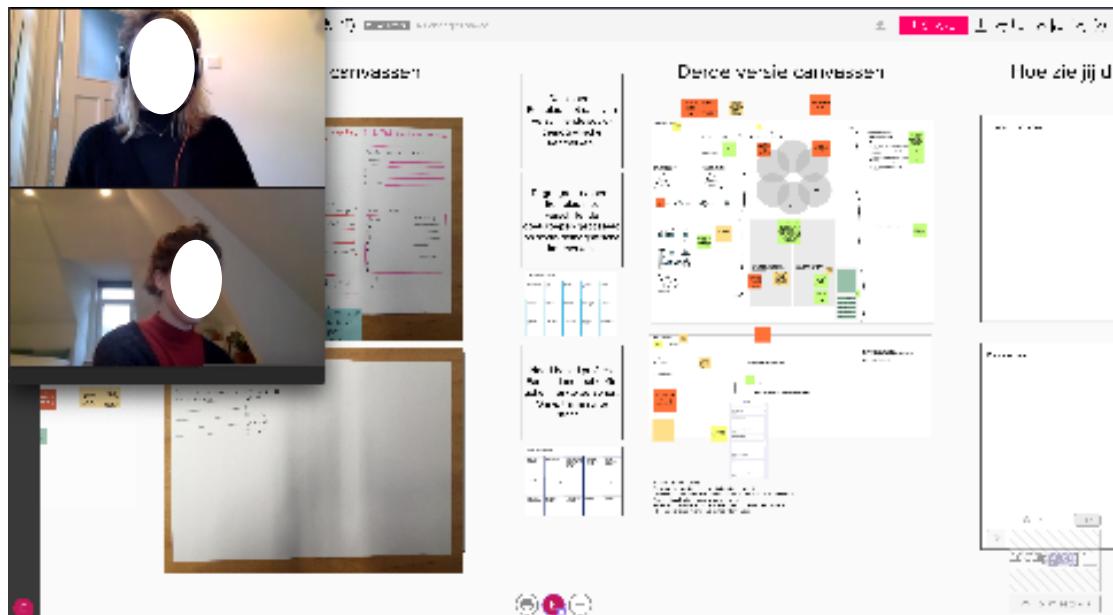
Next steps (+ Why)

In a next iteration the canvasses should be tested with the design team. Also the format should be discussed, since a question arises if canvases would be useful in a meeting with the municipality.

APPENDIX 8B: CO-CREATE SESSION 2 CANVAS WITH ZEEWAARDIG

The goal and the expectations of the co-creation

The previous iteration resulted in updated canvases, which should be proposed to the design team. By proposing the canvases to the team and improving them together,



the canvases will better match the design team's needs and increase the chances that it will be used.

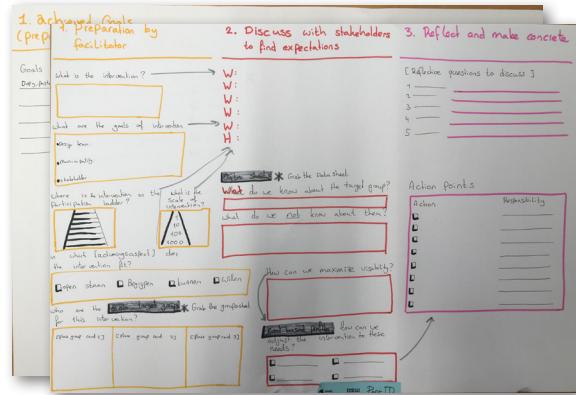
In addition, there are doubts about the format as a canvas. For this I want to ask the design team how they envision that it could be put to good use. I hope to gain insights about the use of the canvases, and clues on how to make the canvases appealing to be used by the design team.

Approach

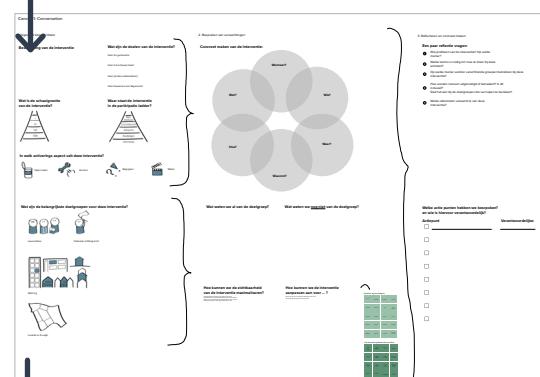
A third version of the canvases is designed and the co-creation session is prepared in MURAL. The online co-creation session provided the designers of the design team with the goals of the canvases and the progress made so far, before starting discussion of the current canvases. Critical questions helped to scope the canvas, and the session concluded with pasting green and red post-its for parts that respectively needed improvement and that were promising and useful for the design team.

Transcript

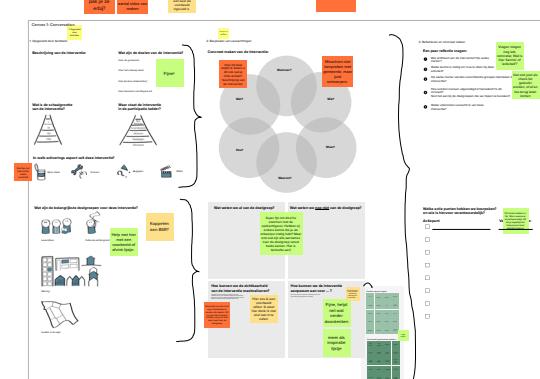
The transcripts of the co-creation session 1 and 2 are available upon request.



Second version of the Canvases



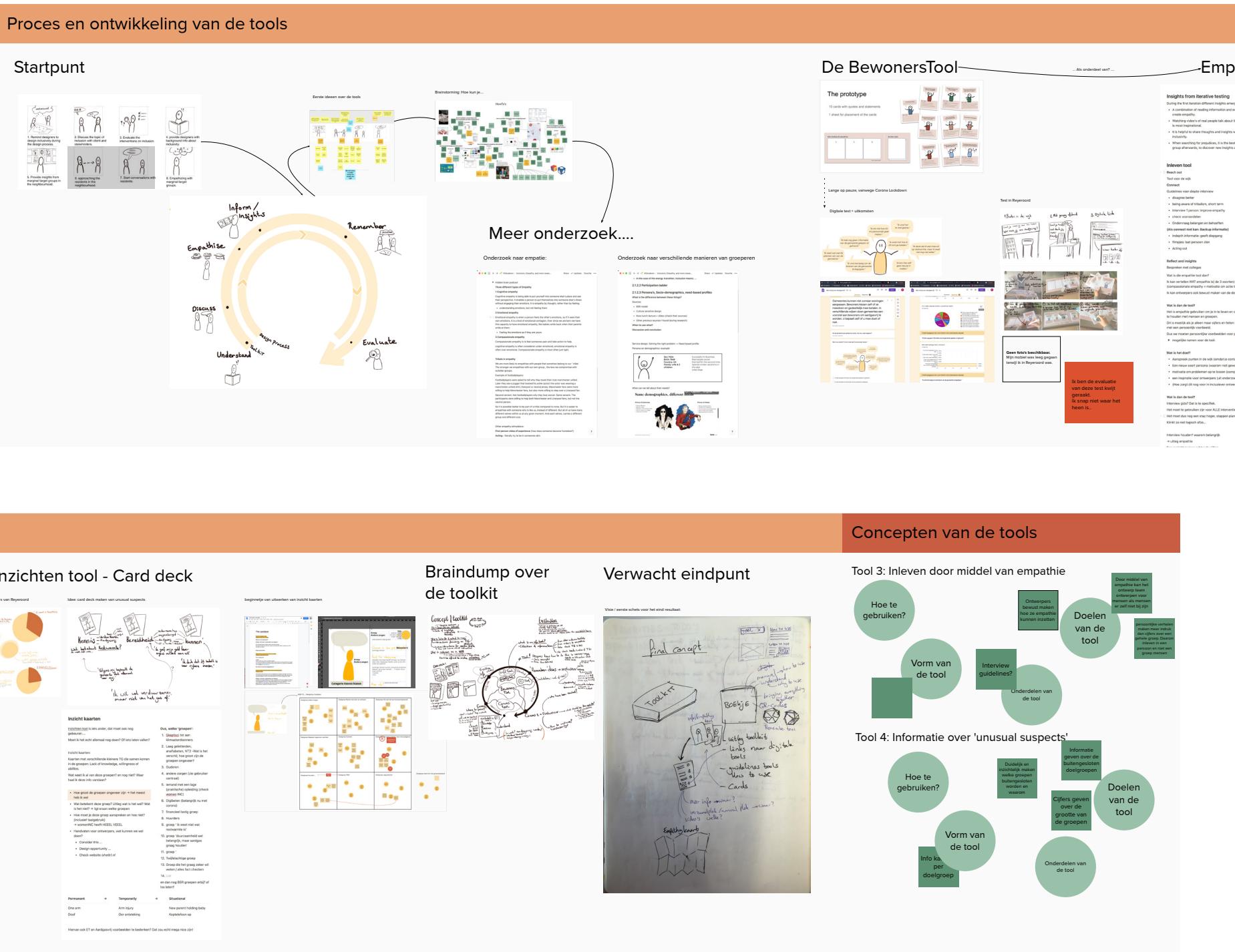
Third version of the Canvases



In a co-creation session with Zeewaardig relevant elements of the canvas are highlighted, some adjustments are suggested. After this version the final Canvas is created.

APPENDIX 10: SET-UP CO-CREATE SESSION INZICHTKAARTEN

CO-CREATE SESSION WITH MARLOU DE INZICHTKAARTEN



APPENDIX 11: DIGITAL QUESTIONNAIRE GESPREKSWAAIER

PRELIMINARY CONCEPT TESTING 1: GESPREKSWAAIER TEST 1: ONLINE

THE ONLINE QUESTIONNAIRE:

Wat vind jij van Aardgasvrij?

Gemeentes hebben plannen om meer woningen aardgasvrij te maken.
Ik wil graag weten wat u hiervan vindt.

Ik ben op zoek naar verschillende meningen over het project aardgasvrij.
Het is geen probleem als u daar nog niet mee bezig bent. Voor mij is elke mening belangrijk!

Ik ga u nu een aantal uitspraken en stellingen voorleggen. Graag wil ik weten met welke stellingen u het eens bent.

Nogmaals, uw mening is belangrijk!



De gemeentes in Nederland zijn in verschillende wijken bezig om woningen van het aardgas af te sluiten en over te stappen op oplossingen die beter zijn voor het milieu.

In welke buurt/ wijk woont u?

Your answer _____

In welke stad is dat?

Your answer _____

Is uw buurt al bezig met Aardgasvrij?

- Ja, er loopt een Aardgasvrij project
- Nee
- Weet ik niet
- Other: _____

Weet u al iets over aardgasvrij wonen?

- Nee, helemaal niks
- Ja, een beetje
- Ja, best veel
- Other: _____

Next

Wat vind jij van Aardgasvrij?

* Required

Gemeentes kunnen niet zomaar woningen aanpassen. Bewoners kiezen zelf of ze meedoen en gedeeltelijk mee betalen. In verschillende wijken doen gemeentes een voorstel aan bewoners om aardgasvrij te worden. U bepaalt zelf of u mee doet of niet.

Als de gemeente een aanbod zou doen, hoe zou u dan reageren?

Wat is uw reactie? U kunt maximaal 3 antwoorden kiezen. *

- "Ik weet wel wat de plannen zijn van de gemeente."
- "Ik heb nog geen informatie van de gemeente gelezen of gehoord."
- "Ik vind het lastig om de brieven van de gemeente te begrijpen."
- "Ik zie niet hoe dit mij persoonlijk gaat helpen."
- "Ik weet niet hoe ik dit ooit ga betalen."
- "Ik vind het teveel gedoe."
- "Ik denk dat ik wel mee wil op restwarmte, maar ik weet het nog niet zeker."
- "Ik kan hier zelf geen keuze in maken."

En in welke uitspraak herkent u zichzelf het meest? *

Choose

Back

Next

Wat vind jij van Aardgasvrij?

Aardgasvrij

Met welke stellingen bent u het eens?

- Ik weet wat er moet gebeuren en om mijn huis.
- Ik wil graag mijn huis verduurzamen.
- Ik heb wat geld gespaard om het te kunnen betalen.
- Geen van alle
- Other: _____

Back

Next

Wat vind jij van Aardgasvrij?

U heeft aangegeven dat u zich herkent in de onderstaande uitspraak:

"Ik heb nog geen informatie van de gemeente gelezen of gehoord."

Met welke stellingen bent u het eens?

- Ik vind dit te ingewikkeld, dus ik lees de brieven niet.
- Ik heb een brief gekregen, maar niet gelezen.
- Ik heb andere zorgen, dus ik heb hier geen aandacht voor.
- Ik kan niet zo goed Nederlands.
- Ik lees nooit moeilijke brieven.
- Ik ben eigenlijk niet zo goed in lezen.
- Other: _____

Back

Next

Wat vind jij van Aardgasvrij?

Laatste paar vragen

Wilt u nog iets kwijt over aardgasvrij?

Your answer _____

Waar heeft u deze enquête gevonden?

Your answer _____

Voor mijn onderzoek wil ik graag bewoners spreken uit proeftuin wijken. Dit zijn wijken waar een Aardgasvrij project loopt. Mag ik nog contact opnemen voor een gesprek? Vul dan uw gegevens in.

In een vervolgesprek hoor ik graag uw mening over dit onderwerp en uw ervaringen en behoeften. Alle gesprekken helpen mij te zoeken naar oplossingen, waarbij er naar iedereen geluisterd is en waar iedereen bij hoort.

Wat is uw naam?

Your answer _____

Mag ik u mailen voor een gesprek? Wat is uw e-mailadres?

Your answer _____

Mag ik u bellen voor een gesprek? Wat is uw telefoonnummer?

Your answer _____

Back

Submit

Wat vind jij van Aardgasvrij?

U heeft aangegeven dat u zich herkent in de onderstaande uitspraak:

"Ik zie niet hoe dit mij persoonlijk helpt."

Met welke stellingen bent u het eens?

- Ik heb andere zorgen, dus ik heb hier geen aandacht voor.
- Ik ben er niet mee bezig en denk er niet over na.
- Ik geloof niet echt in de energietransitie.
- Ik ben al oud, ik maak dit toch niet meer mee.
- Het kost geld en levert me niets op.
- Het maakt me allemaal niet uit.
- Other: _____

Back

Next

Wat vind jij van Aardgasvrij?

U heeft aangegeven dat u zich herkent in de onderstaande uitspraak:

"Ik weet niet hoe ik dit ooit ga betalen."

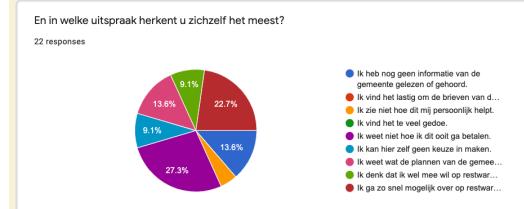
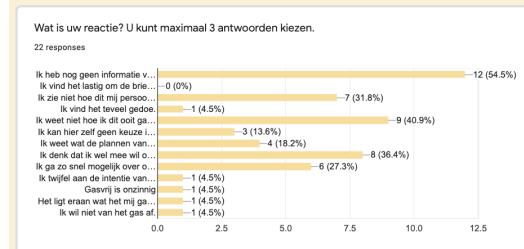
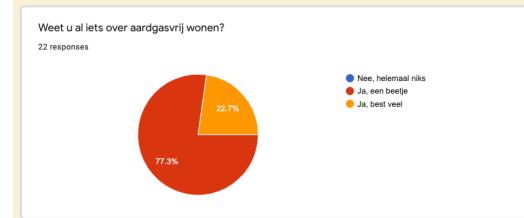
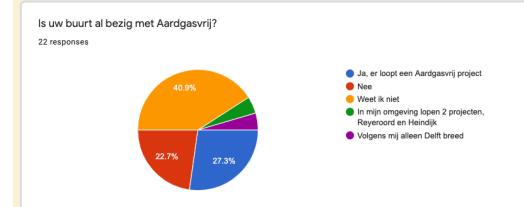
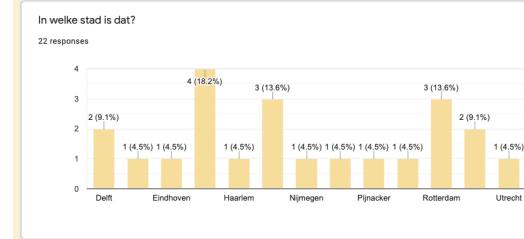
Met welke stellingen bent u het eens?

- Ik vind het lastig om mijn energierekening te betalen.
- Ik geef mijn geld liever ergens anders aan uit.
- Dit is bedoeld voor rijkere mensen.
- Ik ben huurder, dus dit is niet voor mij bedoeld.
- Mijn partner beslist dit.
- Ik ben er niet mee bezig en denk er niet over na.
- Other: _____

Back

Next

RESULTS:



Wilt u nog iets kwijt over aardgasvrij?

Nederland is klein, maar doet zich groter voor dan dat het is.

Dat het maar zo snel mogelijk gaat gebeuren

Nee

Elke energietransitie kent zijn verandering in de omgeving, in en boven de grond. Verandering is moeilijk voor de mens, aan de (lokale) overheid de taak om de drempel zo laag mogelijk te maken. Er is zoveel info en opties in deze energietransitie dat je soms door de bomen het bos niet meer ziet

Stop er voorlopig mee, het kost teveel geld voor de overheid en bewoners. Laat bewoners minder energie verbruiken (isoleren, zonnepanelen, e.d.) en richt de pijlen op de industrie en luchtvaart.

Ik kan ook niet helemaal zeggen of ik er nou achter sta of niet, voor zover ik weet is het een van de meest duurzame nonrenewable energiebronnen.. (uiteraard is wind en zon beter maar op dit moment is het alternatief vaak olie wat veel vervuilender is dan aardgas)

Ik woon in huis met vereniging van eigenaren. Je moet dit dan samen regelen.

Transparante communicatie is heel belangrijk, vroegtijdig burgers uitleggen waarom en wat het ongeveer gaat kosten (hoe moeilijk ook). Maak ook duidelijk dat de overheid helpt.

We moeten van het gas af ivm. "Groningen". Terecht uiteraard! Maar met het milieu heeft dit weinig te maken. B en D gaan extra gascentrales bouwen en D geeft zelfs subsidie omdat gas 1 van de minst vervuilende energiebronnen is.

Ze roepen al meer dan een jaar dat we binnenkort een aanbod krijgen maar ik heb nog niks gezien.

We moeten van het Gronings gas af, maar niet van het gas. Klinkt klare onzin.

Aardgas wordt toch over het algemeen gezien als een vrij 'groene' vorm van fossiele brandstof?

Volgens mij wil de EU aardgas weer gaan zien als een duurzame brandstof. Dus ik snap dat men het allemaal niet meer begrijpt omdat de eurocraten in Brussel regels naar eigen hand zetten om boekhoudkundig er 'goed' uit te komen.

APPENDIX 12: GESPREKSWAAIER TEST SET-UP IN REYEROORD

PRELIMINARY CONCEPT TESTING 2: GESPREKSWAAIER IN THE NEIGHBOURHOOD

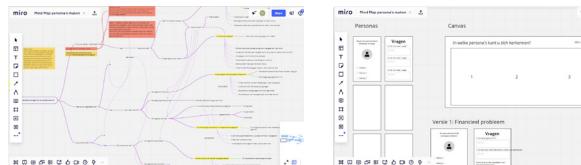
Research goal

1. Connect with the target groups to start doing interviews
2. Test assumptions
 - Are my assumptions of the difficult to reach target groups correct?
 - Are these groups represented in the neighbourhood?
 - Is it correct that these groups have a more negative attitude towards the energy transition?
 - Which groups would like to be heard more? Included or involved more?

Why this research?

I am aware of the hidden target groups, the unusual suspects, and the target groups that are difficult to reach. I know, theoretically, who they should be, and with how many they are living in the neighbourhood. But I need to get in contact with them personally to be able to find solutions that work for them. Listen to their stories, and find elements to improve. Therefor I need a way to identify to which target group an individual belongs, before starting an interview. With this prototype I will test my assumptions while searching for the target groups within the neighbourhood. From these results I can choose to focus on one target or continue broad.

Preparations of making the prototype



The prototype

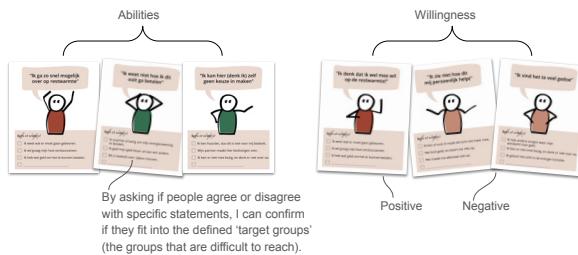
10 cards with quotes and statements
1 sheet for placement of the cards



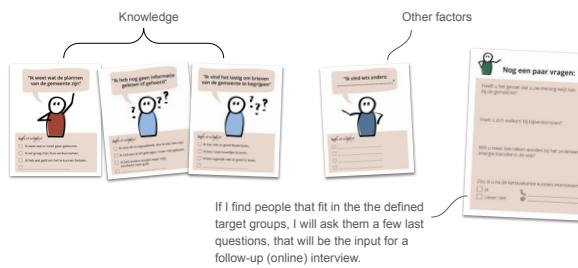
How will I use the cards?

- 1) Knock on doors in Reyeroord
- 2) Ask to do a small experiment + explain why
- 3) Introduce the topic energy transition + introduction questions
- 4) Ask residents to look at the cards and select which they identify with
- 5) Ask residents to fill in the statements of the selected cards: 'Do you agree or disagree with this statement?'
- 6) Ask round-off question (+ collect data for further contact)
- 7) Thanks and close-off

The cards explained



The cards explained



What is next?

- Go to the neighbourhood and ask residents to participate
 - Collect data
 - Analyse data
 - Plan interviews with residents
- At this moment I can not test this prototype because of the covid measurements. Therefor I will postpone this activity until after the Christmas holiday.
- I hope to be able to do this test later, because it is extremely difficult to get into contact with an 'unreachable audience' when I only use online tools, since most of these people might not respond to traditional recruitment.

Prototype is been printed and plastified

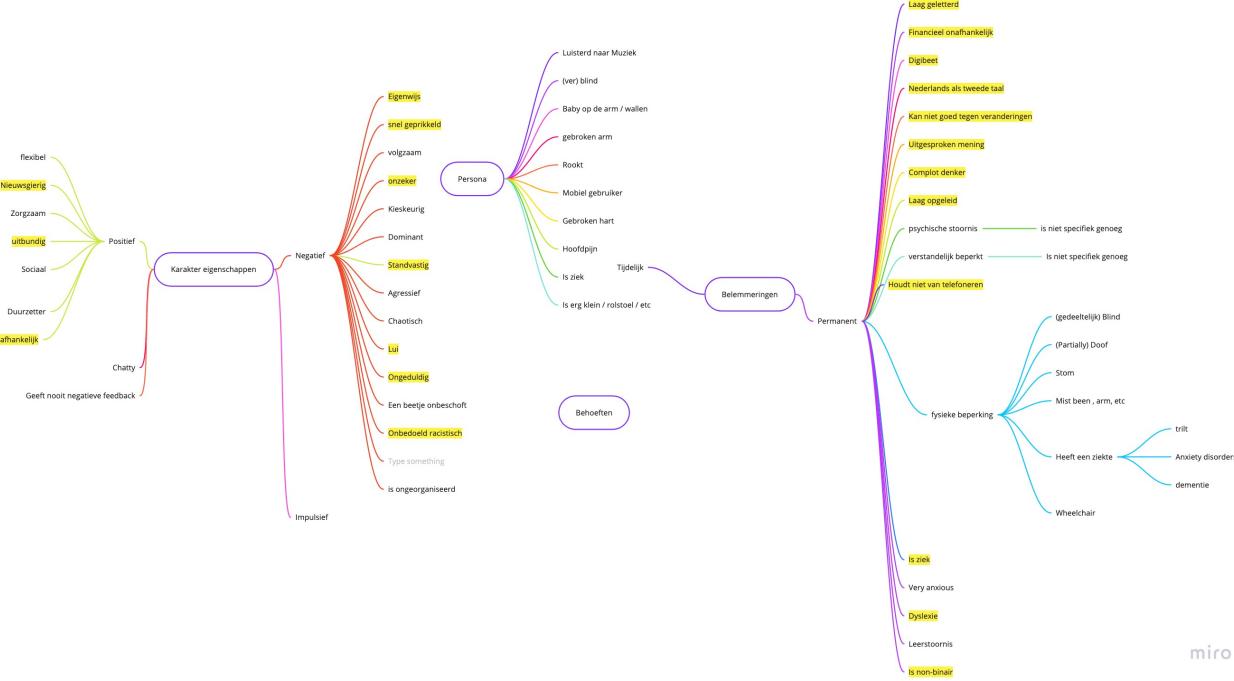


Testplan was adjusted to fit the COVID measures, since the testplan had to be approved by the municipality.

APPENDIX 13: DEVELOPMENT + TEST SET-UP DOBBELSTENEN

PRELIMINARY CONCEPT TESTING DOBBELSTENEN

Creating content for the Dice:



The goal

Testing inclusion reminders with ZW team: a small assignment every week + discussing over a longer period of time. Goal: improve inclusion skill, look beyond the standard groups (CfH) Each dice has a trait (Inhibition, character trait,)

Invite:

De inclusie toolkit krijgt al steeds meer vorm! Graag zou ik een tool met jou en paar andere collega's willen testen aankomende 2 weken. Het gaat om een tool die je gedurende je werkweek helpt herinneren aan inclusiviteit en je zal uitdagen om inclusievere oplossingen te bedenken. Ik

denk dat het ook interessant kan zijn voor de WWDW.

De komende 2 check-outs op dinsdag zou ik graag met jullie de tijd nemen om de tool te gebruiken en te bespreken. Daarna wil ik nog een momentje plannen voor feedback en reflectie van de tool.

Wil je mee doen met deze test?

Research questions

- physical object is pleasant
- Active reminders to engage with it
- Moments to discuss with others
- working with it regularly helps to improve

inclusion skill

How often (and how long) do you do it? What is its experience? Playful, serious, relaxed, etc?

Content on the dice: what do you think? When do you see yourself using this? Is the explanation of the tool clear? Does anyone know a cool name for this tool? (How) do you envision using this tool? How else can you use it? Is it clear what it will bring you?

Agenda meeting

Friday: send packages with Dice
Tue afternoon: using the dice together for the first time.

17:00 Question: What assumptions do you have about the person you just rolled?

- Dice the stones
- Brainstorm for 5 minutes
- Sharing insights with others

What was your first experience?

Homework: Choose a question that is relevant to your current project. Use the dice with a spar partner to discuss.

We will share the results next Tuesday.

Transcript

The transcripts of the preliminary concept test is available upon request. Transcript

APPENDIX 14: PRELIMINARY TEST THE GIDS

PRELIMINARY CONCEPT TESTING

GIDS

guide has been completed in three different sessions of one hour each. In these sessions, the contents of the guide and the explanation of the various tools were carefully considered. Parts that were not clear have been adjusted as a result of the feedback.

Session 1: 01 - 05 - 2021

Session 2: 08 - 05 - 2021

Session 3: 12 - 05 - 2021

Transcript

The transcripts of the preliminary concept test is available upon request.

APPENDIX 15: VALIDATION TEST CANVAS

THE VALIDATION OF THE CANVAS TOOL

Transcript

The transcripts of the Validation test of the canvas is available upon request.

APPENDIX 16: VALIDATION TEST INZICHTKAARTEN & GESPREKSWAAIER

MURAL test set-up:

Deel 1: De uitleg

Deelnemer 3

Naam: : a textbox...

Rol: De **buurtbewoner**

Opdracht: Inlezen

Handleiding van de inzichtkaarten:

TOOL 2: INZICHTKAARTEN

In de volgende opdracht gaan we de inzichtkaarten gebruiken als empathie tool voor een rollenspel. Probeer je zo goed mogelijk in te leven in deze persoon. In opdracht 2 speel jij de rol van de laaggeletterde bewoner.

Niet gepresenteerd

Net gepresenteerd

Deelnemer 4

Naam: This is xox...

Rol: De **ontwerper**

Opdracht: Inlezen

Handleiding van de gesprekswaaler:

TOOL 3: GESPREKSWAALER

In de volgende opdracht gaan we een rollenspel doen. Bij deze opdracht speel jij de rol van de 'ontwerper'. Lees de handleiding goed door, want in opdracht 2 zal je deze stappen doorlopen tijdens een gesprek met een 'bewoner'.

Deel 2: Het rollenspel

Deel 2: Het rollenspel

Het rollenspel:
De ontwerper van Zeeuwstadij gaan vandaag Revereerd in Ze zijn op zoek naar bewoners die nog niet voor kennis hebben over aardgasvrij, voor een nieuwe interventie. Daarom spreken ze een aantal bewoners aan in het park.

Een bewoner wordt aangesproken. Ze heeft wel even tijd voor een gesprek. Waarom? Want er is zo veel om en was nu toch even door het park aan het wandelen omdat het lekker weer is.

Het verloop van het gesprek is aan jullie:

Spiekbriefje voor de bewoner

Onthoudbaar je rol:
 - Voelt zich niet
 gerefereert
 - Woont in Revereerd

Spiekbriefje voor de ontwerper

Let op: zet de Recorder op ZOOM aan!

Step 1: Loop samen de quotes en stellingen. In welke stellingen kan 'de bewoner' zich herkennen? Delete de karakters waar 'de bewoner' zich niet in herkent.

Step 2 & 3: Actueelthet Welk onderwerp is voor de bewoner het belangrijkste is.
 Wat is haar mening hierover?

Step 4 & 5: Hoe voelt de bewoner zich over dit onderwerp? en wat is de persoonlijke situatie van de bewoner?

WAT VIND JIJ VAN AARDGASVRIJ?

Welk onderwerp vindt u het belangrijkste?

Wat vindt u hiervan?

Revereerd

Deel 3: Evalueren

<p>Deelnemer 1</p> <p>De tool is wenselijk. (meerwaarde, aantrekkelijk, wow-effect)</p> <p>Helemaal niet mee eens</p> <p>Helemaal mee eens</p> <p>Toelichting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> De tool is gebruiksvriendelijk. <input type="checkbox"/> De tool is gebruiksgemakkelijk. <p>De tool is haalbaar. (in gebruik, structuur, systeem, tijd)</p> <p>Helemaal niet mee eens</p> <p>Helemaal mee eins</p> <p>Toelichting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> De tool is gebruiksvriendelijk. <input type="checkbox"/> De tool is gebruiksgemakkelijk. <p>De tool is levensvatbaar. (structuur, toekomst, draagvlak)</p> <p>Helemaal niet mee eens</p> <p>Helemaal mee eins</p> <p>Toelichting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> De tool is gebruiksvriendelijk. <input type="checkbox"/> De tool is gebruiksgemakkelijk. <p>Wat zijn ideeën om de tool op de bovenstaande punten hoger te laten scoren?</p> <p>Overige opmerkingen:</p>	<p>Deelnemer 2</p> <p>De tool is wenselijk. (meerwaarde, aantrekkelijk, wow-effect)</p> <p>Helemaal niet mee eens</p> <p>Helemaal mee eins</p> <p>Toelichting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> De tool is gebruiksvriendelijk. <input type="checkbox"/> De tool is gebruiksgemakkelijk. <p>De tool is haalbaar. (in gebruik, structuur, systeem, tijd)</p> <p>Helemaal niet mee eins</p> <p>Helemaal mee eins</p> <p>Toelichting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> De tool is gebruiksvriendelijk. <input type="checkbox"/> De tool is gebruiksgemakkelijk. <p>De tool is levensvatbaar. (structuur, toekomst, draagvlak)</p> <p>Helemaal niet mee eins</p> <p>Helemaal mee eins</p> <p>Toelichting:</p> <ul style="list-style-type: none"> <input type="checkbox"/> De tool is gebruiksvriendelijk. <input type="checkbox"/> De tool is gebruiksgemakkelijk. <p>Wat zijn ideeën om de tool op de bovenstaande punten hoger te laten scoren?</p> <p>Overige opmerkingen:</p>
<p>Proces: Wat ging er goed?</p> <p>Wat kan er beter?</p>	<p>Proces: Wat ging er goed?</p> <p>Wat kan er beter?</p>

Collection of the insights

Transcript

The transcripts of the Validation test is available upon request.

APPENDIX 17: VALIDATION TEST DOBBELSTENEN TOOL

THE VALIDATION OF THE DOBBELSTENEN WITH 5 DESIGNERS

MURAL test set-up:

Evaluatie van de tool

Hoe was je ervaring met deze tool?

Welke pluspunten zie je je?

Wanneer zie je jezelf deze tool gebruiken? en, hoe kan je het nog meer gebruiken?

En nog een paar discussie vragen:

- Is het duidelijk wat het je oplevert?
- Wat vind je van de content op de dobbelstenen?
- Waarbij twijfelde je tijdens gebruik?

Validation

Evaluatie van de tool

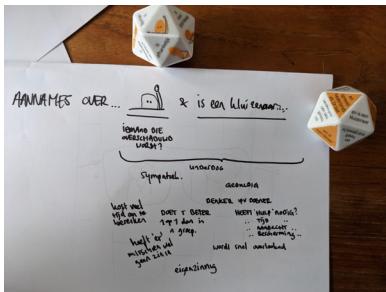
Hoe was je ervaring met deze tool?

Welke pluspunten zie je?

Welke verbeterpunten zie je?

Wanneer en hoe gebruik je de tool?

Validation test with five designers from Zeewaardig (one person was late for the validation test and is therefore not in the picture)



* Beil + Parkinson
↳ Ziet niet goed
↳ Teilt ongecontroleerd
↳ Is zoekende in handicap. / Hoe meer meer om te gaan.
↳

The ‘homework’ that the designers had to do resulted in the pictures showed on the left. The results and experience were shared during the meeting.

APPENDIX 18: DESIGN CHALLENGES PER SOLUTION SPACE

List of requirements

Tool	Solution space	Requirement for the toolkit
Canvas	Discuss	As a non-urgent but important task, inclusion needs to be put on the agenda of all stakeholders involved to create an impact.
Canvas	Discuss	The tool needs to help make decisions about inclusion and support the allocation of tasks. Because if inclusion is everyone's responsibility, no one will take the responsibility
Canvas	Discuss	The designers and the municipality need guidance in dividing tasks about inclusion.
Canvas	Discuss	The tool needs to guide to create concrete action points from the often vague and abstract topic of inclusion
Canvas	Discuss	The tool needs to support the stakeholders to consciously express expectations, to make sure that everyone is on the same page.
Canvas	Evaluate	The designers have to be stimulated to practise and try, and even make mistakes. Because learning from mistakes makes it possible to improve.
Canvas	Evaluate	The designers need to be supported in keeping track of which groups are approached and involved and which groups are not yet.
Canvas	Evaluate	The designers need to be supported in evaluating in collaboration with all other stakeholders to be able to improve to a more inclusive approach in upcoming interventions.
Canvas	Evaluate	The tool should support the designers to decide on which specific target group to focus on in future interventions.
Inzichtkaarten	Inform	The tool should provide the design team with in-depth information about different target groups.
Inzichtkaarten	Inform	The in-depth information should help the designers to empathise.
Inzichtkaarten	Inform	The in-depth information should help the designers to find possible starting points for solutions.
x	Empathise	The empathy tool should be an addition to the already existing empathy tools.
Gesprekswaaijer	Empathise	The tools should nudge designers to compassionate empathy, to ensures that the designers are motivated to take action and improve the situation of the residents.
Gesprekswaaijer	Empathise	By speaking one-on-one you can empathize and understand better than when you hear data about an entire group.
Gesprekswaaijer	Empathise	The tool should invite the designers to speak to people since this helps to look beyond prejudices and assumptions.
Gesprekswaaijer	Approach	The tool should make it easier to approach residents in Reyeroord.
Gesprekswaaijer	Introduce	The tool should make it easier to introduce the complex topic of the energy transition to residents.
Dobbelstenen	Remember	The tool should invite the designers to regularly practise with inclusivity as a skill.
Dobbelstenen	Remember	The tool should remind designers of the importance of an inclusive design approach.
Dobbelstenen	Remember	The designers should be reminded that by solving problems for a specific target group, they also improve the solution for others.
Dobbelstenen	Remember	The designers need to be reminded of the basic principles of the Persona spectrum.
Gids	Toolkit as a whole	The tools should be able to be used independently of each other, depending on the intervention.
Gids	Toolkit as a whole	The tools must be generic enough to be applicable for all interventions, while still adding value.
Gids	Toolkit as a whole	The toolkit should not take more time than currently available by the designers.
Gids	Toolkit as a whole	The toolkit should include examples and clear explanations on how to use each tool.
Gids	Toolkit as a whole	The tools and toolkit should be visual.
Gids	Understand	Before getting started with the tools, it is important that designers understand what inclusive design is.
Gids	Understand	To be able to improve the current approach, designers need to be aware of the excluded groups.
Gids	Understand	Designers need to be aware that by improving for a specific target group, the solution also improves for other people.
Gids	Understand	The designers need to be aware that it is not possible to design for everyone. There is a difference between the target group and the groups reached.