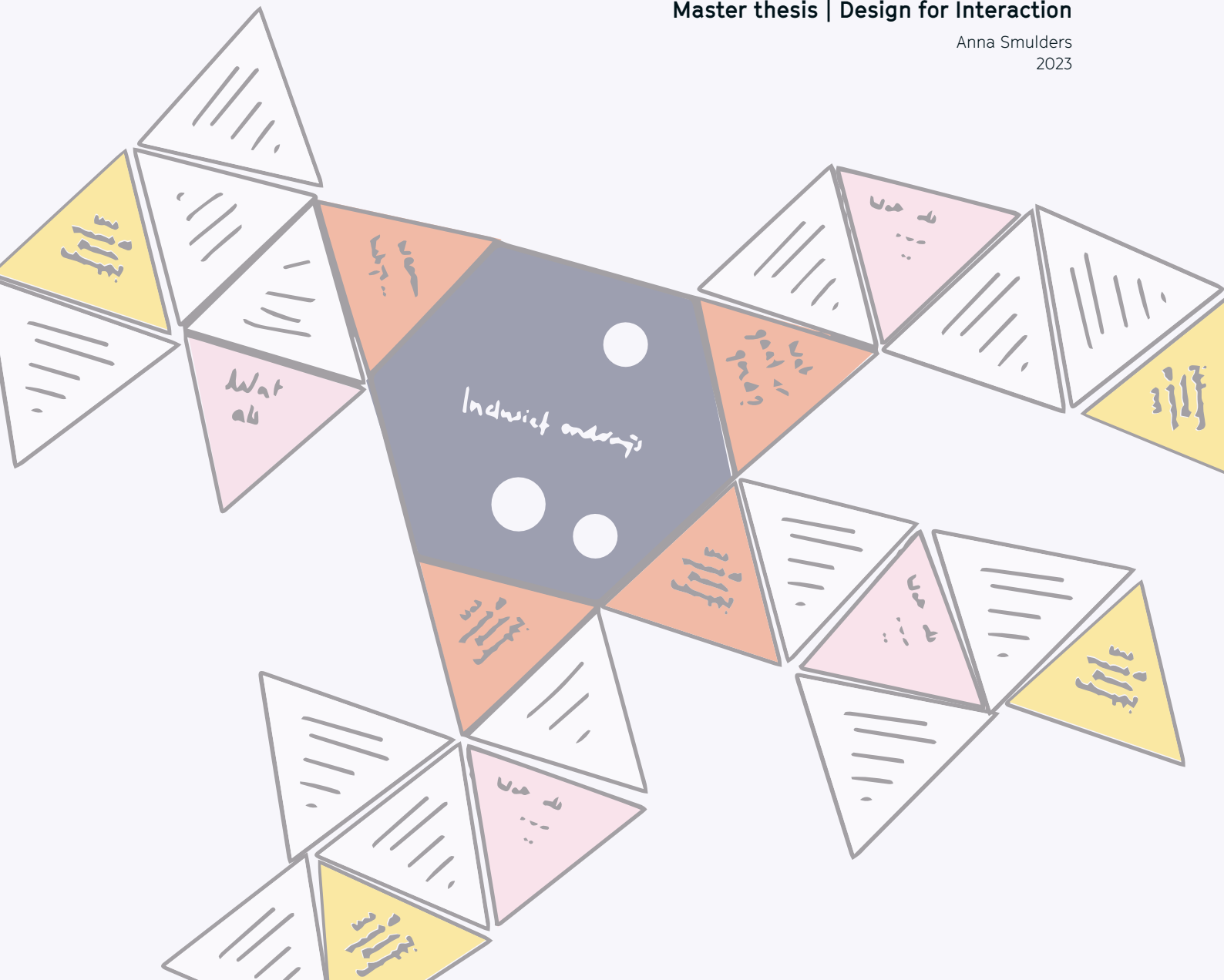


Citizenship Education for MBO Students

Fostering Belonging and
Understanding of Politics

Master thesis | Design for Interaction

Anna Smulders
2023



Colophon

Master thesis | Design for Interaction

Citizenship education for MBO students: Fostering Belonging and Understanding of Politics

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Preface

Dear reader,

This graduation means the end of a very meaningful period and the start of an exciting new one. Looking back at the past 2,5 years I feel so grateful for everything I have learned, as a designer but also as an individual. I feel very appreciative of all the people around me who have helped to make the past 2,5 years in Delft so wonderful.

After a lot of hard work, I am very excited to share my master thesis report with you. The project has known its ups and downs, I had the support of many wonderful people. I could not have been able to be at this point today as it was not for them. Before we get into the details of the report, I want to thank them.

First of all, I want to thank everyone who participated in the project through interviews, creative sessions, user tests, and so on. I have been amazed and surprised by everyone's enthusiasm and deployment in taking the time to help me and share knowledge with me. Without them, I would not have been able to put together this graduation project.

Secondly, I would like to thank the supervisory team, Ingrid, Milene, and Noëlle. Your feedback has helped me to bring this project to a higher level. I feel very thankful for the support and freedom I received from you in times of family loss. Ingrid, thank you for all your tips and meaningful examples, I learned from your expertise in participatory city-making. Milene, thanks a lot for your trust in me, for thinking along with me, and for your flexibility in always helping me. Noëlle, thank you for our weekly meetings, your enthusiasm and questions made me think and your active support to become a social designer who explores by doing.

To my friends and family. Many thanks to everyone involved in this project and for supporting me in my ability to graduate.

A very special thank you to Nina and Maureen, I feel very grateful for the close collaboration, your support, and trust throughout the graduation project. Working together with you, even in the late hours and on the weekends made this whole journey a lot more enjoyable. I am very proud of both of you.

Mom, Dad, thank you for me always being able to ask you anything, for your unconditional support, your critical designer views. Josje, thank you for your being your supportive self. To the three of you, thank you for believing in me.

To my dear roommates, Jolan, Annelotte, and Annick. Thank you for being more than just roommates, but dear friends. Thank you for supporting and helping me whenever I needed you. Janne, thank you for testing and reading parts of the report and thank you in advance for our exciting travel journey together I look forward to so much. Thank you, Tess, for being such a supportive friend always checking in on how I was doing. To all of you, for also taking my mind off graduation in free hours. Finally, a big thank you to all my other friends, who have helped and supported me throughout this process.

I feel proud to present to you my graduation thesis. I hope you enjoy reading this report.

Anna



Executive summary

The current form of our democracy is not inclusive. Therefore, local governments try to enable political participation (Slingerland et al., 2020). Political participatory forms do not seem to have a great impact on policy, despite positive intentions (Edens & Klabbers, 2019). Youth is often not involved in political participation and policy-making, 6 out of 10 youngsters between 18 and 25 feel politically powerless. These numbers are even higher for MBO students (Binnema et al., 2007). Citizenship education shows promises to increase the political participation of youth over time (Slijkhuis, 2021). Citizenship education in the Netherlands is currently in need of improvement as well as Dutch students' citizenship skills (Onderwijsinspectie, 2022).

This graduation project has researched citizenship education and the political participation of students. The project aims to increase political participation by youngsters through the means of citizenship education. Extended qualitative research, using the Design Thinking Method (Chasanidou et al., 2015) and Self Determination Theory (Ryan & Deci, 2000), helped to create an in-depth understanding of the context. The empathic approach of the project highlighted the complexity of the problem. The main insights showed that the development of youths' citizenship skills happens in a complex system. Learning these skills happens all around, in multiple contexts, in direct and indirect ways. Developing citizenship skills does not simply happen in citizenship classes.

The in-depth data was translated into a system map. The map visualizes and clarifies the complexity of the context researched. An online version of the map allows for easy communication of the insights in a structured and visual way. The system map communicates several aspects. First of all, the map consists of two main aspects: situational contexts, that students encounter and two feelings that shape a political attitude. The feeling of understanding and the feeling of belonging influence the extent to which students feel intrinsically motivated to participate politically. The situational contexts

and their corresponding factors influence the fulfillment of these two feelings.

The design phase is supported by the map for thorough understanding. The map facilitates understanding during the design phase. The design goal is to strengthen the understanding of the relation between MBO students' daily lives and the municipality, by facilitating a moment to see this relation, while performing an activity in class. With a desired effect in mind, to make sure students feel competent to be part of politics and be of influence.

Various ideas are generated in ideation activities involving multiple stakeholders. Three design directions are considered and narrowed down to the final design direction: a citizenship program in class. This design direction was tested iteratively in six user tests. Resulting in the final design: 'de Meester Burger', a citizenship program that strengthens the understanding of MBO students' daily lives and the municipality. de Meester Burger is a tool to be used in class. Students work in small groups on municipal themes of choice. The steps of the tool guide students through an exploratory process enabling them to explore their own opinions by facilitating a tangible conversation. Students discover, share, and discuss various insights concerning the chosen theme. The tool supports a what-do-you-think and learning-by-doing approach, delivering advice to the municipality based on insights and ideas generated throughout the steps. Overall de Meester Burger aims to create a meaningful learning experience in class increasing students feeling of understanding and belonging towards the municipality.

However, more extensive research is needed to test and improve the impact of de Meester Burger. Design recommendations suggest for example testing while including the municipality actively, involving other themes, and testing the concept with more MBO students from various levels and professions. Also testing over a longer period is recommended to be able to measure and prove the promises of the tool.

Table of contents

Preface	5		
Executive summary	7		
Table of contents	8		
1. Introduction	11		
1.1 Project start	12		
1.2 The political issue & missing youth	13		
1.3 Education as a promise	14		
1.4 Project focus	15		
2. Project approach	19		
2.1 Methodological framework	20		
2.2 Project execution	24		
3. Empathize	31		
3.1 Method	33		
3.2 Citizenship education	34		
3.3 Political participation by youth	40		
3.4 Exploring the experiences in context	42		
3.5 Discovering themes and patterns	50		
3.6 Sharing the first insights	52		
3.7 Key insights	55		
4. Define	57		
4.1 Method	59		
4.2 Iterating the map	60		
4.3 Key insights	63		
		5. Sharing the map	65
		5.1 Introducing the map	66
		5.2 The map and a reading guide	68
		5.3 Defining the design focus with the system map	84
		5.4 Key insights	94
		6. Ideation	97
		6.1 Method	99
		6.2 An iterative process towards the design	100
		6.3 Evaluation of the possible design directions	104
		6.4 Key insights	111
		7. Prototype & test	113
		7.1 Method	115
		7.2 The final concept direction	116
		7.3 Iterating the concept	118
		7.4 Key insights	127
		8. de Meester Burger a citizenship tool	129
		8.1 An introduction to de Meester Burger	132
		8.2 A desired user scenario	134
		8.3 The elements of de Meester Burger	142
		9. Concluding	149
		9.1 Final evaluation	150
		9.2 Conclusions	160
		9.3 Limitations and recommendations	164
		References	166

1.0 Introduction

This chapter gives an introduction to the background and context of the graduation project. First of all, the project start and its connection to Elke Stem Telt is explained. The second section shares some more details on the contextual background of the political issue and youth participation. Third, the promises seen in citizenship education are shared. The final chapter explains the focus of the graduation project, including the research questions and involved stakeholders.

1.1 Project start

1.2 The political issue & missing youth

1.3 Education as a promise

1.4 Project focus

1.1 Project start

This graduation project is written for the master Design for Interaction at TU Delft. The project aims to increase the political participation of youth by evaluating and designing for citizenship education in secondary education (VO) and secondary vocational education (MBO). The graduation project has been executed at Afdeling Buitengewone Zaken (ABZ), a social design agency in Rotterdam. The graduation project is part of the project 'Elke Stem Telt' initiated by ABZ.

ABZ initiated 'Elke Stem Telt' after the historically low show-up rate of the 2022 Rotterdam elections (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2022). The low show-up rate raises questions about the inclusivity of the elections. The project 'Elke Stem Telt' aims for more inclusivity at the upcoming elections in Rotterdam (Appendix 2). Within the scope of 'Elke Stem Telt' and its aim for inclusive elections, the graduation project focuses on involving youngsters, specifically through the means of citizenship education. The following sections will explain more about the need to involve youth and citizenship education.

Project stakeholders

The stakeholders within the project are Afdeling Buitengewone Zaken and the TU Delft.

1.2 The political issue & missing youth

The current form of our democracy is not inclusive, and therefore governments all across the world encourage more active political participation (Slingerland et al., 2020). Political participation is defined as conventional participation, during electoral periods, and unconventional participation, outside of electoral periods (Barrett & Zani, 2015). In the Netherlands, municipalities are encouraging citizens to share the responsibilities for carrying out governmental activities (Schram et al., 2018). Municipalities experiment with citizen initiatives, citizen consultation evenings, citizen assemblies and so on, trying to involve their citizens within these governmental activities.

Despite good intentions, political participatory forms do not seem to have much of an impact on policy (Edens & Klabbers, 2019). Political participation has been criticized for the risk of 'empty participation' (Arnstein, 2019). In this instance, the participatory activity is portrayed as political participation, however, a top-down decision has already been made. Resulting in empty participation; a participatory activity in which citizens do not actually have a say.

Furthermore, political participatory activities often attract a non-representative group of citizens (Tonkens et al., 2015). Often higher educated, native, and older men participate in participatory activities. Citizens with a migration background, women, lower educated people and youngsters participate less (Boele et al., 2014). Overall, youth participation is considered important to achieve a more inclusive democracy (Crowley & Moxon, 2017). In reality, we see that over 6 out of 10 youngsters between 18 and 25 feel politically powerless. These numbers are even higher for youth in MBO education (Binnema et al., 2007). Youngsters can be seen as the future of democracy. The earlier the involvement of a representative group of youth starts, the bigger their stake will be later on.

1.3 Education as a promise

In order to work towards a more inclusive democratic system, missing groups such as youth need to be included more in political participation. Education proved to be a promising context for increasing political participation among youngsters (Slijkhuis, 2021). This type of education is defined as citizenship education in the Netherlands. Citizenship education is important for increasing political participation as early citizenship education has proven its effect on political participation in young adulthood (Slijkhuis, 2021). In the Netherlands, elementary education (BO), secondary education (VO), and secondary vocational education (MBO) all have the legal assignment to include citizenship education in their educational programs (Ministerie van Onderwijs, Cultuur en Wetenschap, 2021).

However, according to multiple surveys by the Education Inspectorate, Dutch students' citizenship skills need improvement (Onderwijsinspectie, 2022). The abilities of Dutch youth fall short of those of students in similar European nations, according to a prior worldwide ICCS research (2016). The study of Munnisma et al. (2017) shows that Dutch students have relatively little knowledge about democracy. Concerns about citizenship education are expressed by the government due to the lagging citizenship skills of Dutch students.

The Dutch governments concern on improving citizenship is expressed since citizenship skills are important in order to engage fully and feel connected to a democratic society. Developments such as polarization and radicalization highlight the importance of teaching citizenship skills (VO Raad, 2022). Since 2006, schools are legally required to contribute to the development of citizenship skills. The additional law 'Verduidelijking van de burgerschapsopdracht aan scholen in het funderend onderwijs' (Clarification of the citizenship assignment to schools in foundational education) was formed as of August 1, 2022 (Overheid, 2022) providing more direction to schools in the citizenship educational assignment (VO Adademie, 2022).

1.4 Project focus

The problem appearing in our political system, the lacking participation and inclusion of youngsters, seems rather complex. Many factors can come into play when looking at the scope of the problem.

Governmental concerns on Dutch students' citizenship skills and education as a promising context for increasing political participation resulted in the decision to focus on citizenship education. Education can enable youngsters to experience that political participation is useful and that every vote counts (Slijkhuis, 2021). Eventually, this may result in bigger chances of political participation by youth (Slijkhuis, 2021).

In the first part of the project, VO and MBO students were the target group of researching citizenship education. In the second part of the project, the target group was further focused to MBO students, due to their strong feelings of being undervalued in our society (Stuij, 2021).

Focus within citizenship: participatory citizens

The main goal of citizenship education is to deliver self-sufficient and participatory citizens. Citizenship education knows several domains; the political, social, economic and spatial-ecological domain. The graduation project starting point is the low participation and inclusion of youngsters within political participation. The political domain is therefore considered most important.

The project focus results in a double research assignment; firstly, the evaluation of the current citizenship education, and secondly, the aspirations and experiences of youngsters with political participation. Good citizenship education is seen as a factor triggering factor for youth to start political participation.

Project goal & research questions

Taking the scope of the project into account, the main goal of the project and the research questions are defined.

The project aims to increase political participation by youngsters through the means of citizenship education.

Qualitative research is the basis for investigating this double assignment. Firstly by evaluating Dutch students' citizenship education, and secondly, examining their experiences and aspirations to politically participate. The challenges identified in the double assignment are translated into the following research questions:

1. What citizenship education programs currently exist in schools at secondary education and MBO?
 - » What experiences do youngsters have within these educational programs?
2. What attitude do youngsters commonly develop towards political participation?
 - » In what way is this attitude developed?
3. What educational design fits the needs of youngsters, teachers, schools and the municipality?

Stakeholders

Within the context of this project several stakeholders were involved. The main stakeholders within the project are youngsters. A stakeholder analysis is important to understand the systemic forces that shape the experiences of youngsters within education and political participation. The visualization (Figure 1) shares the context of the research project with the involved stakeholders.

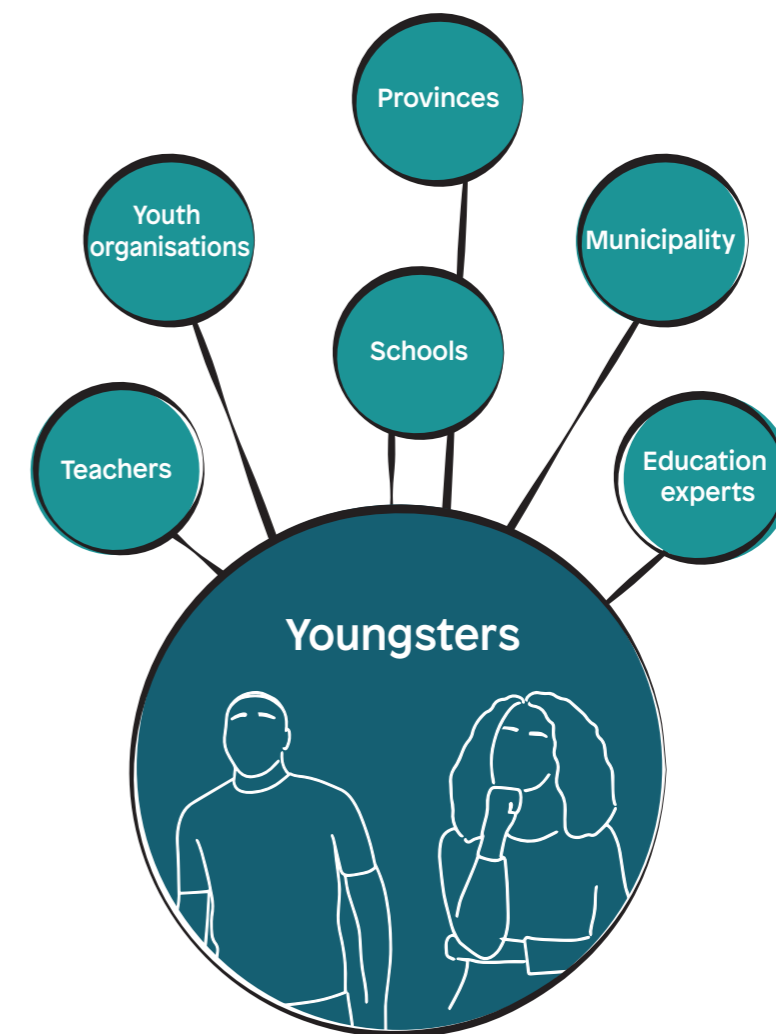


Figure 1. Context of the project and stakeholders.

2.0 Project approach

This chapter introduces the methodological framework used throughout the project. The first section presents the methodological framework. The second section shares the execution of the graduation project in relation to the methodological framework.

2.1 Methodological framework
2.2 Project execution

2.1 Methodological framework

Design Thinking

The graduation project is structured using the Design Thinking Method. Design Thinking is often used to address challenging, multidimensional issues, so-called 'wicked problems' (Chasanidou et al., 2015). Design Thinking is based on the idea that genuine innovation can arise in the process of resolving such challenges by merging empathy, creativity, and analytical procedures. The method makes use of our potential for intuition, pattern-spotting, and the creation of meaningful and useful ideas (Brown & Wyatt, 2010). By altering the way we approach challenges, think, and create products and services, Design Thinking has the potential to change the way we operate. (Wolniak, 2017)

The design thinking method is composed by 5 steps. The design thinking method is approached iteratively going back and forth between the steps (Figure 2).

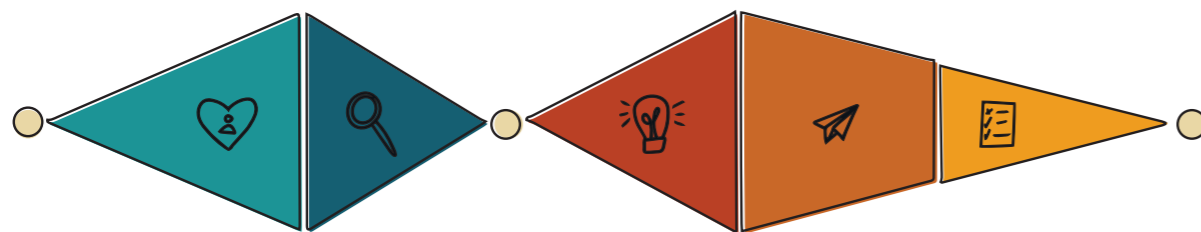


Figure 2. A visualization of the graduation approach

1. Empathize

Empathy focusses on understanding the target group and their needs. This step involves observing, engaging with and listening to the user to gain qualitative insights into their experiences and challenges.

The empathy step includes methods such as desk research, interviews with experts, interviews with teachers, interviews with youth, co-design, visiting workshops and events.

2. Define

Defining focuses on reframing the problem based on the insights gained during the empathy step. This involves synthesizing the qualitative data in order to identify the core problem and its causes.

The define step includes methods such as interpretations, coding, clustering, and deriving themes from the data to define the context.

3. Ideate

Ideation focuses on generating a wide variety of possible solutions for the problem defined. This involves brainstorming and other ideation techniques.

The ideate step includes methods such as co-reflections, co-creation, and brainstorming. Aiming to generate a wide variety of ideas that could solve the citizenship issue.

4. Prototype

Prototyping focuses on creating physical prototypes of the concepts generated in the ideation step. This involves testing specific components of a design solution (Wolniak, 2017).

The prototype step includes methods such as sketching, low-fi, and more high-fi prototyping.

5. Test

Testing focuses on evaluating the prototypes created together with user tests. The goal is to gather feedback, refine, and iterate the concepts and prototypes generated.

The test step includes methods such as reflection sessions and interviews, and pilot and user tests in order to test and validate the concepts.

Self-determination theory

The Self-Determination Theory (SDT) is used for the purpose to evaluate to what extent youth has or will develop intrinsic motivation to participate politically.

According to SDT, fulfilling one's basic psychological needs for autonomy, competence, and relatedness is crucial for developing intrinsic motivation (Ryan & Deci, 2000). When an individual feels intrinsically motivated they are more likely to engage in activities. In our current democracy, one is free to politically participate, intrinsic motivation within the context of participation is therefore a higher goal to strive for. Figure 3 shows a visualisation of the SDT.

The goal is to identify what factors develop intrinsic motivation for students. By evaluating the fulfillment of autonomy, competence and relatedness within research insights gathered as well as the designs developed.

Research has also shown the impact of SDT in the context of education, fulfilling students' psychological needs; autonomy, competence, and relatedness, is crucial for their internalization of academic motivation (Niemic & Ryan, 2009).

Autonomy

Autonomy refers to the perception of having complete control over choosing to engage in activities that align with one's personal interest (Deci & Ryan, 2002). In the context of political participation by youth autonomy could refer to the feeling of voicing your opinion matters and a feeling of creating a change. Autonomy also relates to the autonomous choice of political participation

Relatedness

The need for relatedness involves experiencing a sense of connection and acceptance from others. It is generally characterized as a genuine desire to establish meaningful relationships with others and feel engagement (Deci & Ryan, 2002). In the context of political participation by youth relatedness could refer to the need for a feeling of belonging to the political system. Relatedness can also be fulfilled when discussing politics with family or peers (Russo & Stattin, 2017).

Competence

The need for competence is defined as a aspiration to feel efficacious, influences one's surrounding and be able to achieve valuable outcomes (Deci & Ryan, 2002). In the context of political participation by youth competence could refer to the need for knowledge, skills and experience. Competence is not necessarily a skill but feeling of trust and effectiveness within one's actions (Russo & Stattin, 2017).

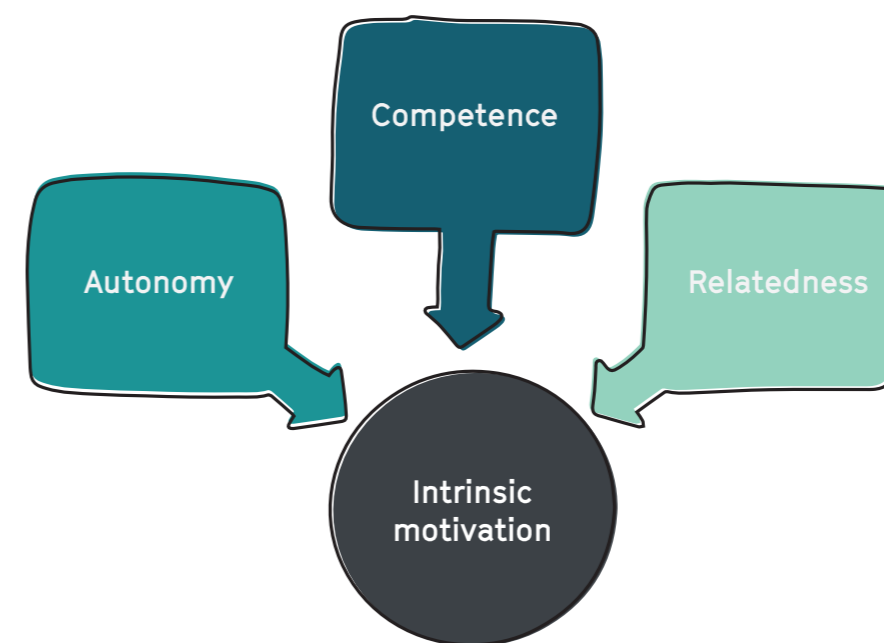


Figure 3. Self determination theory

2.2 Project execution

This section explains the project execution in relation to the methodological framework. The project is executed using the design thinking method, the project consists out of two main parts. The first part of the project focused on understanding the context of citizenship education in relation to youths (expected) political participation (RQ 1&2). Alongside with understanding the context, the focus was also on designing a map that summarizes and communicates the complexity of the context researched. The second part of the project focused on creating an educational design (RQ 3&4) based on the results of the first part of the project, the system map. The Self Determination Theory was used to validate and test the system map and the design.

Figure 4 shows the research activities, its corresponding code and the amount of participants. Each step of the design thinking method asked for different research activities. Figure 5 shows the research activities related to the steps of the design thinking process. Multiple activities came along such as interviews, observation, readings, workshops, co-reflections, desk research, clustering and labeling, ideation techniques such as brainstorming, prototyping and testing.

Figure 6 visualizes the parts of the project, its corresponding research questions, and the research activities.

Research code	Research activity	Nr of participants	
Education Interview 1	EI 1	MBO Citizenship coordinator ROC	1
Education Interview 2	EI 2	MBO citizenship teacher	1
Education Interview 3	EI 3	VO Uitgeversgroep & teacher	1
Education Interview 4	EI 4	MBO Zadkine college teacher & MBO raad	1
Education Interview 5	EI 5	MBO Citizenship teacher	1
Education Interview 6	EI 6	VO Mavo Toorop Teacher	1
Observation 1	OI 1	MBO Grondfest	
Observation 2	OI 2	MBO Province game	
Observation 3	OI 3	VO Mavo Toorop	
Municipal Interview 1	MI 1	Province Ferenc	1
Municipal Interview 2	MI 2	Rotterdam Lot	1
Municipal Interview 3	MI 3	Province Genevieve	1
Municipal Interview 4	MI 4	Rotterdam citizenship Annelies	1
Municipal Interview 5	MI 5	Rotterdam citizenship pilot	1
Municipal Interview 6	MI 6	Rotterdam Griffie	1
Expert Interview 1	ExI 1	Professor Uva	1
Expert Interview 2	ExI 2	Professor EUR YoungXperts	1
Expert Interview 3	ExI 3	MBO Citizenship coordinator ROC	1
Expert Interview 4	ExI 4	Onderwijs124	2
Expert Interview 5	ExI 5	VNG	1
Expert Interview 6	ExI 6	Diversion	1
Expert Interview 7	ExI 7	NJI	1
Expert Interview 8	ExI 8	Young010 & lokaal	1
Expert Interview 9	ExI 9	Uitgeversgroep / EI3	1
Expert Interview 10	ExI 10	MBO raad / EI4	1
Expert Interview 11	ExI 11	Library Erik	1
Expert Interview 12	ExI 12	ProDemos Jonnick	1
Youth Interview 1	YI 1	MBO Grondfest	3
Youth Interview 2	YI 2	MBO Session game province Overijssel	1
Youth Interview 3	YI 3	MBO library rotterdam	2
Youth Interview 4	YI 4	VO library Rotterdam	5
Youth Interview 5	YI 5	Young010 & lokaal	1
Youth Interview 6	YI 6	VO Toorop Mavo	5
Youth Interview 7	YI 7	VO Wijkraadslid	1
Youth Interview 8	YI 8	HBO Wijkraadslid	1
Youth Interview 9	YI 9	MBO JOB MBO	1
Questionnaire 1	Q 1	MBO Questionnaire Province	105
Workshop 1	W 1	Session Elke Stem Telt	
Workshop 2	W 2	Grondfest VNG	
Reading 1	R 1	Grondfest Eva Rovers	
Reading 2	R 2	NJR Je bent jong en je wilt wat	
Co-creation 0	CC 0	2x map sessions with peers	2
Co-creation 1	CC 1	CF	15
Co-creation 2	CC 2	Province Baas van Noord Holland	7
Co-creation 3	CC 3	ABZ brainstorm	2
User Test 1.1	UT 1.1	Pilot Non designers	1
User Test 1.2	UT 1.2	Pilot Non designers	1
User Test 2	UT 2	Pilot Jonnick / ExI12	1
User Test 3	UT 3	Mbo students library	2
User Test 4	UT 4	Non designers	4
User Test 5	UT 5	Designers	2
User Test 6	UT 6	Non designers	4
User Test 7	UT 7	MBO students Albeda	15

Figure 4. The research activities, corresponding codes and amount of participants

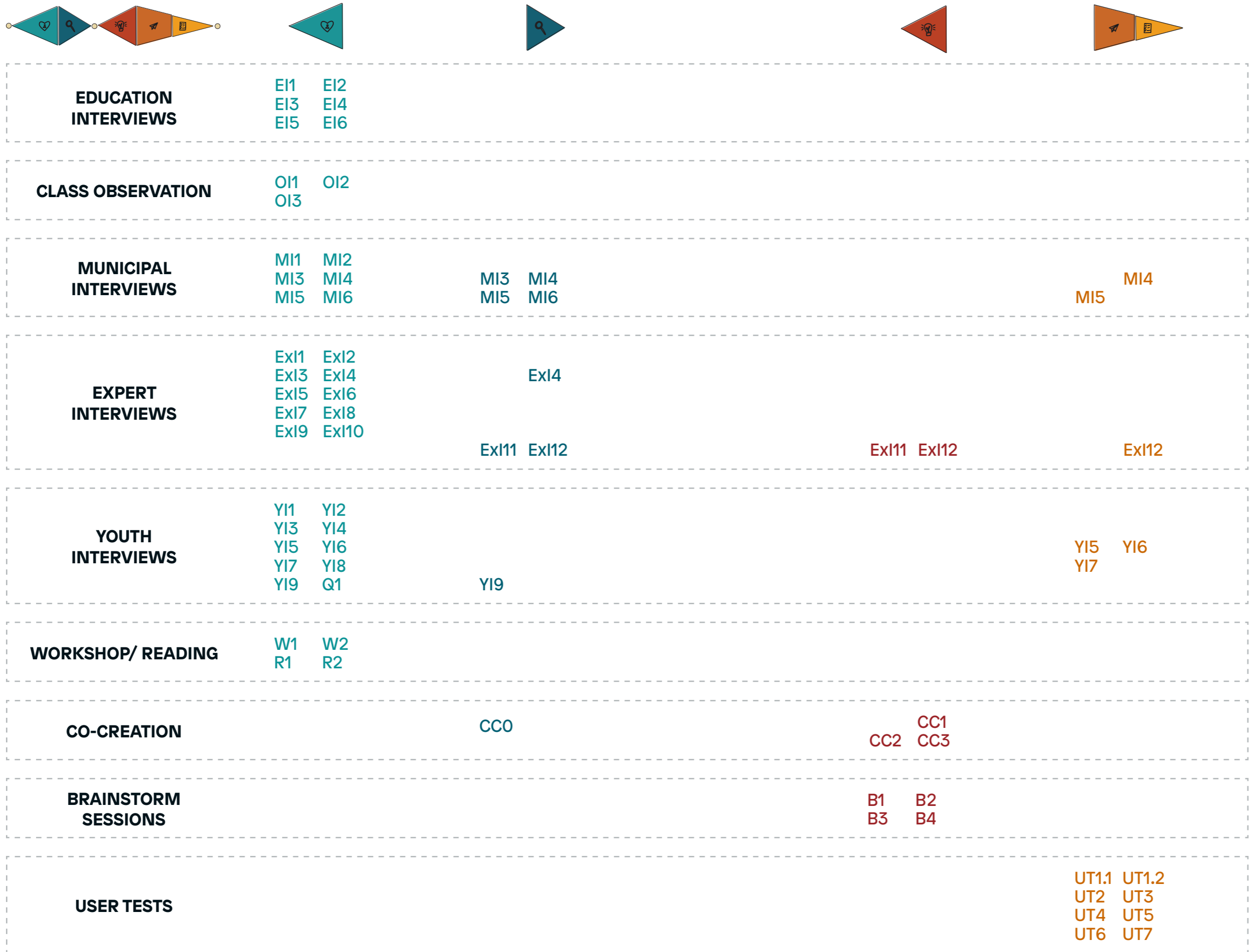
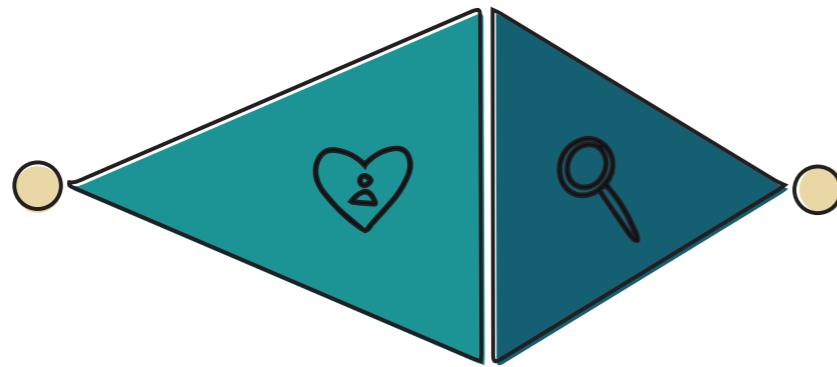
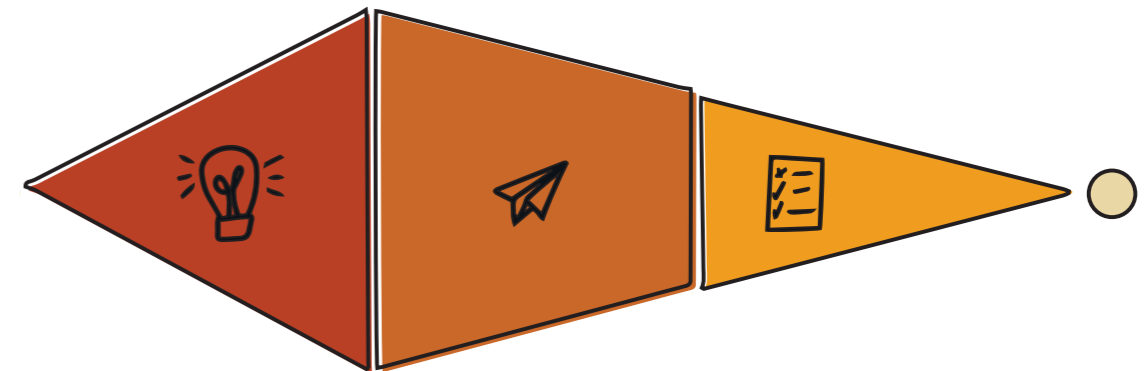


Figure 5. The research activities related to the design thinking method

Project approach



1. What citizenship education programs currently exist in schools at secondary education and MBO?
 - » What experiences do youngsters have within these educational programs?
2. What attitude do youngsters commonly develop towards political participation?
 - » In what way is this attitude developed?



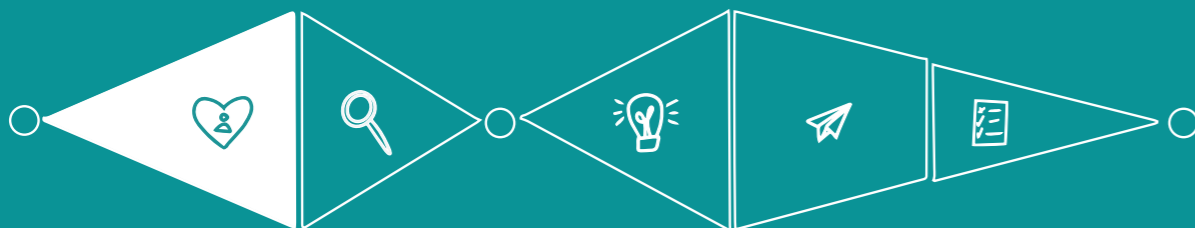
3. What educational design fits the needs of youngsters, teachers, schools and the municipality?

Figure 6. The research questions related to the design thinking method

3.0 Empathize

This chapter discusses the empathy step's execution and insights. The first section describes the chapter's purpose and methods. The second section describes the current state of citizenship education, including definitions, the citizenship law, and the educational setup at VO and MBO. The third section discusses the involvement of youth in political participation. The fourth section outlines the setup and execution of the in-depth research activities. The activities aimed to empathize with youths and other stakeholders. The data is collected and clustered. Finally, the first empathy insights are presented. The chapter concludes by sharing the key insights.

- 3.1 Method
- 3.2 Citizenship education
- 3.3 Political participation by youth
- 3.4 Exploring the experiences in context
- 3.5 Discovering themes and patterns
- 3.6 Sharing the first insights
- 3.7 Key insights



3.1 Method

The focus of this chapter is to create understanding of the exact meaning and definitions of citizenship education and empathizing with the stakeholders involved within the context (Figure 7). The goal was to find out in what way citizenship can be shaped, its definition by law, developments on citizenship over time and citizenship at VO and MBO education. Desk research has been done in order to understand and define citizenship. After gaining a first understanding of citizenship education several empathizing activities with multiple stakeholders were executed. Activities such as in-depth interviews, workshops, readings and observations formed the empty step. Insights were derived using quotes and interpretations from the transcripts of the empathizing activities.

The empathy step tries to answer research question 1 & 2.

1. **What citizenship education programs currently exist in schools at secondary education and MBO?**
 - » What experiences do youngsters have within these educational programs?
2. **What attitude do youngsters commonly develop towards political participation?**
 - » In what way is this attitude developed?

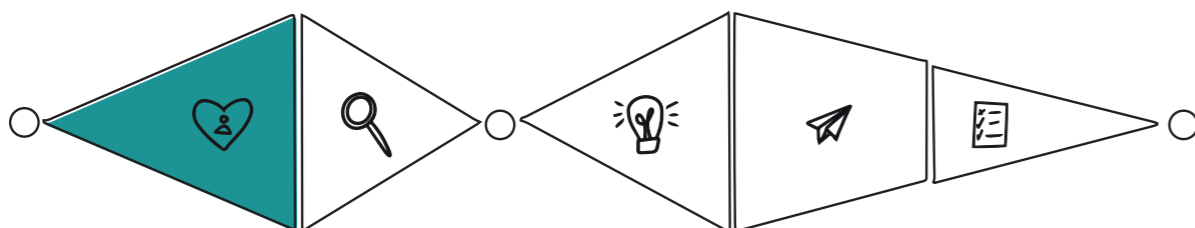


Figure 7. A visual representation of the empathy step in the design process

3.2 Citizenship education

3.2.1 Definition

Citizenship is a membership in a society or community based on the principles of member equality and shared accountability for the affairs of the society or community to which they belong. Within this community one needs ‘the capacity and desire to participate in and contribute to a community’ as stated by the Onderwijsraad (2003).

The capacity of autonomy comes along with this statement. Nieuwelink (2016) states autonomy as the ability of citizens to shape their own lives, the desire to contribute to societal connections and the ability and desire to contribute to a political community.

Related to the self-determination theory a link can be created. This autonomous capacity can be linked to autonomy in SDT. Competence refers to ‘The capacity to contribute’ and relatedness to the ‘Desire to contribute to the community’.

3.2.2 Citizenship education by law

The development of the citizenship law

As from 2006 on BO, VO and MBO schools are obligated to contribute to citizenship education. The Dutch citizenship law aims to promote and guarantee citizenship education. The law states that schools in the Netherlands need to contribute to the development of students citizenship skills, the law leaves room for freedom of education. In reality, it remained unclear what exactly constitutes good citizenship education and how schools might interpret it. The law did not support any guidelines for the education inspectorate to evaluate citizenship education (Nieuwelink, 2020). At last, schools did not really know how to properly tackle topics such as, democracy, freedom of speech, homosexuality and antisemitism. The Onderwijsraad (Onderwijs raad, 2012) has brought up an independent advice to the minister of Education in 2012, highlighting the need for further describing the core of citizenship education.

As of the academic year 2012–2013 MBO education has no exam requirement but effort obligation (Onderwijs raad, 2012). Meaning for a need to prove that schools have made an effort to eduThis project mainly focusses on

the political-legal dimension of Citizenship at MBO education.

From August 1st of 2022 a new law ‘Verduidelijking van de burgerschapsopdracht aan scholen in het funderend onderwijs’ (Clarification of the citizenship assignment to schools in foundational education) was created for BO, PO and VO education (Ministerie van Onderwijs, Cultuur en Wetenschap, 2021).

Citizenship on VO and MBO knows an effort obligation, meaning for the school to make an effort to achieve the result. This involves a school to make their best effort to realize the citizenship assignment.

The law for VO

The citizenship assignment for VO is stated in the ‘Wet voortgezet onderwijs 2020’ (WVO) as from august 2022. First of all, the law states for education to active citizenship and social cohesion, purposeful and coherent. Active citizenship is defined as the willingness and ability to be part of Dutch society and to make an active contribution to it. Social cohesion stresses equality and shared values, regardless of a person’s background. Both focus on learning how to coexist with other citizens, taking part in society, and becoming familiar with the diverse forms of Dutch culture (Wet & Regelgeving, 2022).

Empathize

In more detail this contains basic values and social and societal competences, such as the basic values of the democratic rule of law and to operate based on these values. Developing the competences needed to participate in the democratic society. Secondly, the educational offer needs to be goal-oriented, coherent, recognizable and provide insight into educational results. Lastly, the school should function as a practice environment for citizenship skills that need to be developed (Overheid, 2022).

The law for MBO

The citizenship assignment for MBO is stated in the Wet Educatie Beroepsonderwijs (WEB). This law states that MBO education needs to contribute to students' competences in the four dimensions: the political-legal, the economic, the social and vital citizenship dimension. Each dimension includes more specific examination and qualification demands, citizenship component prepares students to shape their own careers and to participate in society (Ministerie van Onderwijs, Cultuur

en Wetenschap, 2021). The political-legal domain is considered most important within this project, however the social, economic and spatial-ecological domains are always in interaction with the political domain but they are on the background within the scope of the project.

Figure 8 shows a simplified version of the citizenship assignment by law.

In summary we see that despite the several developments by law the citizenship assignment remains quite unclear for schools. Next to that, the WVO and WEB show some differences. The WVO focusses more generally to the development of social cohesion and active citizenship. Whereas the WEB focusses on the four citizenship dimensions and the development of students capacity to shape their own careers and participate in society.

Besides some differences in law, the setup of VO and MBO education also varies. Therefore, the setup of VO and MBO education is further highlighted in the next section.

3.2.3 Citizenship at VO and MBO

To further highlight the context of the graduation project the setup of VO and MBO education is explained.

VO

VO schools in the Netherlands are composed by several levels. VSO, VMBO (B, K, GI, TI), HAVO and VWO (Figure 9) (Het Nederlandse onderwijssysteem | Het Onderwijsloket, n.d.). The differences in citizenship knowledge vary widely between VWO and VMBO students in the Netherlands and there are differences between average scores within individual schools (Munnikma et al., 2017). Besides these differences, there are also variations in the type of citizenship education offered to VMBO or HAVO/VWO students. Citizenship education at VMBO focusses more on adjustments to societal norms, whereas HAVO/VWO education also focusses on critical self-reflection toward society, forming their own opinions, and having the ability to adjust to this society (Nieuwelink, 2016 & Eidhof et al., 2020).

At VO schools citizenship education is often intertwined with other courses. Citizenship education is similar to Mens & Maatschappijleer courses, such as Maatschappijleer, Philosophy, Geography, History, Economy, philosophy of life/religion. Maatschappijleer is often the course that has most contribution to political and societal institutions, democratic rules and pluralistic society (Eidhof et al., 2020).

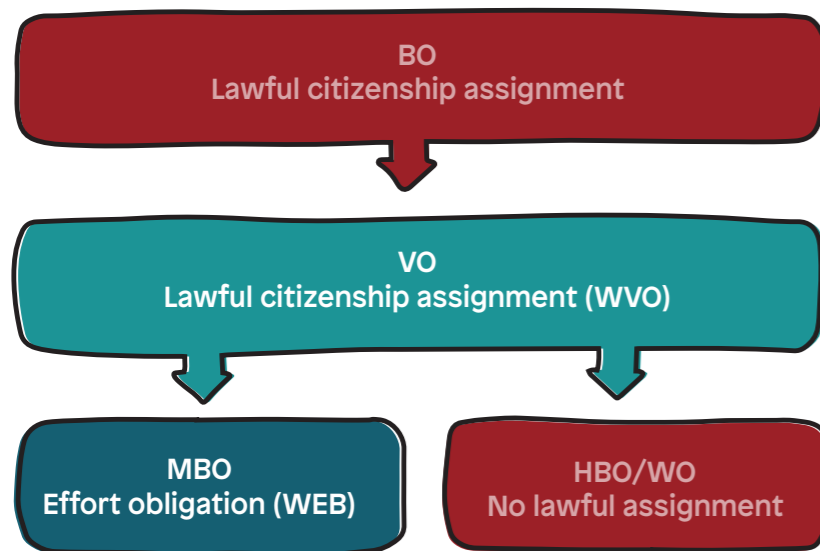


Figure 8. The citizenship law at BO, VO, MBO and HBO/WO

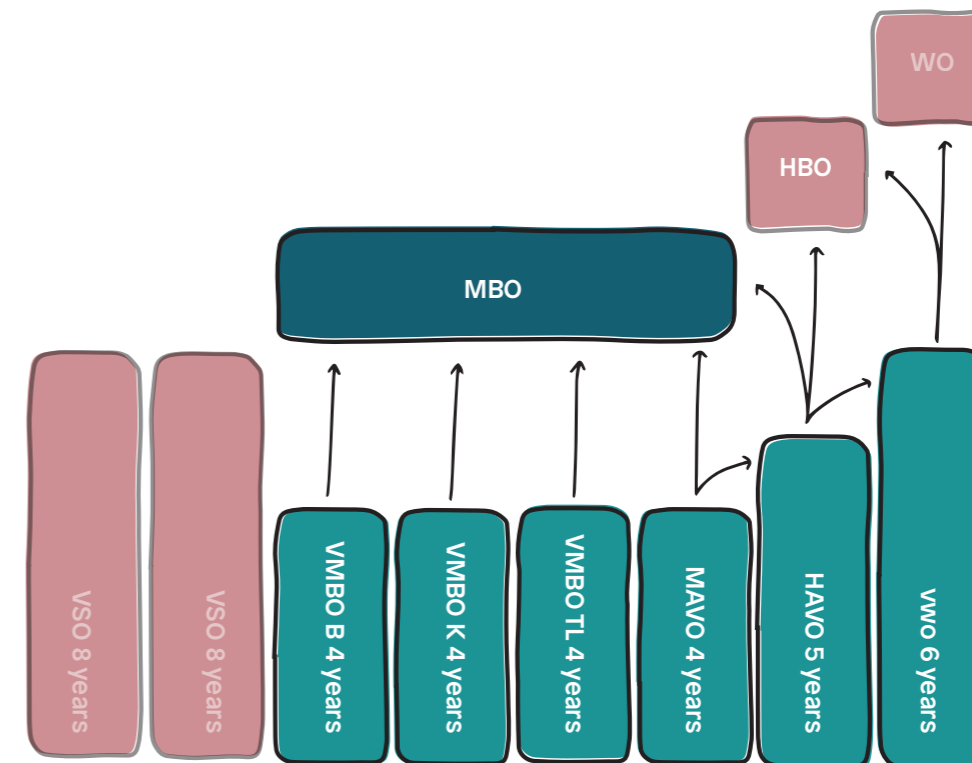


Figure 9. Visualization of VO (light blue colored) in the Netherlands.

Empathize

MBO

Possible follow up education for VO is MBO education (Figure 9). VMBO education prepares students for MBO. MBO is composed by four levels, MBO 1 – 4 (Figure 10), each level prepare students for a specific profession. In total there are about 500 types of MBO programs (Het Nederlandse onderwijssysteem | Het Onderwijsloket, n.d.). The triple qualification in MBO education make sure students receive education for a profession, for further education, and to become contributing members of society (Figure 11) (Kennispunt MBO, 2021).

As mentioned before, the citizenship component prepares MBO students with the skills necessary for successful career functioning as well as for active involvement in society (MBO raad, 2022). This definition has been expanded into four categories of citizenship in a ministerial regulation: the political-legal, the economic, the social and vital citizenship dimension.

MBO students often experience a strong feeling of being undervalued in society. The image of MBO education is rather low in society. Others frequently stereotype MBO students: “Doing MBO is a waste of your brain.” – Stuij (2021).

3.2.4 The quality of

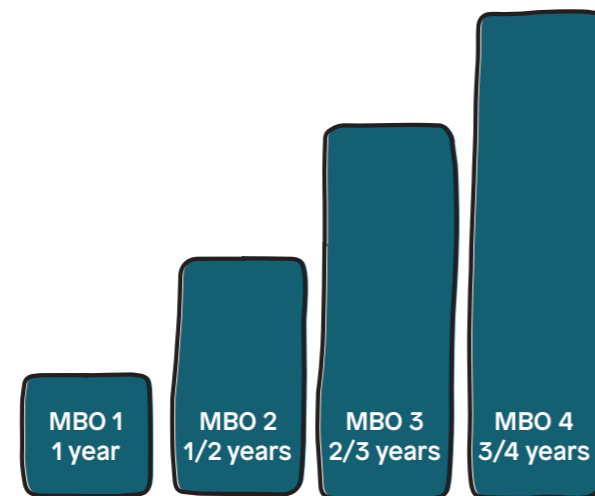


Figure 10. The levels of MBO education



Figure 11. A visualization of the triple qualification of MBO

Dutch citizenship education

The quality of citizenship education remains inadequate, besides the law and citizenship education developments in the past 10 (Onderwijsinspectie, 2022, ICCS, 2016 & Munniksma et al., 2017). The major goal of citizenship education is to prepare students to deal with variety and difference (Nieuwelink, 2020).

Schools have been struggling to organize citizenship education. Several organizations offer guidelines for schools to properly set up citizenship education. Nine checkpoints for designing citizenship education have been created by PO-raad, VO-raad, MBO Raad and Stichting School & Veiligheid (VO Adademie, 2022). Suggestions and visions on the necessary shift towards good citizenship education are being shared in order to support schools (Eidhof et al., 2020). Several stakeholders also offer ready to use citizenship education in order to support schools to apply to the citizenship educational law.

Despite the available offers it turns out to be different in reality, the Onderwijsinspectie (Inspectie van het Onderwijs, 2016) and the ICCS research (ICCS, 2016) show the results of a relatively limited and fragmented offer. Additionally, students feel that they receive relatively few lessons about politics, democracy and constitution (Nieuwelink et al., 2018). According to a study conducted by JOB MBO, students often rate their citizenship education poorly (JOB MBO, 2022).

Less political participation and a feeling of powerlessness are the outcomes of the inadequate level of citizenship education. Frustration, apathy and in the worst circumstances polarization and extremism can be effects of this inadequate level (Eidhof et al., 2020). The need for improvement of citizenship education is clear. The research by Slijkhuis (2021) has proven the effect of citizenship education on political participation in young adulthood, making this a promising context to design for.

Empathize

3.3 Political participation by youth

The previous sections mainly focused on citizenship education. However, the second research question focusses on political participation.

Political participation consists of two forms. Conventional participation, participation related to electoral periods. And unconventional participation, participation outside of electoral periods, such as demonstrations.

The political participation of youth is relatively low as mentioned in the introduction (Chapter 1.2). 6 out of 10 youngsters between 18 and 24 years old have little to no interest in politics. Also the show up rate at elections is limited, also amongst youngsters (Binnema et al., 2007). Research has shown that someone with formal education is twice as likely to vote than someone with secondary vocational education (MBO) (Schmeets, 2017). Often we see that politically active youngsters have followed formal education (HBO or WO) (Save the children, 2020).

The involvement and trust of youth in politics is thus very limited. Youth that did not receive formal education is even less likely to be involved within political participation. This highlights the importance of citizenship education at informal education (VO & MBO). The underrepresentation of educational levels is also evident in the House of Representatives, only 7% of politicians are MBO schooled, whereas approximately 65% of the Dutch population does (Rovers, 2022).



3.4 Exploring the experiences in context

Empathizing with the context

After developing understanding of the core of citizenship education and political participation, the next step was to empathize with the target group and stakeholders within the scope and focus of the graduation project. The aim was to familiarize even more with the context and gain insight in the experiences of the target group and other stakeholders. Multiple types of research activities have been executed with several types of stakeholders. Figure 5 on page 26 shows the overview of all the research activities for each step of the Design Thinking method. The next section describes the research activities in more detail.

Research empathy activities

Teacher Interviews

In total 6 teachers were interviewed (E11 - E16, Appendices 3 - 8). Two of them teach at VO education and 4 teach at MBO education. Three of these teachers also had other citizenship related functions. Firstly at ProDemos, an organization aiming to explain the Dutch democratic system to students. Secondly at Kennispunt Burgerschap MBO an organization which shares information, tips and inspiration for shaping citizenship education and thirdly a member of a publishing organization named Uitgeverijgroep. Some interviews were executed on location (Figure 12) but most interviews were conducted online with a duration of an hour. The interviews were transcribed, meaningful quotes were interpreted and structured in Miro.

The goal of interviewing citizenship teachers was to find out in what way citizenship education is shaped at different schools. Trying to gain insight in positive or negative experiences, by student and teacher, when teaching citizenship. Besides the educational aspects, the interviews also focused on their experiences of (expected) political participation of their students. The interviews ended with a discussion on improvements that could be made.



Figure 12. A teacher interview

Empathize

Municipality and province interviews

Three employees from the municipality or province were interviewed. The interviews were online for the duration of approximately one hour. Quotes and insights were derived from the interview transcripts. The quotes were interpreted and structured in Miro (MI1 - MI3, Appendices 12 - 14).

The goal of the interviews was to find out in what way the municipality is part of citizenship education. But also in what way they facilitate political participation for youngsters and how they experience this within their governmental functions. Lastly, a discussion was held on what is needed in order to improve the situation as is, trying to involve youth more within political participatory processes through educational activities.

Expert interviews

In total ten interviews with 12 experts on the topic of citizenship education and participatory youth projects were done (Ex11 - Ex10, Appendices 18 - 26). Three of the interviewed experts are also considered as teacher interviews as they worked as a teacher and other citizenship related job. Most interviews were online and lasted at least one hour. Quotes and insights were derived from the interview transcripts. The quotes were interpreted and structured in Miro.

The goal of the interviews was to find out in what way external organizations viewed citizenship education and the educational offers available. Besides that most of the experts were related to citizenship and political participatory activities, these activities and experiences with youth were discussed. The conversation also focused on their view on the context as is and what improvements they would view as valuable.

Citizenship class observations

As an observer, I visited three types of citizenship educational classes (OI1 - OI3, Appendices 9 - 11) to create understanding of existing education. Two of the observed classes were with MBO students and one was with VO students. Quotes and insights from the observations were written down, quotes were interpreted and structured in Miro. Within two of the citizenship classes a municipal or provincial state member was part of the educational program. Figure 13 shares the setup of one of the observations in class.

The goal of observing at the citizenship classes was to increase understanding of the details of the educational programs, such

as the level or type (practical or theoretical) of the education. Observation served as a meaningful method to see in what way students react to the education offered. After all three observations I was able to speak to some of the students to deepen understanding of the experiences of youngsters during the class. These insights gathered during the talks after observations are categorized as youth interviews, the insights can be seen in Appendix 9 - 11.



Figure 13. Observation at an MBO citizenship class

Empathize

Interviews & co-reflections youth

In total nine interviews and co-reflections were done with VO and MBO youngsters (Y11 - Y19, Appendices 28 - 36). The youngsters who participated varied from politically active to non-active. For example two young members of neighborhood councils in Rotterdam and a board member of JOB MBO were interviewed. Other participants were interviewed at Rotterdam Libraries or at school. Some youngsters were already 18 or above, where others were not able to vote yet. Most interviews were executed physically and lasted over an hour. Two interviews were conducted online.

The interviews were generatively approached, giving the youngsters a task in order to support for an active conversation. Some of the interviews used worksheets and others used stickers and positions (Figure 14).

Some interviews were structured as co-reflections (Figure 15), the final part of the interview also focused on testing generated concepts, these insights are shared in chapter 6.0 Ideation. Quotes and insights were derived from the interview transcripts. The quotes were interpreted and structured in Miro.

The goal of the interviews was to gain understanding of the youngsters perspectives and experiences on citizenship education. Secondly their view on politics and their political (expected) experiences were discussed. The youngsters were stimulated to share their view on possible improvements and their needs within the educational and political environments.

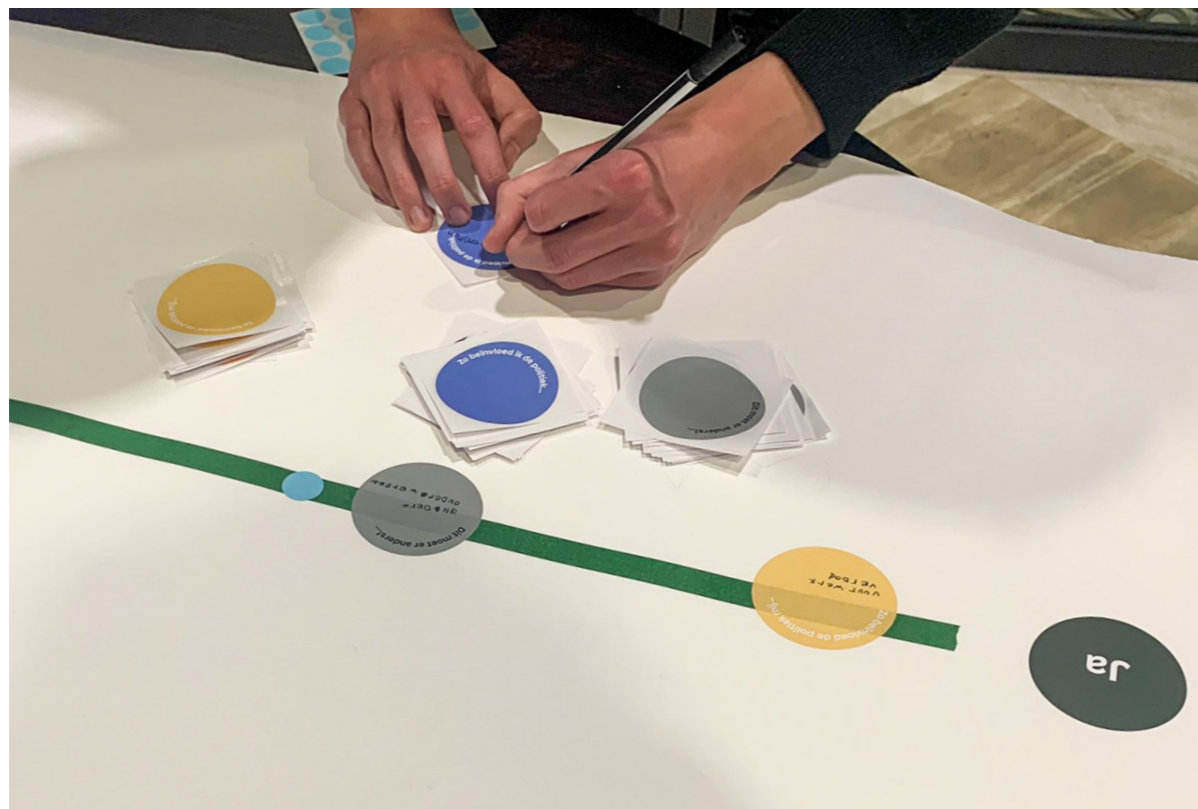


Figure 14. An example of one of the interview sessions



Figure 15. Co-reflections with VO students

Empathize

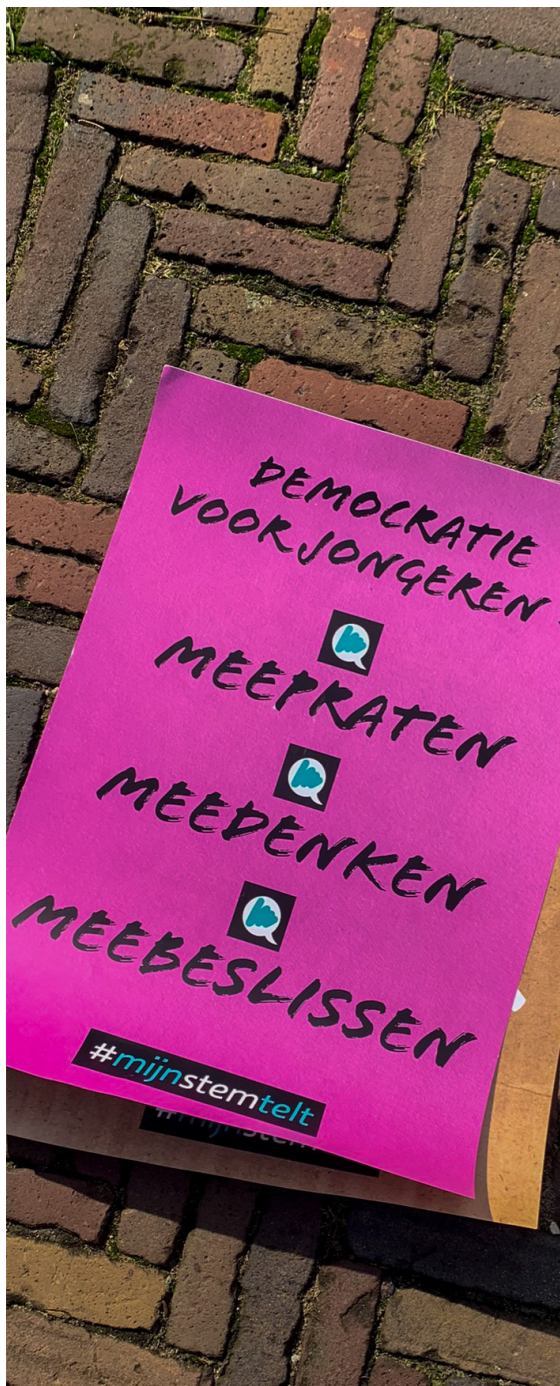


Figure 16. A poster from the workshop by VNG

Questionnaire youth

A questionnaire was prepared to share after one of the citizenship classes 'Provincie spel Overijssel' (OI2) (Q1, Appendix 37). In total 105 students filled out the questionnaire. The questionnaire consisted out of 9 open ended questions. The questionnaire was shared with the students right after finishing the educational program, in the state room of the Province of Overijssel. The insights of the questionnaire were gathered, similarities and differences were clustered in Miro. Most valuable and striking answers were picked out, interpreted and clustered again.

The goal of the questionnaire was to gain insight in the political participation and the experiences of the citizenship class. The students were asked to share what they liked and disliked about the class, if they learned something new and in what way they view the province. Regarding political participation the students were asked whether they would vote for the provincial states, why they would or would not and if they consider voting as valuable.

Workshops & readings

In total two lectures and two workshops were visited. One of the workshops was organized in association with the team of 'Elke Stem Telt' at 'Afdeling Buitengewone Zaken' (Figure 17). Quotes and insights were derived from the interview transcripts. The quotes of the workshops and readings were interpreted and structured in Miro (W1, W2, R1 & R2, Appendix 38-41). The other workshop shared insights and experiences within the pilot program of youth participation by 'de Vereniging van Nederlandse Gemeentes' (VNG) (Figure 16).

The goal of visiting the readings was to gain greater understanding of political participatory experiences by experience experts.



Figure 17. The workshop with Elke Stem Telt

3.5 Discovering themes and patterns

The previous sections described the methods of gathering a lot of qualitative data. This section describes in what way meaning is allocated to the data. Each research activity delivered an overview of the most interesting quotes and interpretations. Combining the clustered interpretations from each activity will allow for pattern spotting in the data (Appendix 42).

Emerging with context and defining labels

The quotes and interpretations clustered in Miro for each research activity were combined and read. The quotes and interpretations were printed out in order to reemerge in the context (Figure 18). The research questions, quotes and interpretations gave a first setup for the main themes. Each research question functioned as a theme. A label within the theme 'citizenship education' is for example 'theoretical class'. Below the two themes and corresponding labels are shared (Figure 19).

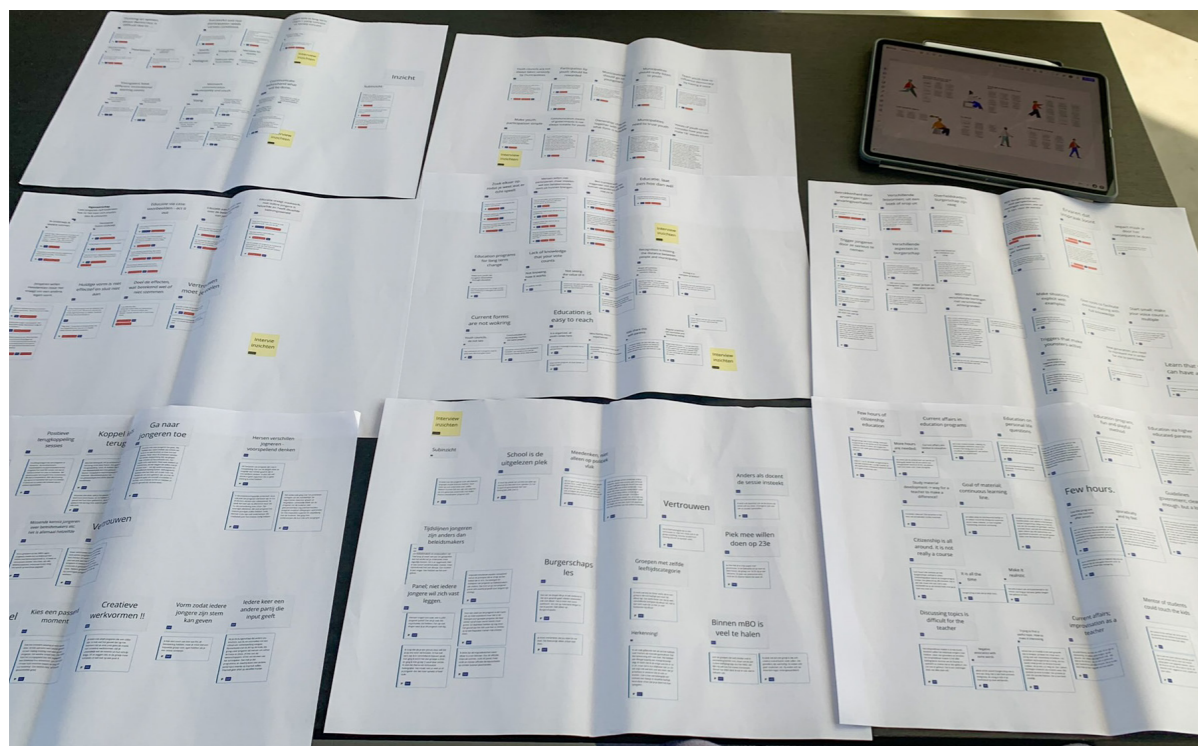


Figure 18. The printed data from several interviews

Labeling and clustering

Labeling the quotes and interpretations functioned as a basis for the clustering process. Clustering and organizing was done in several steps. All quotes and interpretations were labeled and clustered iteratively in Miro. The next section (3.6) describes the first insights summarizing the data from the research activities and clustering.

Citizenship education

The class

- » Theoretical class
- » Practice class
- » Discussion class

School, teacher and hours

- » The teacher
- » The school system and -board
- » The hours

Learning to reflect and form opinions

- » Forming opinions
- » Reflecting
- » Learning about voting

Political participation

Relation and connection with politics

- » I do not feel addressed
- » The topics are boring / difficult
- » It does not suit me
- » I am not represented

The system vs doing and thinking ability

- » The system is complex
- » I do not see the relation that 'this' is politics
- » The system is not on my level

Figure 19. The identified themes

3.6 Sharing the first insights

This section describes the first results and insights gathered from the empathy activities and clustering. The insights in this section come from the 6 teacher interviews, 3 citizenship class observations, 3 municipal interviews, 10 expert interviews, 9 youth interviews, questionnaire and visited workshops and readings.

The clustered insights highlight the complexity of the problem. Relations and similarities within different contexts became visible. What came across very clearly is the fact that learning happens all around, not only in citizenship classes. The research questions are used as a structure to describe the first results.

The existence of citizenship education.

RQ1: What citizenship education programs currently exist in schools at secondary education and MBO?

Citizenship is a super broad concept, this is highlighted by the many developments the citizenship law had been undergoing and the problems identified in chapter 3.3. The broadness of citizenship, becoming a participating citizen, results in the fact that learning citizenship skills not only happen in class.

Learning happens outside of the context of class, for example at home. Parents and friends influence students learnings.

“My youngest brother will join the debate team at school, that is also because he has been practicing at home for 13 years. Especially practicing at home, in a situation which is safe, in general.” – E15

Learning within the context of class, many many factors influence the development of citizenship skills. Such as the teacher, the type of educational module or the available hours for citizenship. Within several modules wide varieties appear in the approaches, for example a theoretical or learning by doing approach.

“It is up to the teachers themselves. You can make it wonderful, or follow it all by the textbook. Which might be ten years old.” – E14

Besides the class’s functioning as a learning environment does the school environment also impact learning. Such as the type of school or educational level students follow.

“Besides these differences, signs of differences in the type of citizenship education offered to VMBO or HAVO/VWO students also show. Citizenship education at VMBO focusses more on adjustments to societal norms, whereas HAVO/VWO education also focusses on critical self-reflection towards society, forming their own opinions and having the ability to adjust this society” (Nieuwelink, 2016 & Eidhof et al., 2020).

The previous insights show rather direct contexts and factors that influence the

learning experiences. However, some contexts and factors influence learnings in a more indirect way. Such as the setup of the Dutch educational system, which is generally focused on measuring knowledge. And the citizenship visions schools need to create, as stated in the law, indirectly influence the quality of education students receive.

“In that regard, we pay far too little attention in education to what-do-you-think. It is way too much about, somewhere understandable, everything in education is measured by what do you already know.” – E15

The development of political attitudes

RQ2: Which attitude do youngsters develop towards political participation?

Citizenship skill development happens in all these direct and indirect ways in several contexts. These experiences results in youth developing a certain attitude towards politics. This attitude can either be positive or negatively developed.

This attitude is formed by fulfilling two feelings. Several factors influence the level of fulfillment. First of all, the extent to which one understands the political system. Overall the system for political participation

Empathize

is considered as very complex. Often students mention they do not realize what politics is about. In addition to that comes the view that politics is not important to them. Aligned with the understanding of what topics belong to the concept of politics. Next to knowing what politics is and what it contains, comes the understanding of how to participate, something that is often considered as crucial.

Topics such as racism and sexism, it is really important to me. But politics does not really influence us, nor does it influence these topics. – Y13.1 MBO student

The second feeling is the feeling of belonging towards the political system. This feeling highlights what factors are of influence for students to feel part of politics. Factors such as representation, feeling addressed by and feeling involved by politics affect the matter to which students develop belonging. Also the expression by students that they are too young to participate and the connection they feel to certain political topics is of influence. Finally, trust is a crucial aspect considering the feeling of belonging to the political system.

I think it is very strange that the people in power now in politics are determining for us. For our future. Whereas it is actually not right at all if you think about it. You are and much older, a different point of view on the world. I think that is partly why young people think, it is no use at all. – Y13.2 MBO student

The insights described above can be summarized into the following:

Youth developing citizenship skills occurs in a complex system. Learning happens all the time in multiple contexts, in direct and indirect ways.

The complexity of the learning environments and political system ask for a method to capture the insights generated. Therefore the decision was made to collect all of the data into the so called system map, the system map is presented in chapter 5.0. The system map fulfills several aspects. First of all, the map enables visualizing and clarifying the complex learning and political system. Secondly, the rich data and insights gathered can structurally be summarized and visualized into this system. Enabling for a communication mean for the reader and those who are involved within the topic of citizenship education explaining and highlighting the complexity of the context.

The next section (4.3) describes the iterative process that has led to the system map.

3.7 Key insights

Understanding citizenship

This chapter explained the first basic understanding of citizenship education by sharing the definition of citizenship. The definition showed how citizenship relates to a membership in society, in which equality and shared accountability to a society one belongs to, plays an important role. Citizenship is obligatory by law, the law received lots of attention over the past ten years. However, unclarities remain existing. Also, VO and MBO education know some differences by law. The WVO (VO), focuses mainly on developing social cohesion and active citizenship. The WEB (MBO), is shaped by the four citizenship dimensions (the political-legal, the economic, the social, and vital citizenship dimension) and students' ability to participate in society. Likewise, the setup of citizenship at VO and MBO education differs widely. At VO, citizenship is intertwined in courses related to Mens & Maatschappijleer. MBO citizenship prepares students for being able to have a successful career, and actively involve in society. In general, MBO students often feel undervalued in society. Despite the attention to citizenship by law, the quality of it remains low. We see in general that Dutch students fall behind in comparison to similar European countries. Less political participation and feeling powerless could be the outcomes of inadequate citizenship education. Viewing political participation, we have seen that youngsters often have little to no interest in politics. Youth that did not follow formal education, (MBO students) are less likely to be involved with political participation. Highlighting the importance to improve the quality of citizenship in informal education.

Diving into the context

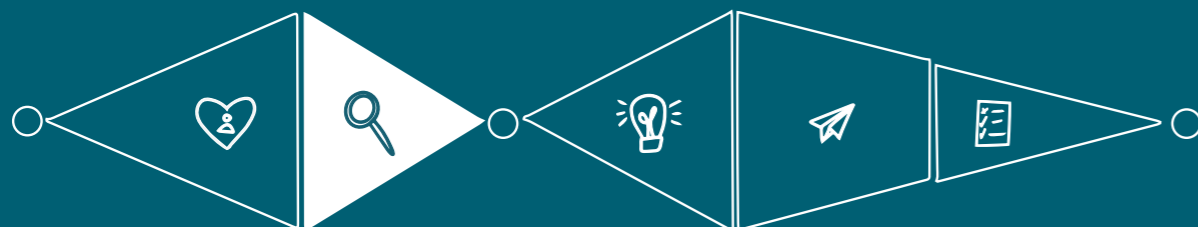
Several empathic research activities have helped to gather a broad understanding of citizenship in context. Clearly, citizenship is a super broad concept meaning that citizenship happens all around, not only in the context of class. Many different factors influence the development of youths' citizenship skills. Factors such as a home environment, teacher-student relationships, the school environment, the type of education students pursue, the setup of the Dutch educational system, students' views and experiences with politics, and indirect influences by law. All these factors shape the attitude of students toward politics. A political attitude results based on the fulfillment of two fundamental needs. The need to feel understanding of the political system and to feel belonging to the system. Understanding considers the complexity of the system, what politics contains, what topics belong to it, why it is important, the institutional setup, and knowledge of how to participate. Belonging highlights factors such as representation, feeling too young, relatedness to topics, feeling trust, and being involved in a serious way.

Overall we can conclude that developing a political attitude happens all around, in multiple contexts, and that the development of this attitude needs two main needs (feeling of understanding and belonging).

4.0 Define

This chapter describes the project's defining step. The rich data from the previous chapter is translated into a system map. This chapter describes the procedure for completing this step. The iterative process used to define the data for the system map is presented. The chapter concludes by sharing the key insights.

- 4.1 Method
- 4.2 Iterating the map
- 4.3 Key insights



Define

4.1 Method

The previous steps resulted in a lot of data. This data, collected in the empathy step, is translated into a system map that captures the insights gathered and the complexity of the problem. The map was iteratively developed by involving various stakeholders. The iterative process helped to visualize the systemic context of citizenship education and political participation. Methods such as expert interviews and creative sessions with peers supported the iterations of the map. The Self Determination Theory functions as a theoretical framework to test the map. This chapter functions as a base for creating a design. Figure 20 visualizes the define step in the design thinking method.

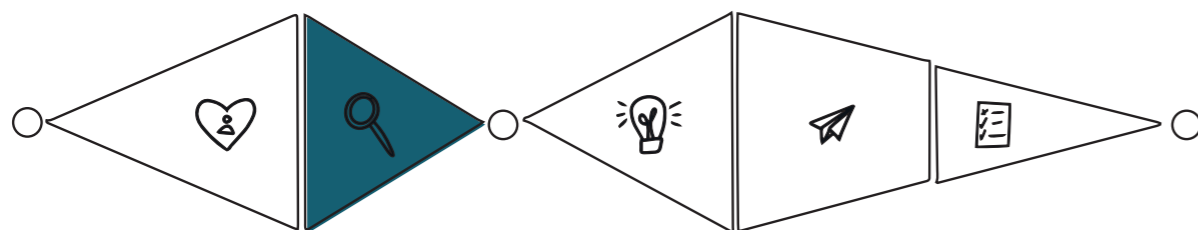


Figure 20. A visual representation of the development of the system map using Design Thinking

Define

4.2 Iterating the map

Iterating the map with interviews

Eight interviews and two peer sessions focused on creating and iterating the map. The interviews involved four municipal employees (MI3 - MI6, Appendices 12 - 14), three expert interviews (ExI 4, 10, 11, Appendices 21, 26 & 27) and one interview with a youngster from JOB MBO (YI9, Appendix 36). Some of the interviews focused on developing the map as well as empathizing or iterating the concept. These interviews are also stated in chapter 4.2. The two sessions with peers used post its to cluster and reorganize the setup of the maps (CCO, Appendix 45).

In the interviews the map functions as a mean to share the insights so far, a discussion tool for the experts view and improvements on the map. In all interviews each interviewee was asked what aspects they recognized or not and whether there were any additions needed. The peer sessions helped to iteratively develop the insights from the interviews into the map (Figure 21). The next section describes the iterations of the map.

Iterations

At first, the map appeared as a chronological journey of possible experiences regarding learning and participation. The second version considered education and politics as two separate systems, however system layers were added. These layers were added due to the fact that learning and experiencing happens on several scale levels. An example: learning at home affects youth in a direct matter whereas the citizenship law also affects students, but indirectly. The third version of the map iterated on the relations in between the educational and political system. Relations were created



Figure 21.

Define

due to the fact that learning and developing citizenship skills does not only happen during the citizenship class but all the time in several contexts. Therefore political participation and citizenship education should not be visualized as separate systems. A final iterative step focused on organizing 'situational contexts' from 'feelings'. An example: experiences in class, social media posts, or experiences due to the setup of the Dutch education system could be considered as situational contexts. Whereas lack of trust, and lack of feeling competent to understand political systems and the aligned effects are considered as feelings. Thus, situational experiences were separated from possible emotional effects. The experiences and emotional effects can be either positive or negative, depending on the context and the stakeholders involved in the situation. The two themes that appear due to 'feelings' are stated as follows: understanding of the system and feeling of belonging towards the system.

The final version of the system map is thus structured into situational contexts and feelings developed as a result of these experiences.

Beside structure related iterations several visual iterations aimed to support the system maps visual communication in a logical way. A visual designer of Afdeling Buitengewone Zaken was involved in visual iterative steps.

The different versions of the map are presented in Appendix 43.

Testing the map to the theoretical framework

The process of developing the map also involved a theoretical approach. The Self Determination Theory (SDT) is used to test the validity of the map regarding its relation to intrinsic motivation.

As mentioned in chapter 2.1, the Self Determination Theory focusses on intrinsic motivation that arises from three fundamental psychological needs: competence, relatedness and autonomy. These needs are essential for individuals to develop intrinsic motivation.

Diving into the theory of SDT and comparing the elements to the system map has led into the following. It seems that the findings structured in the system map are aligned with

the three elements of SDT. The two feelings (understanding and feeling of belonging) show clear overlap with competence and relatedness. Autonomy is not explicitly mentioned within the system map but considered as a by-product due to the fact that voting and participation are a free choice in the Netherlands.

Therefore we could state that the larger feelings of Understanding (Competence) and Belonging (Relatedness) are, the more likely students are intrinsically motivated to start participating politically.

When comparing the situational contexts of the map we see that aligning SDT is very context related. Within the map contexts are described as neutral, however, both positive and negative experiences could appear, depending on many factors. An example can highlight the possible relation of SDT within the situational bubbles.

"We had a very young teacher. We could choose ourselves whether or not we would come to class and make our homework. That resulted in students actually doing homework. If you take us seriously and treat us as human beings. We are the same as you, we have brains too..." - MBO student

The quote clearly highlights that relatedness (age of teacher), autonomy (freedom of making homework) given by a teacher and a feeling of competence ('I can do this, I have a brain') positively influence students learning experiences. Such a positive learning experience provided by a teacher within a citizenship class, will most likely positively develop students understanding (competence) and feeling of belonging (relatedness) within the bigger picture of citizenship and political participation.

The next chapter introduces and describes the system map.

4.3 Key insights

Iterating the map

This chapter explained the process of translating the data into the system map. The map enables to capture and visualize insights, highlighting the complexity of the context. The map allows for easy communication of the insights in a structured and visual way. Several iterations were done in order to be able to capture the factors in the several learning contexts and the two feelings that develop a political attitude. The map has known several setups. Starting as a chronological journey, transforming into to a system map that involved layers involving hierarchy considering direct and indirect influences to students learnings (the differences considering e.g. the home environment and the law). The first versions considered the political and educational system as separate systems. Iterations highlight the relation and intertwined aspects between the educational and political system. Creating relations that highlight the broadness of learning citizenship skills. Finally, a layer dividing the fundamental needs from the learning contexts is added. Stressing the differences between learning contexts and factors that fulfill fundamental needs (understanding and belonging), needed to develop a political attitude. Testing the map to the SDT showed that the two fundamental needs (understanding and belonging) align very closely to the theory. Feeling of belonging shows clear overlap to Relatedness and feeling of understanding to Competence. Autonomy is not directly mentioned in the map but considered a by-product as political participation is free of choice in the Netherlands.



Figure 22. Iterating the map

5.0 Sharing the map

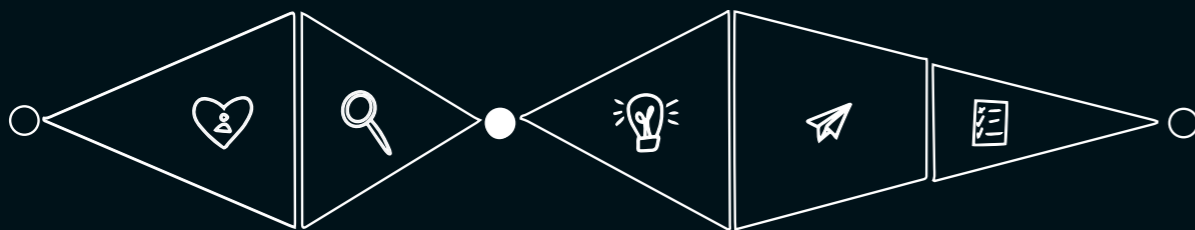
The previous chapters described the iterative process of empathizing in the context and developing the system map. This chapter describes the final result of the system map. The first section of the chapter introduces the system map. Section two explains how to read and use the map. The third section presents the map aligned with quotes highlighting possible experiences to help the reader empathize. Finally, a design focus is defined for the following steps of the project. The chapter concludes by presenting the key insights.

5.1 Introducing the map

5.2 The map and a reading guide

5.3 Defining the design focus with the system map

5.4 Key insights



The system map

5.1 Introducing the map

The map is presented online, and can be viewed clicking the link below. The visuals and text are also presented in this following section. Figure 23 shares the visualization of the map.

The specific factors that could influence the development of understanding and belonging within the situational contexts are printed in bold. Factors can be experienced either as negative or positive depending on context related aspect and or previous experiences.

Each context is supported with a quote to help the reader empathize. Quotes for all the remaining sections can be found in the appendices (Appendix 44).

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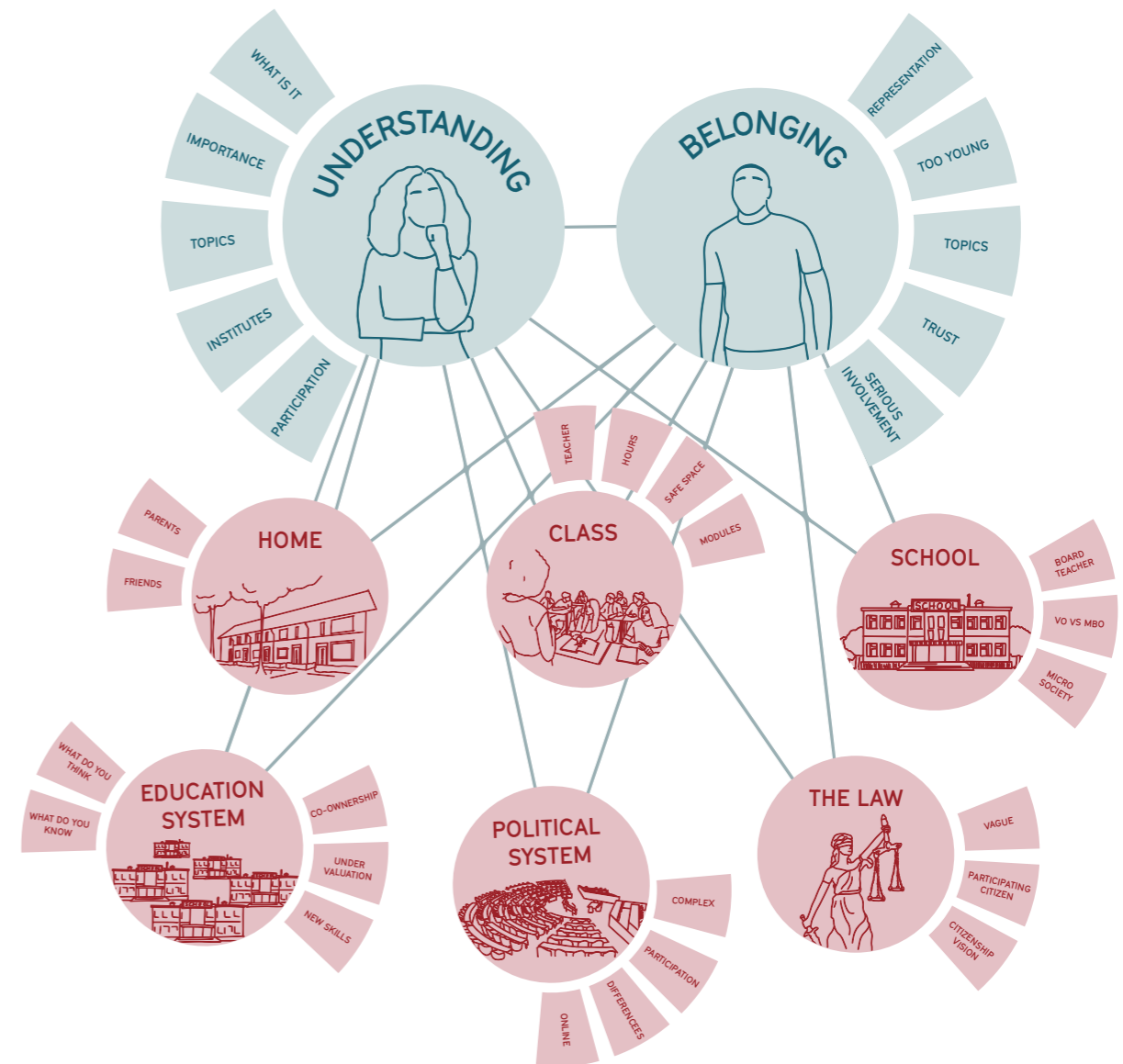


Figure 23. The system map

The system map

5.2 The map and a reading guide

The defined insights and iterative process resulted in an interactive system map. The goal of the map is to communicate the complexity of the current systemic environment in which youngsters learn about citizenship. Learning happens all around, in multiple contexts in direct and indirect ways, and not only in citizenship classes. This section gives some guidance in reading and using the digital map (Figure 24).

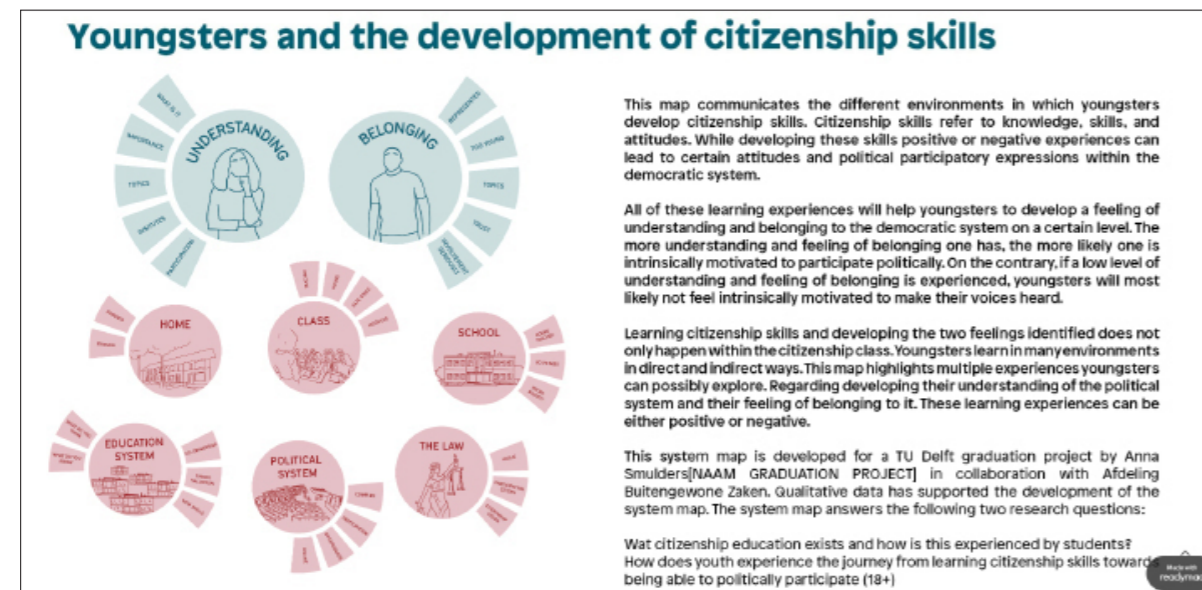
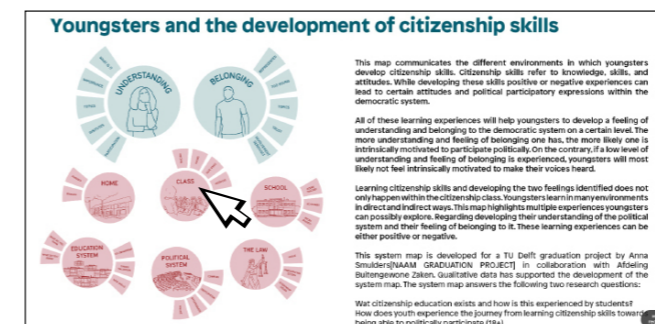
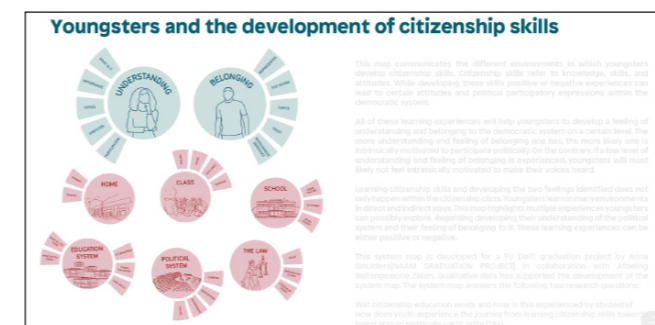


Figure 24. The map and how to use it



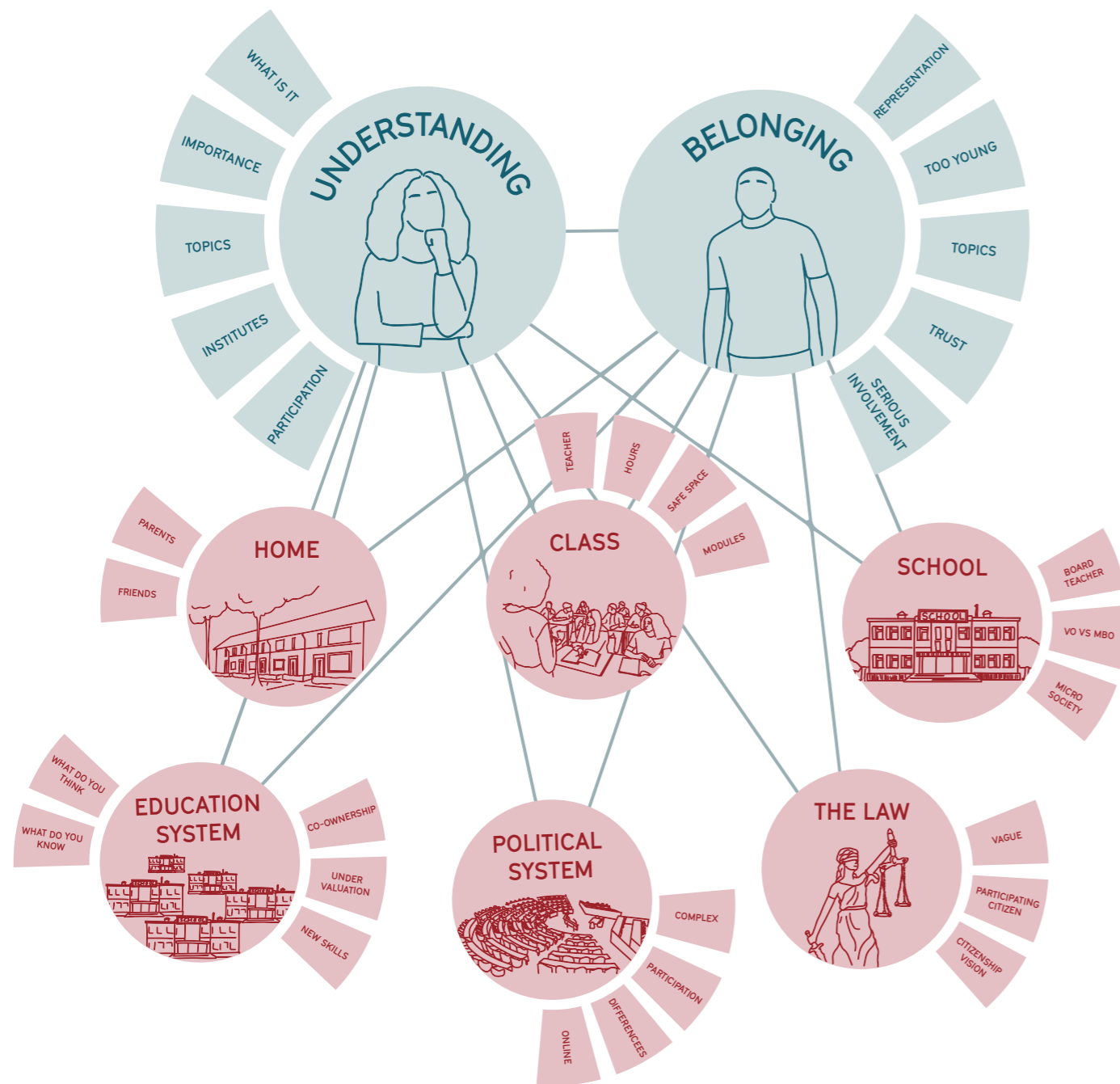
First of all an introduction shares the functioning of the map. This part introduces the reader to the context and shares the research questions.

The right side of the page is scrollable. After reading the introduction, details of the system maps bubbles can be read.

On the left side of the page the visual setup of the system map is displayed. The top two bubbles share the feelings that youngsters develop (colored blue). The other bubbles (colored red) highlight the situational contexts in which youngsters can develop these feelings in an direct and indirect way.

Each bubble functions as a button, guiding the reader to a more elaborate explanation of the bubble on the right side of the page. The elaborate explanation shares the details of the bubble and quotes to help the reader create a sense of empathy.

The system map



An introduction

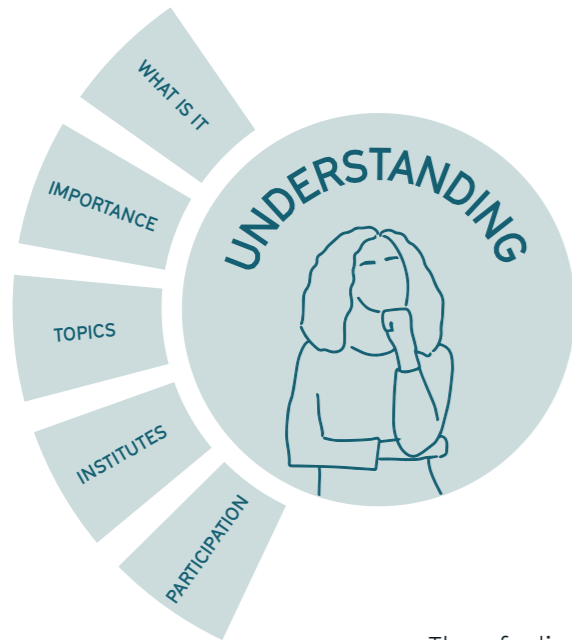
This map communicates the different situational contexts that contribute to the development of a political attitude by youth. This attitude is formed by two aspects, a feeling of understanding and a feeling of belonging. The higher these aspects are, the more likely students will have a positive attitude toward politics and feel motivated to participate politically.

The map highlights the many possible contexts in which various factors influence students' learning experiences. As a result, depending on the factors and contexts students run into, belonging or understanding is positively or negatively developed. In addition, students' personal perception of this experience is also of influence. This highlights the coincidence aspect that comes into play in this complex system.

In general, the more understanding and feeling of belonging one has, the more likely one is intrinsically motivated to participate politically. On the contrary, if a low level of understanding and feeling of belonging is experienced, youngsters will most likely not feel intrinsically motivated to make their voices heard.

Learning citizenship skills and developing the two feelings identified does not only happen within the citizenship class. Youngsters learn in many environments in direct and indirect ways. This map highlights multiple experiences youngsters can possibly encounter.

The map is supported with quotes derived from qualitative research to support the findings. First of all the two feelings and corresponding factors are presented. Second, the situational context, aligned with the factors, that can be of influence in a direct or indirect way are presented.



Feeling of understanding

Feeling of belonging



“ The word politics does not really make me feel addressed. We don’t know about political things.” – MBO student

“Topics such as racism and sexism, it is really important to me. But politics does not really influence us, nor does it influence these topics.” – Y13 MBO student

I would not vote if I do not fully understand - VO student

The feeling of understanding arises in several layers. Understanding is considered similar to the fundamental need for competence in the Self Determination Theory (Ryan & Deci, 2000). Competence is defined as a desire to feel efficacious, influence surroundings and be able to achieve valuable outcomes.

The first layer identified is the understanding of **what politics is about**. Often students do not **relate the word ‘politics’** to themselves.

Aligned with that is understanding the importance of politics. Meaning understanding the **influences** politics can have **on daily life**, and the possible **effects** political **choices** and **voting** could have.

Thirdly, it often remains unclear **what topics** relate to the concept of politics.

Also understanding the **structure** and **setup of the political institutional system** is considered important in order to participate.

Finally, understanding **how to operate and participate** within this political system as an individual. Besides the need students feel to know how to participate, this process of understanding is often time-consuming.

Understanding is often experienced as a must but at the same time experienced as challenging. Due to disinformation and the complexity of the political system.

When youngsters gain a deeper understanding of the political system due to positive contextual experiences, they may be more likely to feel intrinsically motivated to participate politically. Because understanding can support fulfillment of the need for competence (SDT).

The feeling of belonging also arises in several layers. Belonging is considered similar to the fundamental need for relatedness in the Self Determination Theory. Relatedness refers to experiencing a sense of connection and acceptance by a group of people.

The first layer of the feeling of belonging refers to representation. Feeling **represented by politicians** enlarges the feeling of relatedness towards the political system and those who operate within the system.

Aligned with representation comes age. Age is an important factor that could influence relatedness, often youth **feels too young to actively participate in politics**.

Topics that are **close to students’ daily life** enlarge the feeling of belonging compared to topics that they do not relate to. Feeling belonging to a topic is also connected to students **feeling of being able to understand** the system.

The **lack of trust** that the democratic system faces today does often not support a positive development of the feeling of belonging.

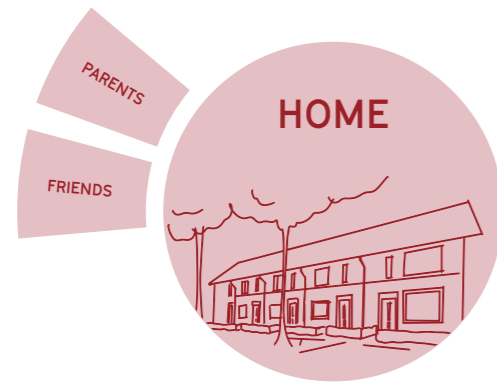
Finally, the feeling of belonging will be increased for youngsters when they feel **like politics takes them seriously** and **involves them actively** in policy making.

When youngsters gain feeling of belonging towards the political system due to positive contextual experiences, they may be more likely to feel intrinsically motivated to participate politically. Because feeling of belonging can support for fulfilment of the need for relatedness (SDT).

“We don’t see people in politics as individuals, but as people in power. They are not relatable to us.” – MBO student

“I don’t think my one vote makes that much of a difference in politics. I think they’ll just do their own thing anyway.” - VO student

The system map



Home

“My youngest brother will join the debate team at school, that is also because he has been practicing at home for 13 years. Especially practicing at home, in a situation which is safe, in general.” – Citizenship teacher MBO

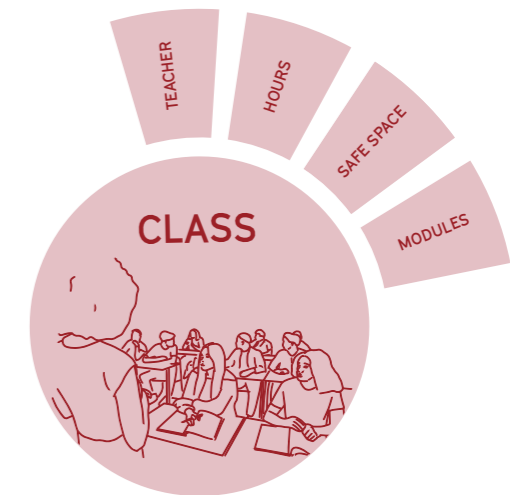
Parents

The development of understanding and belonging varies widely within different home environments. Youngsters are influenced by the way parents interact with politics and their opinions. Besides for some students, the home environment can function as an **exercise environment** for developing citizenship skills such as substantial discussions at the kitchen table. Whereas others are not supported by these types of home environments. This could result in differences per student. Research has proven that factors such as **social economic status** and migration background influence the learning of students from a young age on.

Friends

Friends are also an important factor of influence. Students who **talk with their friends about politics** develop an understanding and feeling of belonging differently than students who don't.

The class



The teacher

The **relationship** students have with their teachers can affect the effectiveness of their learning. Some teachers are able to **create close bonds** with their students. Sometimes a negative clash can appear due to differences in class/school context in comparison to home or street contexts. Students are expected to behave differently in both contexts.

Secondly, the teaching competencies of the teachers also affect students. Teaching citizenship does not require any **citizenship competence** or education. Thirdly teaching preferences, each teacher has their own **teaching preferences**. At the end of the day, teachers are **still human**, they are not always capable of performing at best either.

The hours

On average **few hours** are available for citizenship education. This could result in students leaving school with only 10 hours of political education. When trying to make an **impact, consistent and structural learning** is needed. The very few hours leave little room for improvising and **involving current affairs** within the educational program.

Safe space

Exploring citizenship can be challenging, a **safe space and learning environment** are very important for students to be able to develop. Safe space and learning environment could refer to relations with other students and teachers, feeling confident to share your opinion and participate in class.

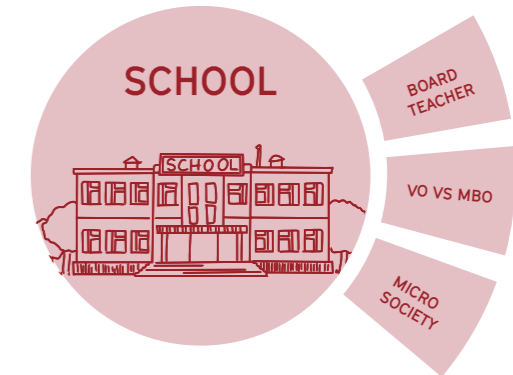
A safe space is also important for teachers. **Discussing complex**, sometimes polarizing, **issues in class** can be very challenging for teachers.

“Teachers do not need specific citizenship competences, everyone can teach the course.” – Teacher and member of publishing group

“Now it is just one activity per period, which will only make limited impact. It should be way more consistent.” – Citizenship coordinator ROC

The system map

The school



“It is very important that there is trust and safety in the group. Also amongst the students, before they can really dare to voice their opinions.” - youngXperts

“Citizenship is getting to know the world, you need to go outside, out of the classroom.” - Citizenship coordinator ROC

Modules

Several types of citizenship modules exist, and students receive different types of education. Modules can vary widely, some are very **theoretical** whereas others focus on **practice and learning by doing**.

Theoretical classes focus on teaching **the institutes**, something that aligns with the traditional ‘what do you know’ approach (See educational system).

Learning by doing approaches focus on **experiencing that participating pays off**. Learning by doing gives the opportunity to get in touch with **the real world**, and get students active. Experiences stories and getting in touch with real people can make great impressions on students.

Modules also vary in suitability to the students. Some show a **one size fits all** approach, whereas others focus on linking theory and experiences to students’ **own living environment** or their **professional education**.

The school board & teacher

School boards and teachers are obligated to develop **citizenship visions**. The quality and content of visions vary widely between individual schools. The citizenship assignment is very broad, **choices** on what to educate, in what way, and when within the limited hours available need to be made. This results in differences per school.

The vision influences the setup and execution of the education. Each school makes different choices within the available **modules**, and the quality of methods varies widely. The teacher also plays an important role here, independently from the module, they are able to improve citizenship education. However, approval by the board and some **volunteering** hours are needed for improvement.

VO and MBO differences

Another factor of influence is the **level of education** students follow. Citizenship differs at VO and MBO.

VO education is in general more focused on **theory** and teaching the institutional setup of democracy. Due to age and the type of education, students have less practical experience. **MBO** students have to do internships that bring along **practical experiences** and they need to choose a specific professional education. Some **professional educations** align more with citizenship-related topics than others.

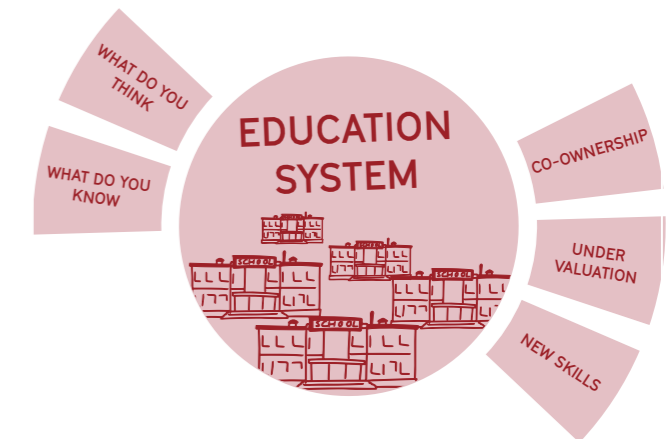
Within VO **differences** are also seen between **VMBO and HAVO/VWO** education. VMBO education often focuses more on **adjustments to societal norms**, whereas HAVO/VWO

“Often you see teachers who give citizenship as a side course. They did not study for it.” - Teacher and member of publishing group

“There is a big difference between VO and MBO. MBO students choose a professional education. I notice if you bring up topics, with third year students, they have much more understanding due to their practical experience at internships. VO students do not have a lot of practical experience yet.” - Citizenship teacher

The system map

Educational system



“Giving youngsters a voice, and making them feel their opinion matters. This is not only politics, it also happens in micro environments.”
- ExI2 Professor youngXperts

education is also focused on critical self-reflection towards society, **forming own opinions**, and having the ability to adjust the society (Nieuwelink, 2016 & Eidhoft et al., 2020).

A general feeling of belonging to society is often lower for VMBO and MBO students. Due to the **undervaluation of their educational level** by society. More details are shared on this in the theme ‘Educational system’.

Micro society

Practicing citizenship skills can also happen on a **micro level**. Involving students to have a say within the school board could function as a great practice environment. School can be the perfect learning environment for developing democratic values because of its overlap with democracy as a micro-society.

What do you know

The educational system in the Netherlands is often really focused on **measuring knowledge**; what do students know? This question aligns with a **theoretical** learning approach, teaching students the setup of the democratic system. The theoretical learning approach can be questioned regarding the minimal relation to practical citizenship skills.

Knowledge and **understanding** of the setup of the democratic system are **important** to some extent.

What do you think

Shifting the question toward **‘what-do-you-think?’** seems valuable. Learning that politics is **more than** just an **institutional system**. Learning that politics happens all around, not only in The Hague, one can have a critical view on political themes close by and be a part of this. This implies students making the so-called political system ‘their own’. Besides, asking what they know about politics often scares them away, and asking ‘what-do-you-think about...’ opens another conversation. **Co-ownership** and learning by doing are valuable methods to share more than the theoretical setup of the system.

Co-ownership

Co-ownership allows students to **practice** ‘What do you think’ of the big society in a micro-environment that is safe and familiar. It develops a feeling of **responsibility** and automatically steers a mindset in which you will form your own opinion. Besides the benefits for students, it also benefits others, making decisions about students or with students gives different results.

“I try to emphasize that politics is not just about the first and second chambers. You see that at first students say ‘I know nothing about politics’. But if you ask about a refugee crisis, the answers are right there! But hey, that exactly is politics.”

The system map

“Learning to discuss something you don’t know much about and forming your own opinion are two separate skills that you need to learn.”

Level Differences

As mentioned in ‘VO and MBO differences’ a lot of **different levels and educations** teach students citizenship skills. Therefore a lot of different types of education are taught to a lot of different types of students.

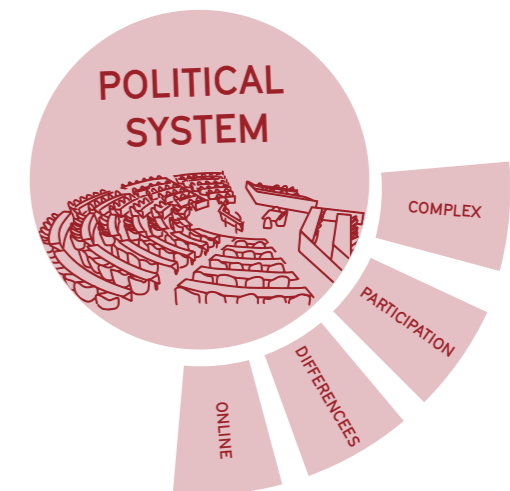
Feeling **undervalued** is often experienced by VMBO and MBO students can be very strong. This feeling of being undervalued appears due to the way the educational system is viewed by society. Framing VMBO and MBO education as ‘low’ levels of education. This influences the way students view themselves within society, impacting their feeling of competence.

New skills

Learning to be a participatory citizen within citizenship asks for developing **new skills**. Citizenship skills such as debating, forming your own opinion, on topics you might not be familiar with, and experiencing controversial opinions of others. Developing these skills is something that comes with experience.

Developing the skills can be exciting. Therefore a **safe learning environment** is really important.

Politics



Complex system

The political system is very **complex**. Often we see that not even all employees of municipalities and governmental organizations fully understand in what way for example the local council operates.

This complex system does not show to be **effective** in involving youngsters within the participatory processes. The current structure in which the system operates does not align with most youngsters. The usual suspects and so-called **‘beroepsjongeren’** do participate. The system and policymakers need to make an **effort to involve** a representative group of youngsters by asking other questions with new methods.

Conventional and unconventional participation

Democracy knows **conventional and unconventional** participatory forms. Most conventional forms do **not fit youngsters**, as they operate in the structure of the current complex system. Youth panels, local youth councils, and political youth parties are examples of these conventional forms.

Unconventional participation is a **non-electoral form of participation**, such as demonstrating. It is important to experience that conventional participation is not the only method to make your voice be heard.

The existing participatory forms of conventional participation are designed for the **beroepsjongeren**. This is a shame because other youngsters do have dreams and valuable visions. Involving all youth, by making an effort to ask them what they think is important. Looking for **new forms** and making them feel owner and heard is important.

“Not even everyone who works for the municipality knows how the council functions...” - Griffie member Rotterdam

The system map

“It is important to know that timelines of youngsters are very short, and of policy makers very long...” - YoungXperts

“Seeing memes of the minister on his bike makes me think he is also just a normal man.” - MBO student

Differences system and youth

Youth and policymakers are **different from one another**. First of all, youth **brains** are still developing, which makes them think more **short term** and in general more creative to think out of the box. Whereas policy is very **long-term focused**. Secondly, the lack of **representation** clearly highlights differences in **age** but also **education**. Only 65% of Dutch society is max. HBO schooled, whereas in the kamer only 7% is HBO schooled. [GETAL VAN AANTAL JONGERE IN DE KAMER]. Besides these differences does the complexity of the system also not stimulate for participation due to **jargon** and the **need for** some basic **level of understanding** of the complex system.

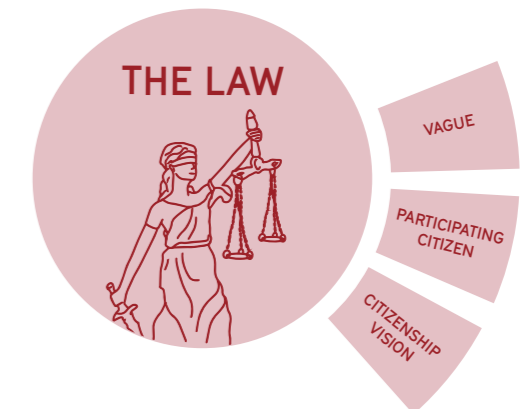
Politics online

The view of youth toward politics is also shaped by what they see online. Politics is also intertwined on **social media platforms**, such as Instagram, TikTok, and Twitter. Within these online platforms mostly the national politics is visible.

Often we see that youth does not actively follow the (local) news. They use social media platforms as their main **news sources**.

Furthermore, politics is only clearly visible in daily life during electoral periods, through **electoral campaigns**. Interestingly these campaigns do not always reach youth. When one is involved in politics, you are more likely to notice these electoral campaigns.

Citizenship law



Broad & vague

Citizenship is **obligatory by law** in the Netherlands at **BO, VO, and MBO**. Each educational level knows slight differences within the law, for example, MBO education knows an effort obligation.

Despite guidance by law, the citizenship assignment is very **broad**, it often remains unclear for schools how to fulfill the citizenship assignment. Citizenship entails many topics. How often, what, and when to educate is a choice that needs to be made. Despite recent changes, the law is still **under development**, due to the unclarity that is experienced.

The participating citizen

The aim of the law is to educate students to become **‘participating citizens’** in society. Teaching them to have the capacity and desire to participate and contribute to the community they belong to.

Citizenship is a **membership in a community** based on the principles of member equality and shared accountability for the affairs of the society to which you belong. The participating citizen

Citizenship vision

Schools are obligated to substantiate their citizenship program with a **citizenship vision**. The quality of visions varies from school to school. A citizenship vision allows the **education inspectorate** to test and measure the quality of citizenship education.

“Citizenship is super broad. It is about democracy, but also homosexuality or staying out of debt. You can never cover all, and one thing is not more important than another. The guidelines from the ministry are very vague..” - Citizenship teacher

The system map

5.3 Defining the design focus with the system map

The previous section described the system map that was developed. The map provides the empathic base needed when designing for citizenship education. The map shares the complexity of the context of citizenship education. However, the complexity of the context asks for choices and a design focus considering the time frame of the graduation project.

The use of an effort-impact matrix (ASQ, n.d.) helped to choose a design focus by mapping the contextual details of the system map into the matrix. The aim of the design goal is to strengthen the understanding of the relation between MBO students' daily lives and the municipality, by facilitating the moment to see this relation by performing an activity in class.

The effort-impact matrix is a decision making tool that assists in creating a focus. Each situational context can be mapped within the matrix based on the level effort it requires to increase the feeling of understanding and belonging and the potential impact it could generate, effort is placed on the X-axis and impact on the Y-axis. (Figure 26). The next section elaborates the consideration of placement of the context bubbles in the effort-impact matrix.



Figure 25. Working with the system map

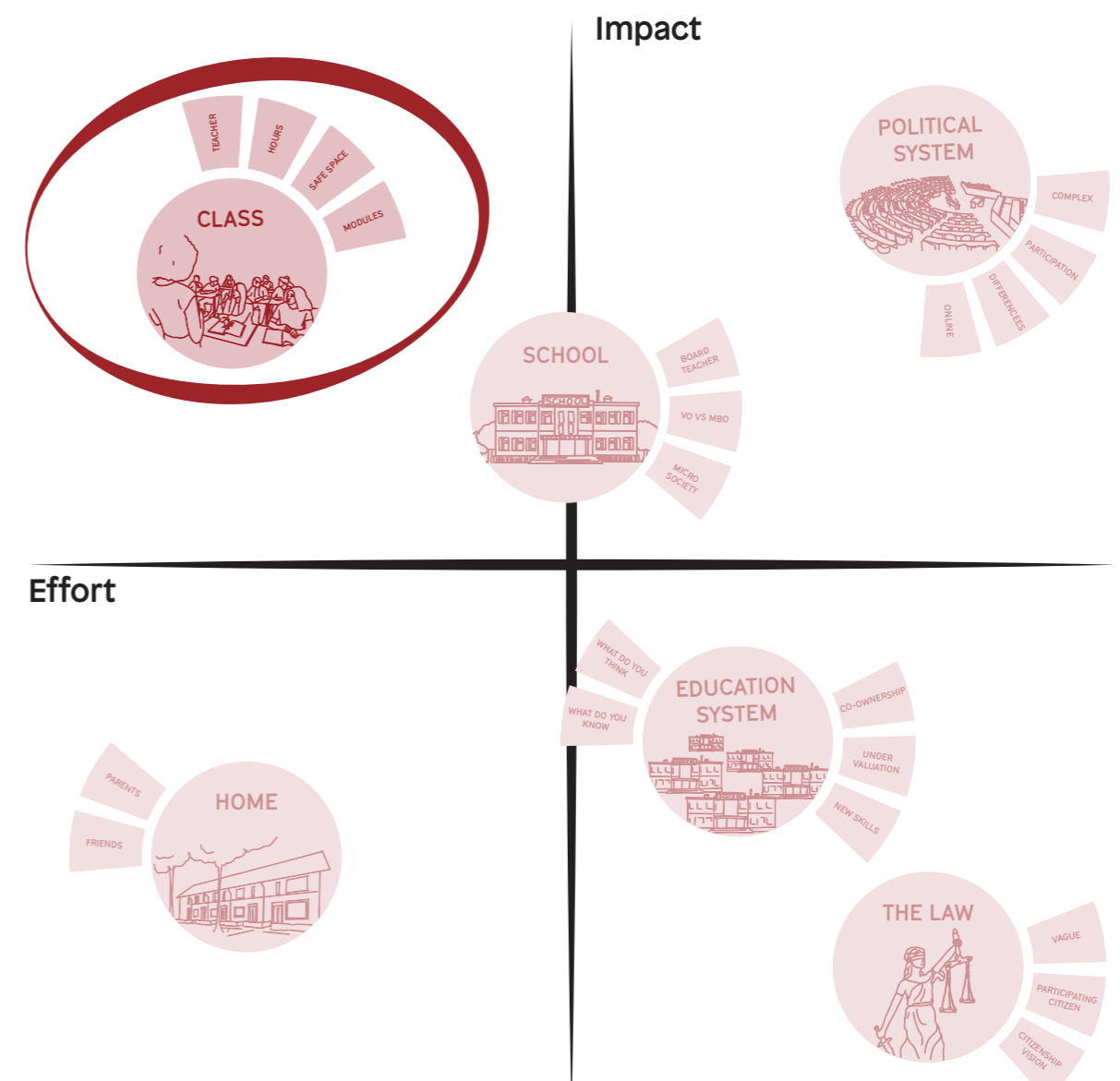


Figure 26. Impact Effort matrix

The system map

5.3.1 Placement of the contextual bubbles in the impact-effort matrix

Home

Designing for the home environment is considered to be high effort due to the fact that it might be difficult to reach the non-participating groups. Chances are most likely that one could only reach the usual suspects, therefore the impact achieved would be rather low.

Class;

designing in the context of class would be of a relatively low effort. Classes are quite easy to reach and a wide variety of youngsters can be involved. The impact will be higher as the class context knows a wide variety types of youngsters.

School;

designing for the school context (school board e.g.) would be of medium to high effort, however impact might be harder to measure and be more long term. A lot of external factors could still impact the changes within teaching citizenship to youth.

Politics;

changing the political system would most likely have a very high impact, but is at the same time a process with a lot of effort. Achieving a high impact in this context will not be possible within the scope of the graduation project, and most likely not even within the scope of a few years.

Educational system;

the same holds for designing for the educational system, as this is really a systemic environment, a lot of external factors are of influence. Therefore effort would be very high and impact most likely low.

Citizenship law:

designing for the law is most likely not possible, especially within the scope of the graduation project. However the impact could be really high long term.

Concluding:

The effort-impact matrix clearly show that designing for the class context is most valuable and interesting within the scope of the graduation project. This context also aligns best with the research questions.

5.3.2 Choosing factors to fulfill the two feelings with the design

After deciding the context to design for, the class, design requirements are generated. The system map functions as a guideline for the design requirements. This section describes in what way the design requirements were derived from the system map.

The goal is to design for the fulfillment of the two feelings identified, feeling of understanding and belonging. Fulfilling understanding and belonging is important as it could increase students intrinsic motivation (SDT) to participate politically and be included within the democratic system. This design challenge keeps the higher goal of working towards a more inclusive democratic system in mind. A democratic system in which youth feels included.

The two feelings – understanding and belonging – are influenced by many different factors, as is highlighted in the map. All factors were considered and evaluated. The focus was to identify whether or not the factors could stimulate positive development of the two feelings in the context of class. The map and its empathizing quotes supported this process.

The aim of the requirements is to increase feeling of understanding and feeling of belonging within the context of class. Some factors and opportunities present in other contexts could also be included within the requirements. The situational contexts the class, school and educational system were used when defining the requirements.

The next section describes in what way the factors within these contexts could fulfill the feelings and what aspects of understanding and belonging will potentially be increased.

The *red* words explain what factor in situational contexts are considered. The *turquoise* words explain what factor belonging to the two feelings will potentially be fulfilled when involving the factors from the contexts.

The system map

The class

Safe space

It will be important to create a *safe* learning environment within the design and class context in which students are able to *feel free to participate and share opinions*.

Participation in a safe space can increase the feeling of belonging as it enables students to *feel taken seriously and involved* more easily.

Modules

A design that increases for active participation in class, that implies *practice and learning-by-doing* could increase understanding.

It will be valuable to step aside from theory to share *what politics is*, more than just an institutional system. Learning by doing decreases the theoretical attitude of politics, and will help students to actively learn in what *how to participate* and form opinions.

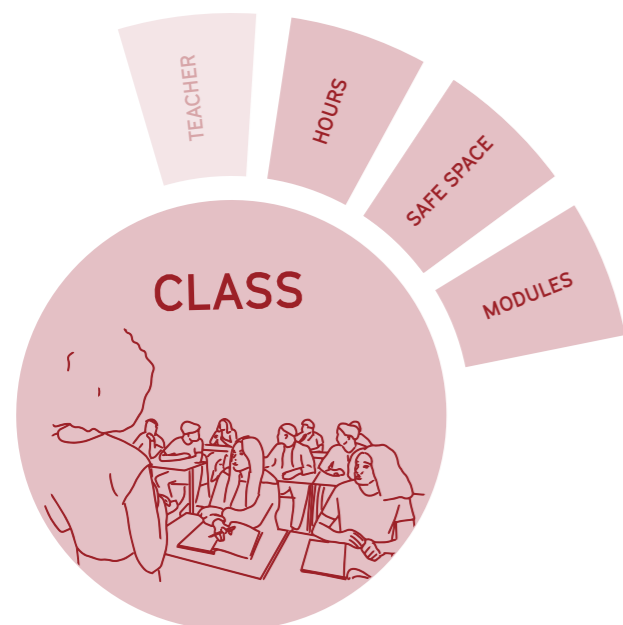
Aligning the design with *students' daily lives* can help to increase understanding and feeling of belonging.

Using topics one relates to within the module brings politics closer to them as you increase the understanding of *what politics is* about. In this way it is easier to understand *what topics* politics could be about and *why it is important*. An increased feeling understanding could also increase the feeling of belonging with relatable *topics*; if you do not feel *too young and involvement*.

The hours

It will be valuable if the design enables teachers to easily *involve current affairs* within the educational program requiring less hours.

Involving current affairs, again helps to link politics to students daily lives. Which will increase understanding, *what it is* about, *why it is important* for them personally. It will increase feeling of belonging as one can relate to the *topics*.



The school

The teacher

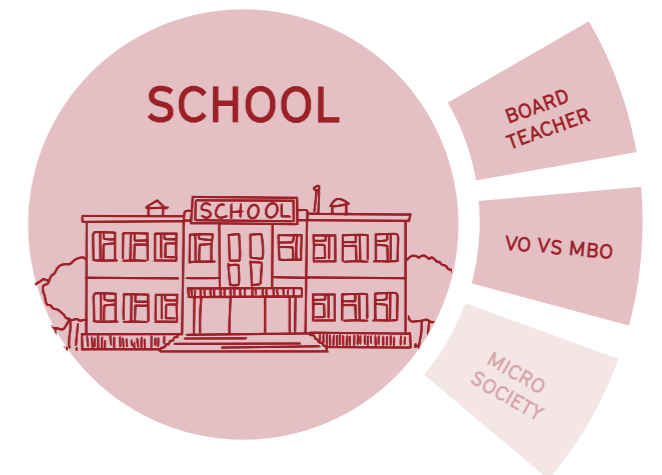
A design that allows for open use can support *teachers and boards* to easily implement the design within their education and align it to the *citizenship vision*. Also openness can help to decrease *volunteering hours* when trying to develop valuable education.

Supporting teachers and boards with an open module does not directly influence one of the sub aspects of understanding and belonging but it could help teachers to carefully guide students to autonomously increase *understanding and belonging*.

VO MBO differences

Similarly to feeling *undervalued*, could the design aim for open ended use. The design could allow to be used in *every level*. Decreasing students to feel undervalued and challenge them to participate using their talent and skills.

Making a design for open ended use that decreases feeling undervalued will increasing students to feel *involved and taken seriously*.



The educational system

What do you think

Involving a 'what-do-you-think' approach within the design will stimulate students to form their own opinion. This translates to an approach that is not focused on testing what you know about the system but on forming an opinion and relating yourself to politics.

This question can increase a feeling of belonging when students are *involved and taken seriously*. Taking away their feeling of being *too young* to interact with politics and to participate politically.

The system map

Co-ownership

Aligned with a what-do-you-think approach comes *co-ownership*. Involving co-ownership in the design will help students to feel responsibility for a topic or problem.

A feeling of responsibility can increase understanding as it stimulates learning what *topics* politics relate to. Co-ownership takes away feeling *too young* as one is *taken seriously and being involved*.

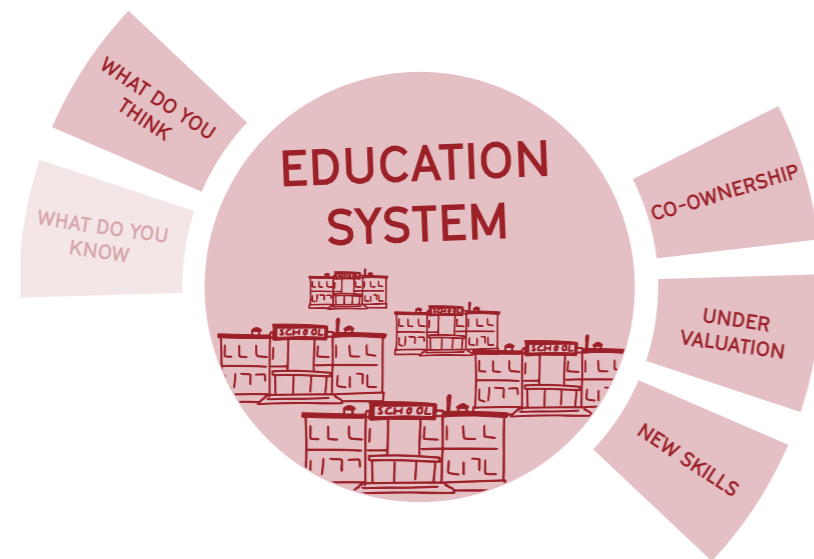
New skills

The design should stimulate students to develop *new citizenship skills*. Developing these skills comes with experience and by doing and is more easy in a safe learning environment.

Developing new skills increases understanding of *how to participate* by putting the development of citizenship skills to practice.

Undervalued

The design should decrease (MBO) students to feel *undervalued*. A decreased feeling of being undervalued will most likely increase a feeling of belonging by making sure students *feel involved and taken seriously*.



The system map

5.3.3 Presenting the design requirements and design goal

Aside from creating a design focus based on the requirements a specification on the target group was also made. The research so far and the map included VO and MBO students. When entering the design phase the choice was made to fully focus on MBO students. Several insights have led to this decision. First of all the MBO students often feel undervalued in society. Secondly MBO students are less likely to be involved in political participation. And finally the representation of MBO students in politics is far too limited (Rovers, 2022).

The listed factors from the chosen contexts and their potential to positively influence the feeling of belonging and understanding can be summarized into the following design requirements. The requirements are structured from most to least important. Meaning that the first three requirements are considered must-haves for the design. Other requirements are considered nice-to-haves, for example because they affect the students in a more indirect way. Ordering the importance of the requirements is added considering the time frame of the project.

The learning approach

1. Link policy in the design to students' daily lives
2. What do you think - approach
3. A learning-by-doing approach
4. Create a feeling of ownership

A learning-by-doing approach, linking students' daily lives to politics. Asking students 'what-do-you-think' and in that matter creating a feeling of ownership.

The learning environment

5. A safe learning environment
6. Environment to develop citizenship skills
7. Decrease students to feel undervalued

A safe environment in which citizenship skills can be developed supporting for the decrease in the feeling of being undervalued.

The functioning for the school

8. Allow for easy implementation of current affairs
9. Open-ended; easy to align with citizenship vision

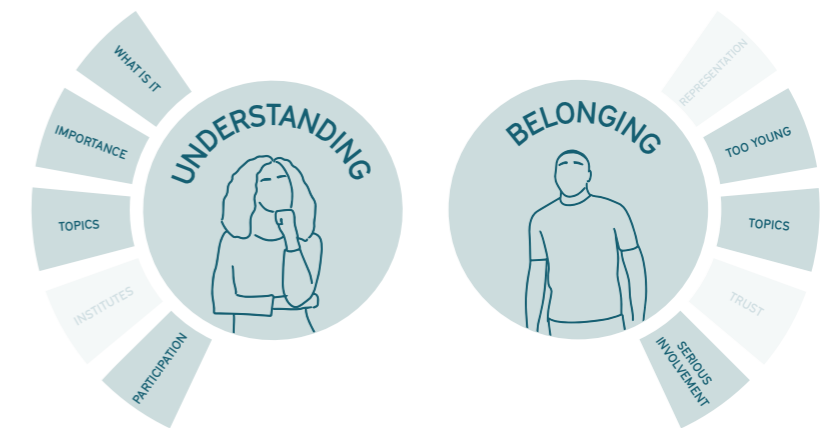
An open-ended method; Allows for easy implementation of the current affairs and in that matter easy alignment with the school's vision.

The design requirements touch upon several factors of the two feelings, developing a feeling of understanding:

- » What is it
- » Why is it important
- » What topics
- » How to participate

And a feeling of belonging:

- » Too young
- » Topics
- » Involvement seriously



The main focus of the design phase can be summarized into the following design goal.

Strengthen the understanding of the relation between MBO students' daily lives and the municipality, by facilitating a moment to see this relation while performing an activity in class.

The design goal keeps the second goal in mind; creating the realization that students have the competence to adjust decisions that influence their daily lives within politics.

5.4 Key insights

The map

The chapter introduced the system map. The map includes the two feelings and situational contexts. The two feelings, or fundamental needs, include the feeling of understanding and belonging. These two feelings are positively or negatively developed by the several situational contexts and factors that influence students learning.

The several contexts in the map include very direct factors, such as the home environment or in class. Whereas others influence students' learnings more indirect, such as school and politics. Other contexts have an even more indirect influence, such as the educational system and citizenship law.

The map enables to create a thorough understanding of the problem in context by capturing the complexity of citizenship education and political participation. The map provides an empathic base for the design phase.

The design focus

The design focus was derived from the system map using an impact effort matrix. Because of the complexity of the context choices to design for were captured in a design focus. All contexts were mapped within the matrix to evaluate what context is most meaningful to design for within the scope of the project.

The design focus was derived from the system map using an impact effort matrix. The choices to design for were captured in a design focus. Each contexts was mapped in the matrix by evaluating what context is most meaningful to design for within the scope of the project. This indicated that the context of the class is most promising, it allows one to make an impact with relatively little effort and aligns best with the research questions.

After choosing a focus, design requirements were derived from the map. Besides deriving design requirements, the target group of the project was detailed down to MBO students. The motivation to design for MBO education considers their feeling of being undervalued in society. Several contexts functioned as an inspiration when creating design requirements, the requirements aim to increase understanding and belonging. The context of the class, the school, and the educational system were used as inspiration. The factors that seemed valuable from these contexts were translated into design requirements fitting in three themes. The requirements are structured from most to least important.

The first theme concerns **the learning approach**. The learning approach concerns that the design should aim for students to see the link between their daily live and politics [DRQ1]. In addition, the design should contain a what-do-you-think approach, stimulating students to form their own opinions [DRQ2]. Also, the design should stimulate learning-by-doing and support an active approach in which all students actively learn and participate [DRQ3]. Finally, the design should aim for ownership, meaning that students feel some level of ownership towards the topic and the ideas they discuss [DRQ4].

The second theme concerns **the learning environment**. The design should create a safe learning environment in which students feel free to share their opinions and discuss complex themes [DRQ5]. Secondly, an environment in which citizenship skills can be developed [DRQ6]. And finally, the design should aim to decrease MBO students to feel undervalued. By enabeling the students to discover their competencies to be involved with the municipality [DRQ7].

The third theme concerns **the functioning of the school**. The design could allow for easy implementation of current affairs [DRQ8]. Along with that, aim for an open ended-approach, enlarging the possibility to align the design with the schools' citizenship visions easily [DRQ9].

In general, the first theme and design requirements 1-3 are most important. These requirements seem most promising to directly increase understanding and belonging.

The design goal is to **strengthen the understanding of the relation between MBO students' daily lives and the municipality, by facilitating a moment to see this relation, while performing an activity in class**. With a higher goal, to make sure students feel competent to be part of politics and be of influence.

6.0 Ideation

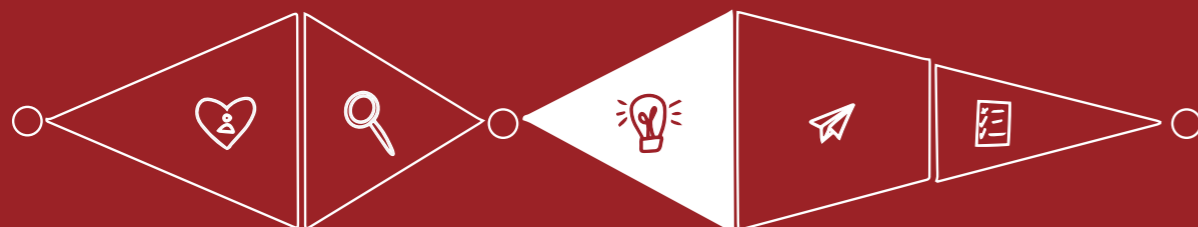
The first part of the graduation project focused on diving into the context of citizenship education and political participation. This data is translated into the first product, the system map. The system map creates understanding for the complexity of the challenge. In the second part of the graduation project a design is created based on the design requirements found within the system map. This chapter describes the process of ideation with stakeholders. First of all, the methods for ideation are explained. Section two describes the activities that shaped the iterative process. The third section presents the three concept directions and the insights gained from evaluation. The chapter concludes by presenting the key insights.

6.1 Method

6.2 An iterative process towards the design

6.3 Evaluation of the possible design directions

6.4 Key insights



Ideate

6.1 Method

So far the empathy and define step, resulting in the system map, helped to create extensive understanding of the context. The second part of the project focusses on developing a design that fulfills the design requirements. This part aligns with the second half of the design thinking method (Figure 27). The empathy created, the design goal and requirements function as a base for this part.

This part is involved iterative ideation activities to create concepts that could potentially meet the requirements and design goal. Three design direction resulted from the ideation activities. These directions were evaluated, the insights of the evaluation are presented.

This section tries to answer the following research question, aiming to fulfill the design goal.

3. What educational design fits the needs of youngsters, teachers, schools and the municipality?

Strengthen the understanding of the relation between MBO students' daily lives and the municipality, by facilitating a moment to see this relation while performing an activity in class.

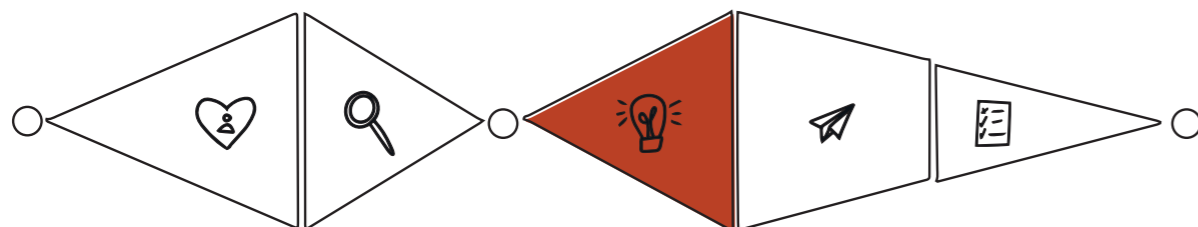


Figure 27. A visual representation of the development of the system map using Design Thinking

6.2 An iterative process towards the design

This section describes the iterative ideation, prototyping and testing activities that helped to shape the design. The design requirements and design focus create a base for ideation. Ideation was executed in an iterative process using multiple ideation activities. The ideation activities delivered sketches and concept scenarios. These sketches and concept scenarios were iterated and evaluated in test interviews and other ideation activities such as co-creation sessions. The next section describes the setup of the ideation and testing process that resulted into design directions.

Methods ideation & testing process

Co-creation sessions

Co-creation sessions functioned as one of the methods of the ideation and testing process. In total two types of co-creation sessions were organized within five sessions. Three creative sessions were facilitated and executed by peers within the course Creative Facilitation (Figure 29) (CC1, Appendix 46). In total 15 students participated and each session lasted for 2,5 hours. The project participated within the course as a case, the facilitators were provided with a description of the case. Next

to the case description, several meetings deciding for the main goal of the sessions. During the sessions the facilitators asked questions and guidance to increase clarity and ensure the session was aiming for the right goal.

A co-creation session was organized for the province of Noord-Holland (Figure 28) (CC2, Appendix 47). Seven citizenship guest lecturers of the province participated within the session. The session lasted for 2 hours.

The main goal of the sessions was to further generate ideas for the design goal.

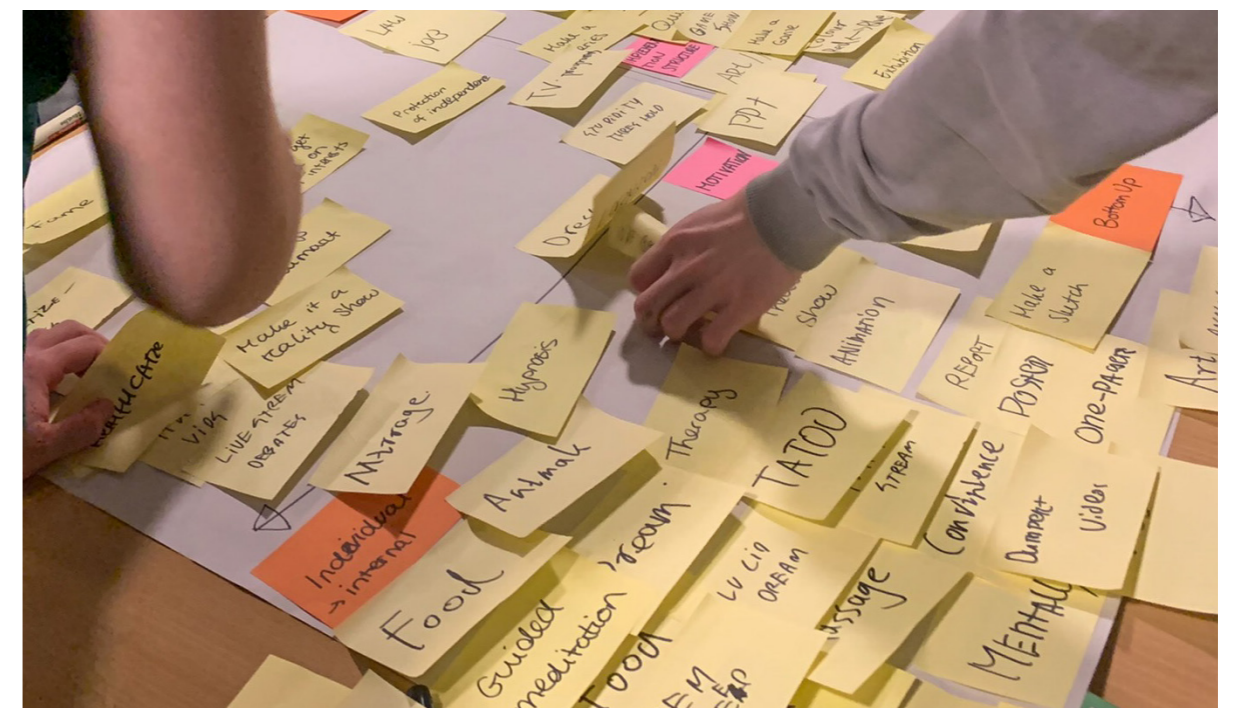


Figure 28. The co-creation session with the Province of Noord-Holland

Figure 29. The co-creation session with peers from CF

Ideate



Figure 30. The brainstorm at ABZ

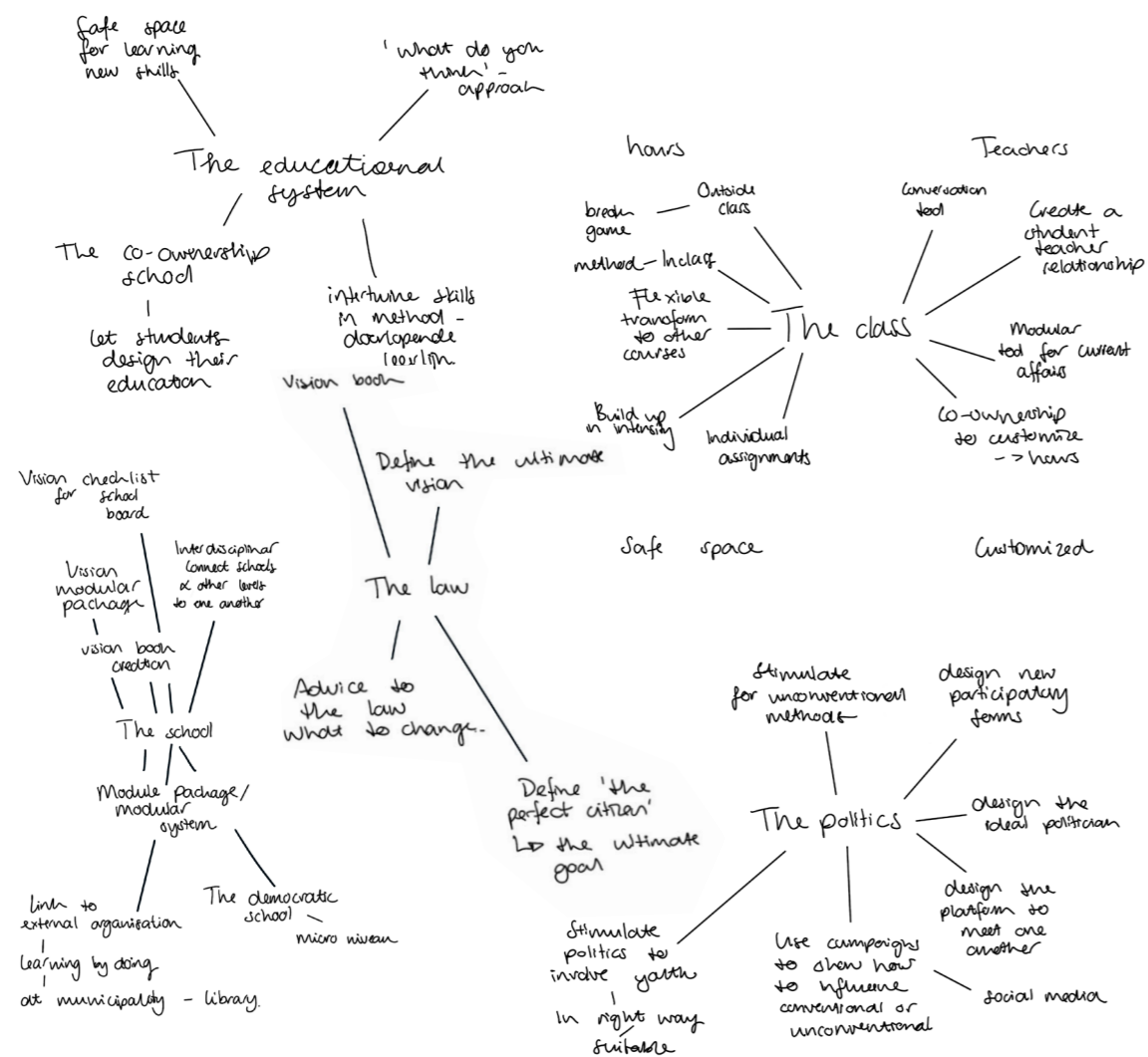


Figure 31. An example of the brainstorm results

Brainstorm sessions

Five individual brainstorms and one brainstorm session together with two colleagues from Afdeling Buitengewone Zaken helped to detail down the concepts generated within the co-creation sessions (CC1) (Figure 30 - 28). Insights of the brainstorm sessions can be found in appendix 46.

Co-reflection

Three co-reflection sessions functioned as a means to test several ideas (Figure 32). In total seven youngsters participated in the sessions. In one session five VO students participated the other two sessions were one on one with young neighborhood council members of the municipality of Rotterdam (Y16 - Y18, Appendices 33 - 35).

The co-reflections functioned with a double assignment, the first half of the reflection focused on empathizing, the second half focused on evaluating the concepts presented. The goal of the second half of the sessions was to test the concepts with youngsters.

Reflective interviews

In total four reflective interviews with five participants helped to test and iterate concepts. Three interviews were with the municipality of Rotterdam (MI4 - MI6, Appendices 15 - 17). One interview was with the 'Koninklijke Bibliotheek' (ExI11, Appendix 27).

The aim of the interviews was to evaluate the concepts created and further deepen understanding of the functioning of the concepts.

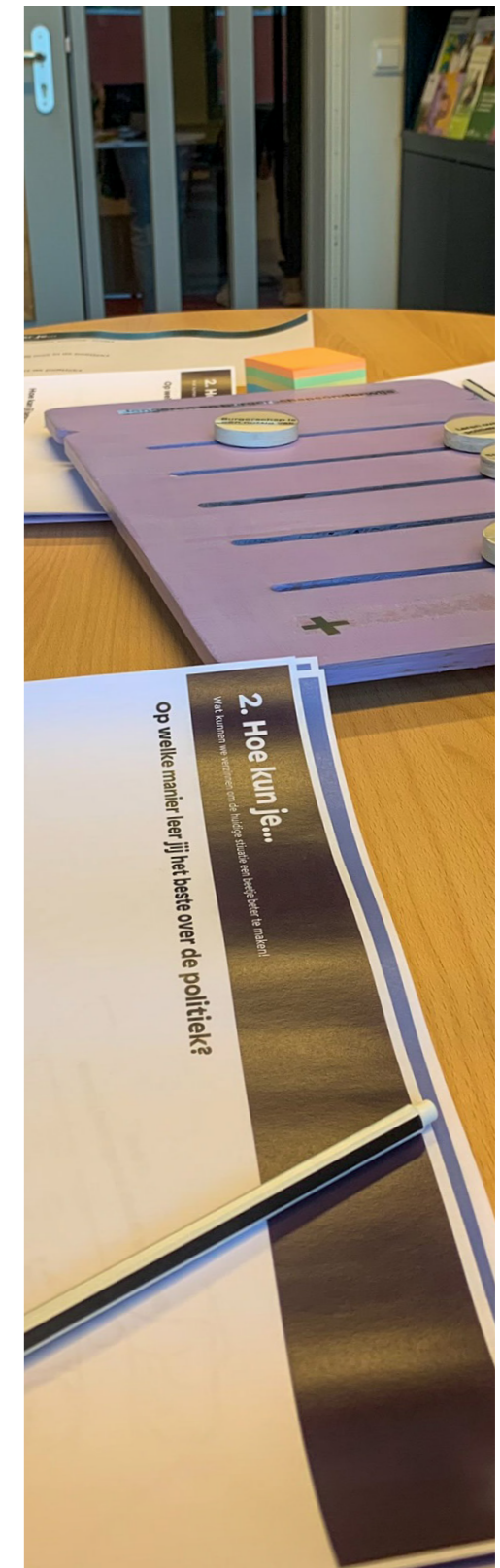


Figure 32. An image of the co-reflection with VO students

Ideate, prototype & test

6.3 Evaluation of the possible design directions

6.3.1 The concept directions

All of the activities resulted into many ideas. The ideas were translated down to three design directions. Each design direction was iteratively explored within the ideation and testing activities. The design requirements helped to evaluate the three design directions. This evaluation process gave insight in the strengths and weaknesses of each direction. These insights were translated into the final design direction.

The final design direction has been tested and prototyped iteratively within seven user testing sessions. The testing process is described in the next section.

Figure 33 shows the iterative process of developing the design directions, the final direction and the testing process towards the final design.

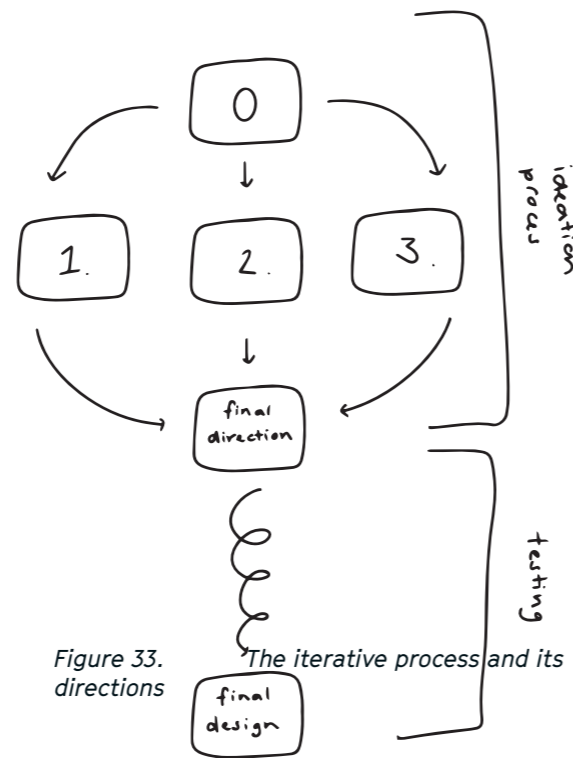


Figure 33. The iterative process and its directions

0

Direction 0

The concepts of direction zero are considered the concepts presented during the co-reflection sessions (Y16 – Y18). These concepts will be presented in appendices 33 - 35. The concepts functioned as a start for creating the three directions.

1.

Direction 1 connect the municipality to schools

The first direction focuses on shaping contact between the municipality and schools (Figure 34). The municipality and students are matched within a educational program of several weeks.

The project starts at school as the municipality provides several types of assignments to the students. The module supports students to identify what project they want to be involved in. The project is executed at the municipality together with policy makers from the municipality after its start at school. Students are matched to policy advisors from the municipality that are involved with the topic they have chosen. The project will be finished at school and handed in to the municipality.

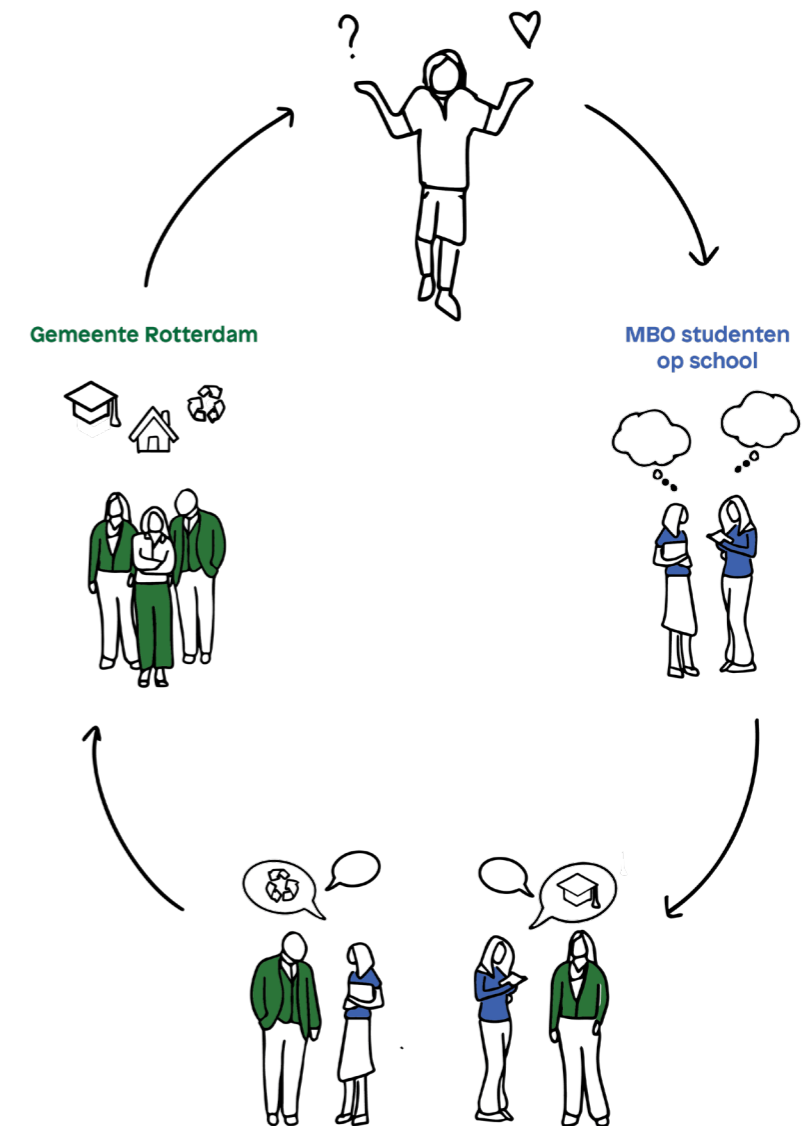


Figure 34. A visual of direction 1

Ideate

2.

Direction 2 support the teacher

The second direction focusses on supporting the teacher (Figure 35). Teaching citizenship is a challenge and the quality of the education is influenced by the teacher. Due to the limited hours available and the difficulty and wideness of citizenship supporting teachers can improve the quality of the education.

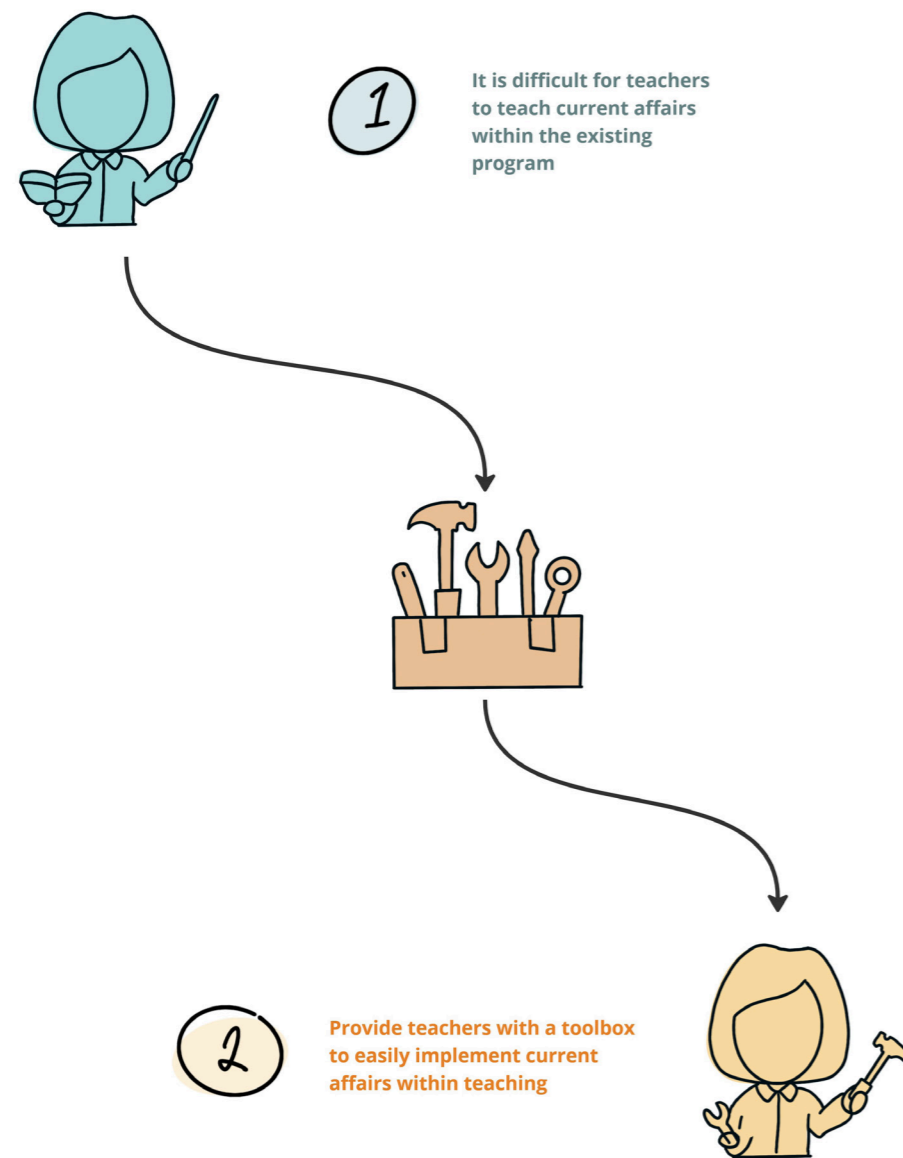


Figure 35. A visualisation of direction 2

3.

Direction 3 explore a decision making process

The third direction focusses on experiencing a decision making process related to political themes (Figure 36). The students are challenged to consider multiple dilemmas on several themes related to the municipality. The concept involves scarcity in a tangible and physical way. Because of the scarcity students need to make decisions and trade-offs that would also appear in the real world. At the end of the class a result is printed that could visualize in what way the class has 'ruled' their city.

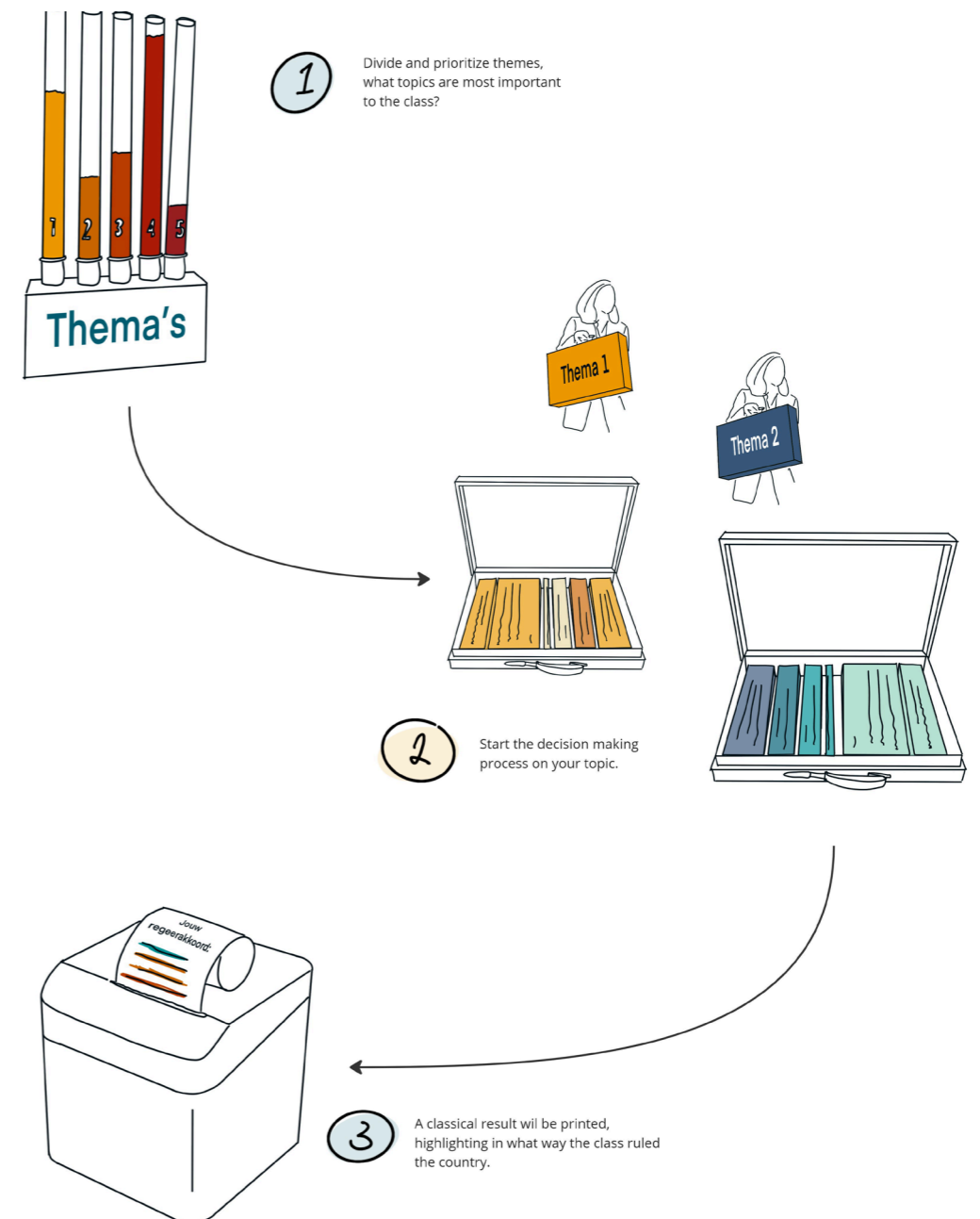


Figure 36. A visualisation of direction 3

Ideate

6.3.2 The three directions evaluated

This section explains the results when evaluating the three design directions. For each direction the design requirements are taken into account by referring to the corresponding requirements, which can be found on page 92. The ideation and testing activities described in the previous sections have led to the following insights.

Insights direction 1

The learning approach

In the first concept direction involves linking the students to policy in a very direct manner through students and the municipality meeting physically, which promotes for active learning [DRQ 1 & 3]. By taking a project approach, students are encouraged to take ownership of their project and feel responsibility due to their direct link to the municipality [DRQ 4]. Overall the project is designed to promote a what-do-you-think approach [DRQ 2].

The learning environment

Within this direction the learning happens at school and at the municipality. Creating a safe environment as stated is therefore depending on both locations [DRQ5].

It is important to note that the students' sense of being undervalued may be depending on the municipal councilor's ability to foster their sense of importance and engagement in the project [DRQ7]. Despite potential learning challenges, such as feeling safe, being present at the municipality is a valuable location for students to develop citizenship skills in a practical setting [DRQ6].

The functioning of the school

This concept does not allow for implementation of current affairs by the school. However we could assume that the municipality will involve topics that are on the agenda locally [DRQ8]. Also, the direction is not fully open ended, as the concept aligns mostly with the political-legal dimension [DRQ9].

Summary

The second concept seems promising in terms of achieving the most important design requirements (1, 2, 3). However, implementing this concept within the time frame of the graduation project might be challenging. Additionally, the concept relies heavily on collaboration with the municipality. The reflective interviews with the municipality showed their interest in the concept and the hesitation on the short-term execution. Therefore, more effort and time might be needed to build a strong base with the municipality to be able to successfully execute the concept.

Take-aways

Include the aspect of a real and direct connection with the municipality and by including municipal themes.

Insights direction 2

The learning approach

Exploring a decision making process enables students to link policy making to their daily lives. Choosing the theme within this policy making process, increases the ability to see this link [DRQ1]. An active learning approach is stimulated using the physical and playful way to explore the decision making process [DRQ3]. Receiving feedback at the end of the class could also stimulate a sense of ownership as students were able to create this result [DRQ4]. However, this concept lacks the what-do-you-think approach because of the limited involvement of creativity and including personal opinions [DRQ2]. Because the decision making process and possible tradeoffs for students to be made are already filled in.

The learning environment

This concept allows for positive improvement of a safe learning environment by skilling teachers. Enabling the teacher to know how to create a safe learning environment amongst students in class [DRQ5, 6].

The functioning of the school

This concept focusses on supporting the teacher by including current affairs in class within limited time available [DRQ8]. The concept is very open ended therefore allowing for alignment to the citizenship vision [DRQ9].

Summary

Based on the information stated above, it appears that this concept may not be the most suitable for achieving the design requirements. The emphasis on the teacher and the indirect approach may be ineffective. It is critical to prioritize the students' needs and perspectives in this project. To ensure that the learning experienced is design to actively engage and empower students.

Take-aways

include some bits of the supporting role of the teacher within the final concept.

Insights direction 3

The learning approach

Exploring a decision making process enables students to link policy making to their daily lives. Choosing the theme within this policy making process, increases the ability to see this link [DRQ1]. An active learning approach is stimulated using the physical and playful way to explore the decision making process [DRQ3]. Receiving feedback at the end of the class could also stimulate a sense of ownership as students were able to create this result [DRQ4]. However, this concept lacks the what-do-you-think approach because of the limited involvement of creativity and including personal opinions [DRQ2]. Because the decision making process and possible tradeoffs for students to be made are already filled in.

The learning environment

A safe learning environment is stimulated by working in smaller groups [DRQ5]. However, the development of citizenship skills may be somewhat limited due to the lacking what-do-you-think approach [DRQ6].

The functioning of the school

Current affairs cannot be included within this concept. For the reason that the decision making path must be predetermined for the concept to allow for making trade-offs. Furthermore, for the same reason does the concept lack open ended aspect [DRQ8, 9].

Summary

The concept lacks a what-do-you-think approach, considered to be the second most important requirement, because of the predetermined decision making path. However, the active and physical engagement of students is a stimulating approach. Also ending the class with an end result could be a meaningful aspect to implement.

Take-aways

Include the active and tangible approach in the final concept. Aim for the what-do-you-think approach. Ending with a result to enable students to generate concrete input.

6.4 Key insights

This chapter explains several ideation activities. The activities resulted in three design directions.

Direction one, connecting the municipality to schools, shows promises to fulfill the most important design requirements by presenting real cases and involving the municipality actively. Unfortunately, this concept does not allow to be executed within the time frame of the project. However, a real connection to the municipality is valuable. This could be achieved by including municipal themes and leaving room for a potential role to be fulfilled by the municipality.

Direction two, supporting the teacher, could eventually fulfill the design requirements but in a very indirect way. The concept is focused too much on the teacher, this will require more research. Supporting MBO students should be the main focus. However, teaching has its influence. Therefore, the teacher can be supported by providing a teacher manual and a clear and active role in the program.

Direction three, experiencing a decision-making process, lacks the what-do-you-think approach, considered one of the important design requirements. The concept needs lots of detail and choices to be made in advance, planning a route of the possible decision-making process. However, the active and tangible approach to the concept seems very valuable. Ending the class with an output and a result is also considered valuable.

- » Show the link to the municipality by including municipal themes and allowing them to step in easily
- » Support the teacher with a teacher manual
- » Include a strong what-do-you-think approach
- » Include the active learning-by-doing aspect for each student
- » Finish the class with a result that summarizes the insights formed
- » Include the freedom of choice in the themes

The evaluation has shown that each direction fulfills different design requirements.

7.0 Prototype & test

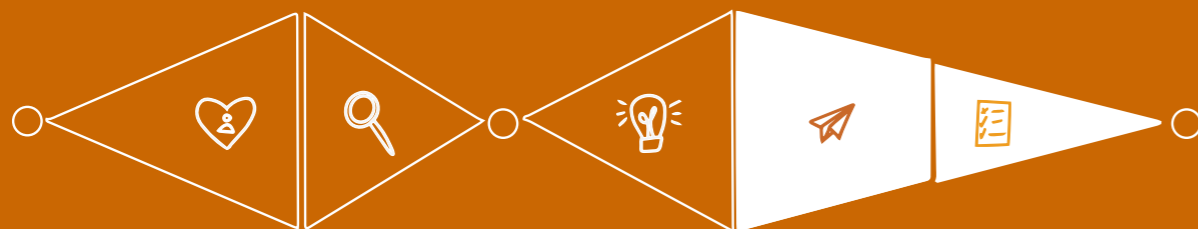
This chapter introduces the reader to the final concept direction. First of all the methods used for prototyping and testing are described. Followed by the final concept direction and the iterative process that followed. The iterative process involves five iterative steps with a total six user tests. Each iteration includes a brief description of the user test's setup and method, as well as the main insights and adjustments. The chapter concludes by presenting the key insights.

7.1 Method

7.2 The final concept direction

7.3 Iterating the concept

7.4 Key insights



7.1 Method

This chapter describes the prototyping and testing steps (Figure 37). The ideation step resulted in a wide range of concepts. In total three concept directions were detailed and evaluated. The insights that came out of this evaluation helped to shape the final concept direction presented in this chapter. Strengths identified in each direction are combined into the final direction. The direction formed the base for an iterative process. Several user tests with MBO students, peers and experts shaped this iteration process. Fifteen stakeholders participated within a total of six user tests. Each user test involved methods such as observations, questionnaires and interviews. The setup of most user tests was somewhat similar; providing the participants with an assignment, observing their actions and finally evaluating their experiences verbally. Observation notes, transcripts and question forms helped to create clear understanding in the functioning of the designed steps. These insights were translated into iterative improvements. The design requirements are used to evaluate the data gathered in the user tests.

This section tries to further answer the following research question aiming to fulfill the design goal.

3. What educational design fits the needs of youngsters, teachers, schools and the municipality?

Strengthen the ending of the relation between MBO students' daily lives and municipality, by facilitating a moment to see this relation while performing an activity in class.

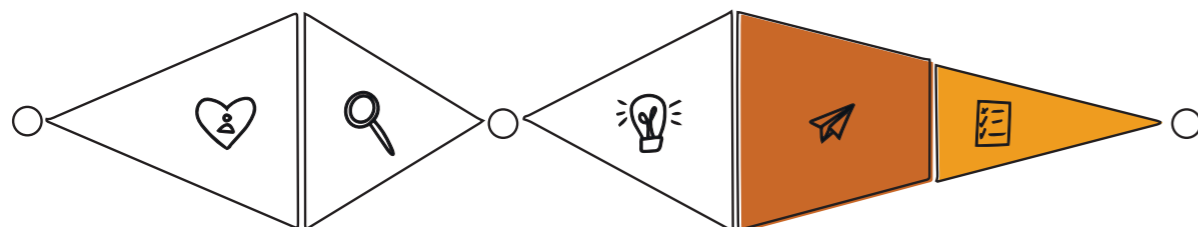


Figure 37. A visual representation of the prototype and test steps in the design process

Prototype and test

7.2 The final concept direction

The final concept direction is a citizenship program in class. The program consists of several steps and materials. The outline of the steps are described on this page. The following pages will elaborate on the iterative process that followed after choosing a final concept direction, eventually delivering the final design. The iterative process involves several user tests.



00 Introduce the class

Students work in groups of four. The teacher introduces the students to the program. The link to the municipality is shown, either by a video recorded by the municipality or by a municipal councilor being present during the class.



01 Choose a theme

In the first step students will choose a theme within their group. Several themes are presented to the students to choose from. All themes are derived from municipal processes.



02 The involved

The second step stimulates the students to explore who is involved within the chosen topic. The involved stakeholders are either influenced by the theme, or influence the theme.



03 Explore

In the third step students explore the theme on a deeper level by choosing and answering questions. Questions stimulate to think critically about the theme, each student individually answers a question. One by one questions and answers are shared and discussed in the group.



04 What if

The fourth step implies to take along other perspectives. Triggering questions stimulate the students to consider several 'what if' scenarios to broaden their perspective on the theme.



05 Ideas

In the fifth step ideas are generated. The previous steps help the students to explore what the theme entails and what changes can be made to positively influence the topic in their city. Reflective questions help to evaluate and challenge their ideas.



06 Summarize and share

In the final step the students summarize their findings and communicate them to the municipality. The insights are also presented plenary in class.

7.3 Iterating the concept

7.3.1 Iteration 1

User test 1.1, 1.2 and 2.

The first iteration involved two user tests with peers and one test with a citizenship program creator from ProDemos. The first user test focused on exploring the process of choosing themes and answering questions on that theme (step 1 and 2), the other steps of the concept were discussed. Two participants were involved in individual tests (UT1.1 & UT1.2). In the second user test the concept was presented online in a scenario sketch with a program creator from ProDemos (UT2). The details of the user tests can be found in appendix 49 & 50. The user tests resulted in the following insights.



02 Include puppets to identify who is involved and to make this process more visual



03 Only use open ended questions. Agree disagree questions will result in a debate; who will win instead of being able to explore the topic as a group

Let students write down their answers to really create the feeling of a mind map and be able to fully visualize the discussion and insights (active ?)



06 Closure assignment, summarize the findings of the students and connect that to the municipality (link to daily life)

General

Questions should be on blocks this works easier then separate cards and blocks.

“I always let my students write a letter to the European commission, they received reactions that worked really well.” - ProDemos Program creator UT2



Figure 38. Test with two peers

Prototype and test

7.3.2 Iteration 2

User test 3

The second iteration involved one user test with two MBO students (UT3, Appendix 51) (Figure 39). The user test focused on choosing a theme, answering questions, exploring who is involved and idea finding (Step 1, 2, 3 and 5). The remaining steps were explained and discussed. The user test resulted in the following insights.



Choosing a theme was positively experienced as the students enjoyed to work on a topic that concerns them personally. However some topics were unusual to the students, such as sustainability. The students shared they did not choose it because they do not know enough about it, but do consider it important. Including a description of the theme provides some knowledge and understanding to be able to work on the theme.



The video that shows the link to the municipality was initially placed more towards the ending of the program, before idea finding. The students clearly mentioned that their attention span is not long enough for a long video at the end of the class. Therefore the decision was made to involve this in the introduction of the class.



It was difficult for the students to consider who was involved in the topics. As a result, some additional guiding questions are included to assist students in identifying who is involved in the theme.



Similar to the attention span issue with the video, the final assignment was also a concern for the students. They agreed that finishing with a summary and submitting this to the municipality was a good idea, it could be shortened. Instead a short summary of the main learnings and advice for the municipality would be sufficient.

The physical aspect of the product, the blocks, was well-received.

General

Within this test the students were instructed verbally for each step. A student manual is created for the next iterations in order to test the concepts ability to be used by students independently.

The steps of the concept were effective and encouraged the students to be active. One of the students was eventually even motivated to vote for the provincial states that day. However, the students expressed a strong belief that politics fails to support them or take them serious. This implies a wide societal issue that cannot be solved within one single lesson but needs to be improved over time.



Figure 39. Test with two MBO students

Prototype and test

User test 4, 5 and 6 were executed with the similar setup. At the beginning of the test the participants were introduced to the test, explaining that this concept is designed for a citizenship class for MBO students aiming to strengthen the understanding of the relation between students daily lives and the municipality by facilitating this moment with the concept. The participants were asked to read the manual and act out the steps. Observation, a discussion at the end and a question form helped to evaluate the session as experienced.



Figure 40. A user test with non-designers

7.3.3 Iteration

User test 4

The third iteration involved one user test in a group of four non-designers (UT4, Appendix 52) (Figure 40).

03

Some questions could be answered with a yes or no, in order to make students fully active all questions should be changed to open ended questions.

02

In this version of the concept the 'who is involved'-step was still placed after answering questions and what if. The participants mentioned that placing this step more towards the beginning of the process is more logical, it automatically increases empathy as students know who to consider when answering the questions.

04

Aim to make the what-if questions as open ended as possible to ensure that the questions can fit for most themes.

06

End the class plenary by sharing the advice insights to know what each group has worked on.

In order to smoothen the process it is valuable to identify a team leader and clearly instruct the team leader to read the assignments out loud. Write the assignments in such a way that students are activated.

General

Increase independent working and clarity it will be valuable to include the use of a timer guiding students throughout the steps.

Different shapes were explored, it became clear that not all participants knew in what way to place the tiles.

7.3.4 Iteration 4

User test 5

The fourth iteration involved one user test (UT5, Appendix 53) in a group of two participants from ABZ (Figure 41).



The extra explanation of the themes should be presented at the front side of the tile, this makes it clear and less of a hassle to read. Allowing to read the explanation during the whole class without flipping the tile.



The idea finding step could be more activating. Add an explanation sharing that students can set a timer and that the goal is to generate as many ideas as possible.

General

The colors did not fully coordinate, sometimes it was hard to understand what materials they should use. Therefore a visualization of the materials needed is added.

The triangular shapes are experienced as pleasant. This shape allows for easy placement of the tiles on the playing field.

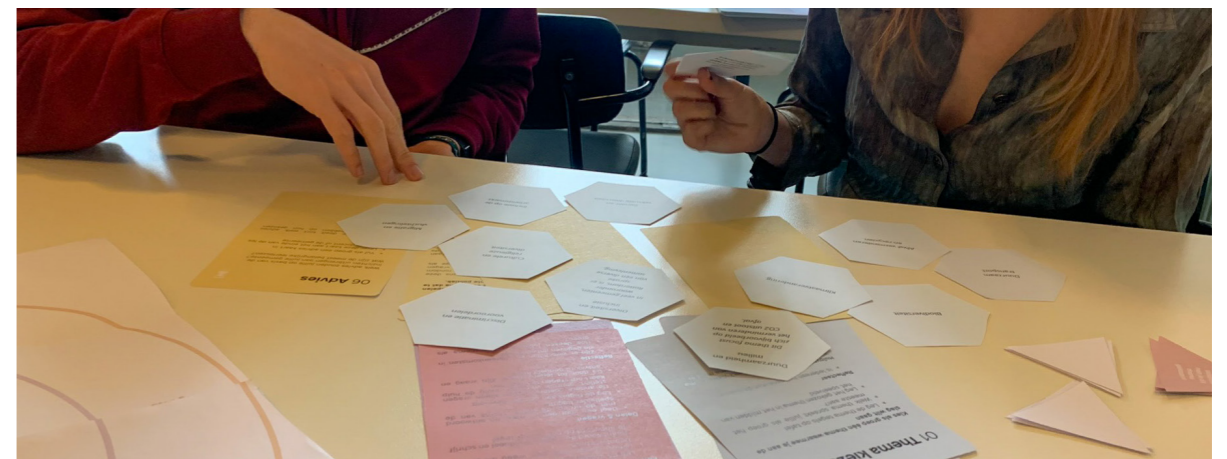




Figure 41. A user test at ABZ

7.3.5 Iteration 5

User test 6

The fifth iteration involved one user test (UT6, Appendix 54) in a group of four non-designers (Figure 42).

03  Allow students to write the name of the stakeholder directly on the puppet to avoid confusion about the representing stakeholders. This will make it easier to remember which puppet was assigned to which stakeholder.

05  Recommended was to rephrase the title in the guideline “solutions” to idea finding. Solutions implies that there is a problem that needs to be solved. This is not always the case, and the goal of this step is to generate creative ideas and explore possibilities rather than addressing a specific problem.

The playing field does not align with the triangular shapes

General Use a more activating and inspiring color for the materials.

The teacher can have an active role, presented in a teacher manual.



Figure 42. A user test with non-designers

7.4 Key insights

This chapter introduced the final concept direction by giving an overview of the steps of the design. The concept direction was iteratively developed involving six user tests. Each user test resulted in several insights and adjustments for the steps of the design.

First of all, the decision was made to show the video revealing the link to the municipality in the introduction [UT3].

For step one, ‘choosing a theme’, the tests showed that choosing a theme is a meaningful aspect of the design as it allows the students to work on a theme that concerns them personally [UT3]. However, students felt hesitant to choose topics they have less knowledge on. Therefore, a short explanation is provided on the theme tile to bridge the knowledge gap [UT3 & UT5].

Considering the second step, ‘who is involved’, physical puppets are added to visualize the stakeholders on the playing field [UT2]. However, identifying stakeholders is considered challenging for some topics. Therefore, guided questions are included [UT3]. Also, this step was positioned at the beginning of the process as it enables students to consider their stakeholders throughout the whole process [UT4]. Besides visualizing and identifying the possibility to name the puppet added, making it easier to look back at [UT5].

Step 3, ‘questions’, involved several adjustments considering what questions were added. The main insight here was to ensure open-ended questions to guarantee a conversation instead of an agree-to-disagree debate [UT2 & UT4]. Ensuring a visual mindmap, answers can be written on tiles [UT1]. Also, to stimulate a conversation, students ask one another follow-up questions, and a question card providing example questions was included to support students [UT5].

Step 4, ‘what-if’, was included, aiming to increase empathy and enable students to consider the theme from various perspectives [UT2]. The what-if questions were adjusted multiple times trying to make the questions widely applicable to multiple themes [UT4].

Step 5, ‘ideas’, mainly involved iterations to activate the students. Making sure the students feel stimulated to generate many ideas [UT5]. Besides that, the step was named idea finding instead of solution finding, solution hints for a problem to be solved [UT6].

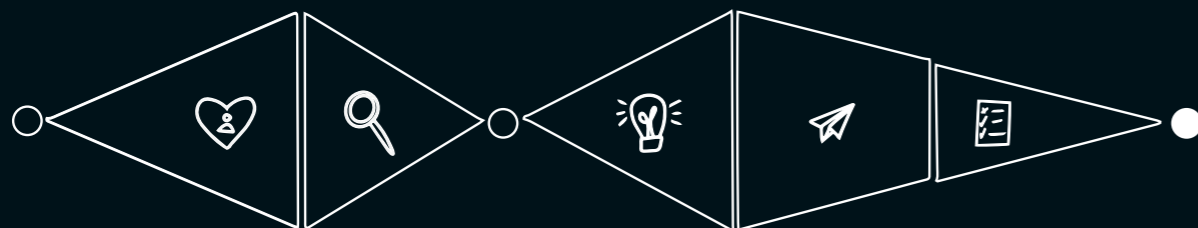
Step 6, ‘advice’, was shaped within several user tests finding its exact purpose and setup. The advice step is a closure assignment summarizing the findings and linking this to the municipality [UT1 & UT2]. The step should be short and concise to keep students involved at the end of the class. The students write a short advice for the municipality based on their insights [UT3]. Sharing the advice plenary includes a logical ending to the class, motivating students to create proper advice and to learn from other groups [UT4].

General insights of the user test clarified that presenting the questions on the tiles works best. This makes the product more united and easier to use because of similar materials for questions and writing [UT1 & UT3]. A student manual was included to enable the groups to perform the steps independently [UT3]. Involving a team leader and a timer smoothens the execution of the steps [UT4]. Considering the materials, several shapes were explored to enable logical placement and mapping.

8.0 de Meester Burger a citizenship tool

This chapter presents the final design. The first section introduces the final design, 'de Meester Burger'. The second section describes a desired user journey of the design. Finally, the individual elements that come along with the design are presented.

- 8.1 An introduction to 'de Meester Burger'
- 8.2 de Meester Burger in a user journey
- 8.3 The elements of 'de Meester Burger'



Final design

8.1 An introduction to de Meester Burger

de Meester Burger is a citizenship tool designed for MBO students to foster a positive feeling of understanding and belonging towards the municipality.

de Meester Burger is used in class. One of the primary goals of the design is to strengthen understanding of the relation between youth's daily lives and the municipality. By exploring relevant topics such as equality and sustainability, related to the municipality, support to increase the understanding and belonging of youngsters. Exploring a topic by following the steps of the tool helps students to explore and experience their competencies. Additionally, students develop and share their opinions on a political theme with fellow students and the municipality.

This citizenship tool is used in class, students work in groups of four. The various steps allow students to investigate a municipal theme of their choice. Before exploring the several steps, the class is introduced by (a video of) a municipal councilor sharing the municipality's interest in the students' perspectives on the topics they will be working on. This aspect visualizes the relation between the themes the students will work on and the municipality.

The steps of de Meester Burger create a moment for students to explore their own and other opinions while facilitating a tangible conversation. By exploring several questions and answers within the group the playing field is filled with the students' insights (Figure 43). Some questions aim to identify the stakeholders involved in the topics, others on triggering their own opinions, and other perspectives or to generate ideas that could affect the theme positively.

de Meester Burger aims for a learning approach in which the relation between policy and students' daily lives becomes visible. The questions in the steps imply a 'what-do-you-think-approach' and a 'learning-by-doing approach'. By asking the students to summarize their insights and develop an advice to the municipality, a feeling of ownership is established.

Overall de Meester Burger aims to create a meaningful learning experience in class increasing students feeling of understanding and belonging towards the municipality.



Figure 43. de Meester Burger in use

8.2 A desired user scenario

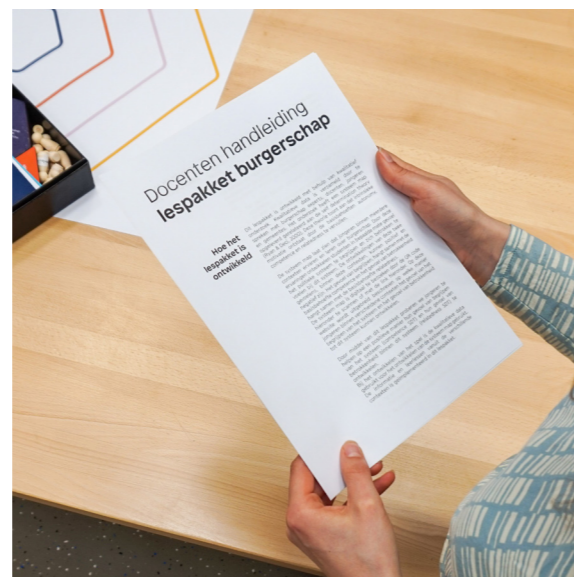
00 Start of the class

The **teacher manual** helps the teacher or municipality to prepare for the class and fully understand its steps.

The class is introduced by the teacher or the municipality using the **slide deck**, explaining the goal of this class to the students. A **video** is included within this slide deck, displaying a municipal councilor member explaining the link between the themes students will be working on and the municipality.

The students are asked to divide in groups of four, choose one team leader and open the 'de Meester Burger' box. The teacher keeps track of the time for each step and starts the timer.

Previously to the class it is possible for the municipality to deliver a theme.



01 Choosing a theme

The team leader reads the first in the **manual** out loud. All the **theme tiles** are put on the table, the group explores the themes. Together the students decide what topic they want to work on. The chosen theme is put in the middle of the **playing field**. The group reflects if everyone agrees with the chosen theme.



Final design



02 Who is involved

The team leader reads explanation for step two in the **manual** to the group. The group answers the two questions in the manual that support the students to identify who is involved within their theme. Who is influenced by this theme? Who influences this theme?

After discussing who the stakeholders are, the students can **write** on the stakeholders' puppets. The **puppets** are placed on the theme tile.



03 Explore

Step three in the **manual** is read by the team leader. The **question tiles** are put on the table. Each student chooses a tile and individually answers the question. The answers are written on **answer tiles**.

One by one the students **share** their question and answer. The other students are able to ask follow up questions. The **question card** can be used to support this process. The tiles are added on the playing field. This is repeated for each student.

The students consider differences or similarities in the tiles added and **reflect**.



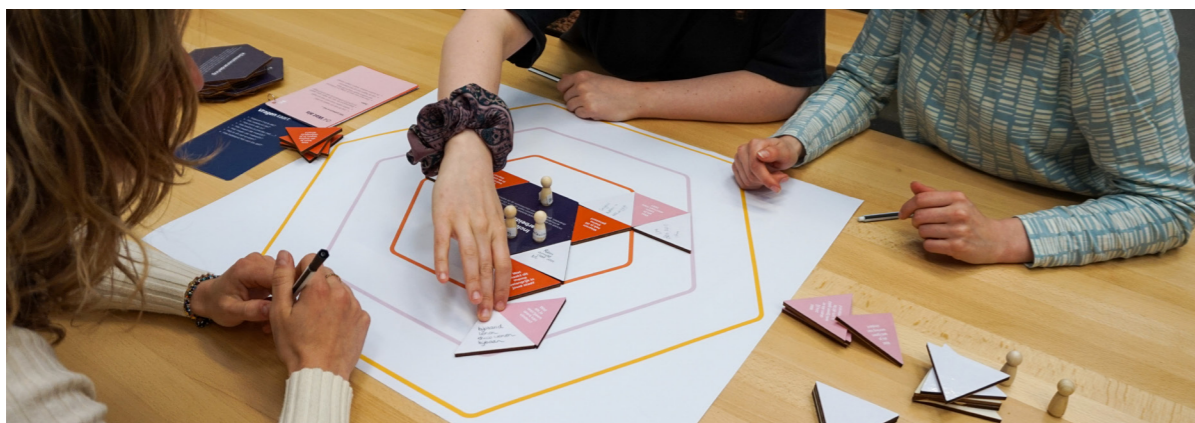
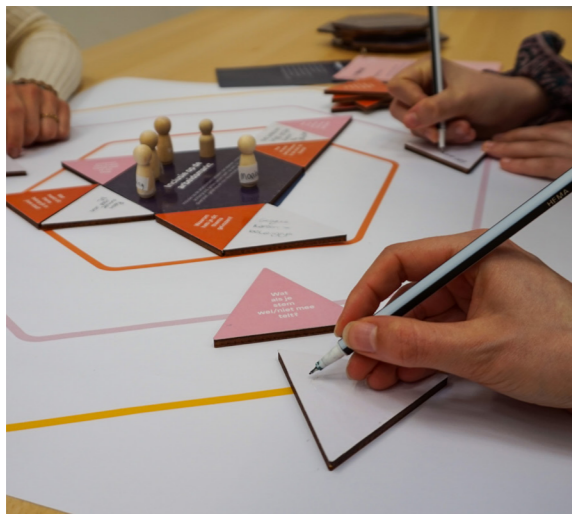
Final design



04 What if

The **manual** is used to read step 4. The **what-if tiles** are put on the table. Every student chooses a what-if question they want to answer individually. The answers are written on the **answer tiles**.

The students one by one **share** their what-if and answer with the group. The other students can ask follow up questions and use the **question card** for support. The tiles are added on the playing field. This is repeated for each student.



05 Ideas

Step 5 is read out loud from the **manual**. In this step the students think of as many ideas as possible that can positively contribute to their theme. The **reflection tiles** are put on the table and can function as inspiration for ideation or to reflect on generated ideas. Each student takes **answer tiles** to write as many ideas as possible. The group **shares and discusses** the ideas generated.

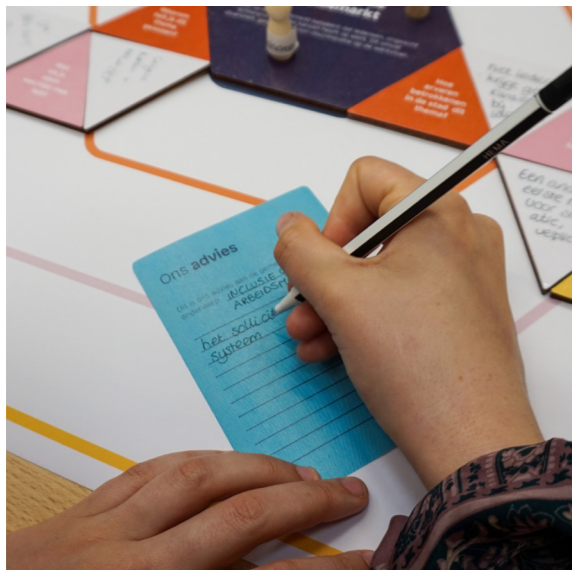
The group ends with reflecting on the ideas.



Final design

06 Advice

The **manual** for step 6 is read. The students are asked to come up with an advice for the municipality based on their insights and ideas put to the table. The group fills out an **advice card** that summarizes the main insights of their theme and shares their advice.



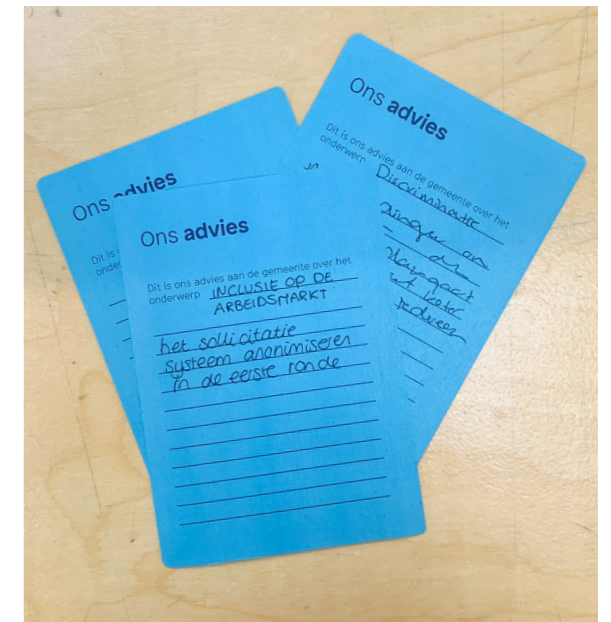
Plenary discussion

A plenary discussion is created to **share the results** from each group. The groups one by one share what theme they worked, what they discussed and what they will **advise** to the municipality.

The teacher can initiate an extra discussion on the experiences of the students during the class.

Share insights with municipality

At the end of the class all the advice cards are **collected and shared** with the **municipality**. Possibly the municipality can provide **feedback** in a short video, to show in the next class.



Final design

8.3 The elements of de Meester Burger

de Meester Burger consists of several elements. Some elements are designed to be used by the teacher considering preparing the class and others are to be used by the students. The following section visualizes and presents the several elements that come along with de Meester Burger.

Slide deck: Instruction slides and municipal video

A slide deck to introduce the citizenship class to the students is provided. Within this slide deck the steps of the process are briefly shown, the aim of the class is explained and a video of the municipality can be included.

Teacher manual

A teacher manual explains how the tool is developed. What the exact goal is of the tool and a detailed description of how to use the tool in class.



Final design

Student manual

A manual explaining the steps of the toolkit one by one. Each page explains a different step. Sharing in detail what materials are needed, how much time to take and what exact tasks to perform.



Question card

A question card is available supporting the students to ask follow-up question to one another. The students do not have to use these questions but they can provide inspiration to stimulate a conversation.



Theme tiles

The first step implies choosing a theme. Eight theme tiles are created for this tool. The tiles contain a title and a short description explaining the meaning of the theme.



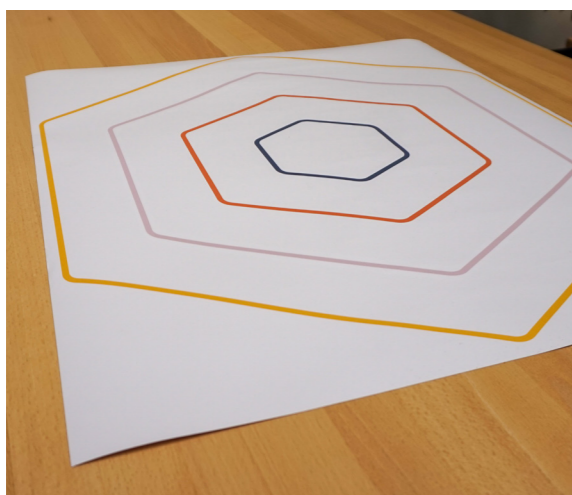
Puppets & stickers

The second step uses puppets to indicate the stakeholders involved in the theme. The puppets can be placed on the playing field. In order to remember the established stakeholders stickers are included to name the puppets.



Playing field

The playing field serves as a guideline to structure placement of the tiles. The colors and shapes indicate where to place the corresponding materials.



Pens and a wipe

The tool comes with markers to write down the answers and insights generated during the process. A wipe is included to be able to clean and re-use the materials at the end of the class.



Question tiles

The third step uses question tiles. Eight (amount) questions are available to choose from. The questions trigger students to explore the topics existence to daily life. Each student chooses one question, this enables the group to widely explore the theme.



What if tiles

The fourth step uses what if tiles. Eight what if questions stimulate the students to take along another perspective. Again, each student chooses one what if question, resulting in a wide exploration of the time.



Final design

Reflection tiles

The fifth step focusses on idea generation. The reflection tiles stimulate the students to critically evaluate and explore their ideas.



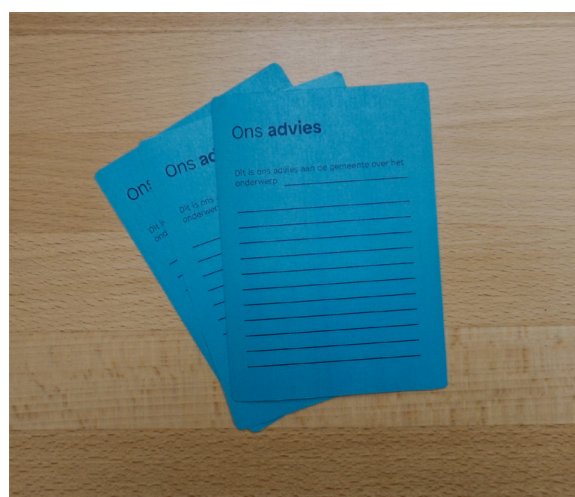
Writing tiles

Within each step answers and insights can be written down on writing tiles. Placing the colored and writing tiles on the playing field allows for a tangible and visual conversation map.



Advice cards

In the sixth step an advice card is filled in. The students are asked to reflect on their insights and learnings. Summarizing this into an advice they want to share with the municipality.



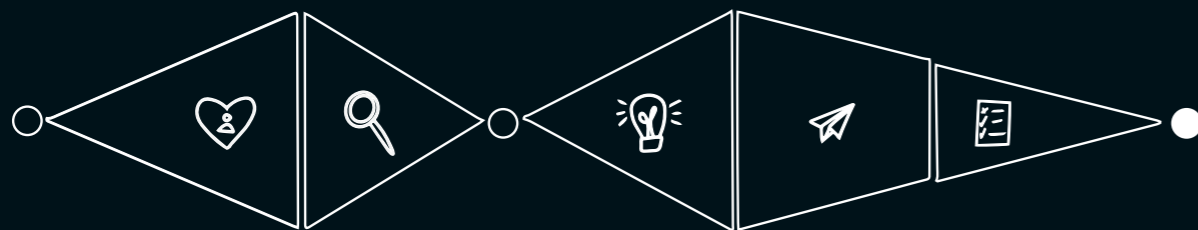
9.0 Concluding

This chapter describes the conclusions of the project. The first section presents the final evaluation, the test setup, a citizenship class, and the main insights. Based on the insights conclusions are drawn and presented in the next section. The chapter ends with a reflection on the project, presenting the limitations and recommendations.

9.1 Final evaluation

9.2 Conclusions

9.3 Limitations and recommendations



Concluding

9.1 Final evaluation

To evaluate the final design, de Meester Burger, a final test was executed in an MBO citizenship class. In total fifteen MBO students participated. This section describes the test setup of the final evaluation, describing the test and evaluation methods used. The results gathered through observation and a questionnaire are shared. Finally, the conclusions and recommendations are shared.

9.1.1 The test setup

A citizenship class test

The final design was tested and evaluated in an MBO citizenship class. In total fifteen students participated in the final test. The students were divided into four groups. Testing and evaluation took about 1.5 hours. The test was executed at Albeda college Weena, Rotterdam. The students are in the second year of the CEO program, economics and entrepreneurship legal training, level 4 (Figure 45).

The session was divided into two parts, testing and evaluating. The testing part introduced the students to the class and instructing them to execute to read the manual and use the materials displayed at the table. Observatory

notes were taken to gain understanding of the students' perception and use of the design.

The evaluation part focused on evaluating the students' experiences after executing the steps of the design. To achieve this, the students filled out a questionnaire with several questions (Figure 44). The questionnaire used a 5-point Likert scale and open-ended questions. Each design requirement was incorporated within a question. Appendix 55 shares the test and evaluation setup in more detail.

After gathering the data, a synthesizing step was done to be able to allocate meaning to the data. The observation notes were clustered and structured for each step of the user test. The data gathered in the questionnaire was collected and structured in excel. Pattern spotting showed similarities in the answers of the open ended questions. The data from the 5-point Likert scale is gathered in a graph and the average score are counted.

The following sections present the insights that were gathered throughout the final test.

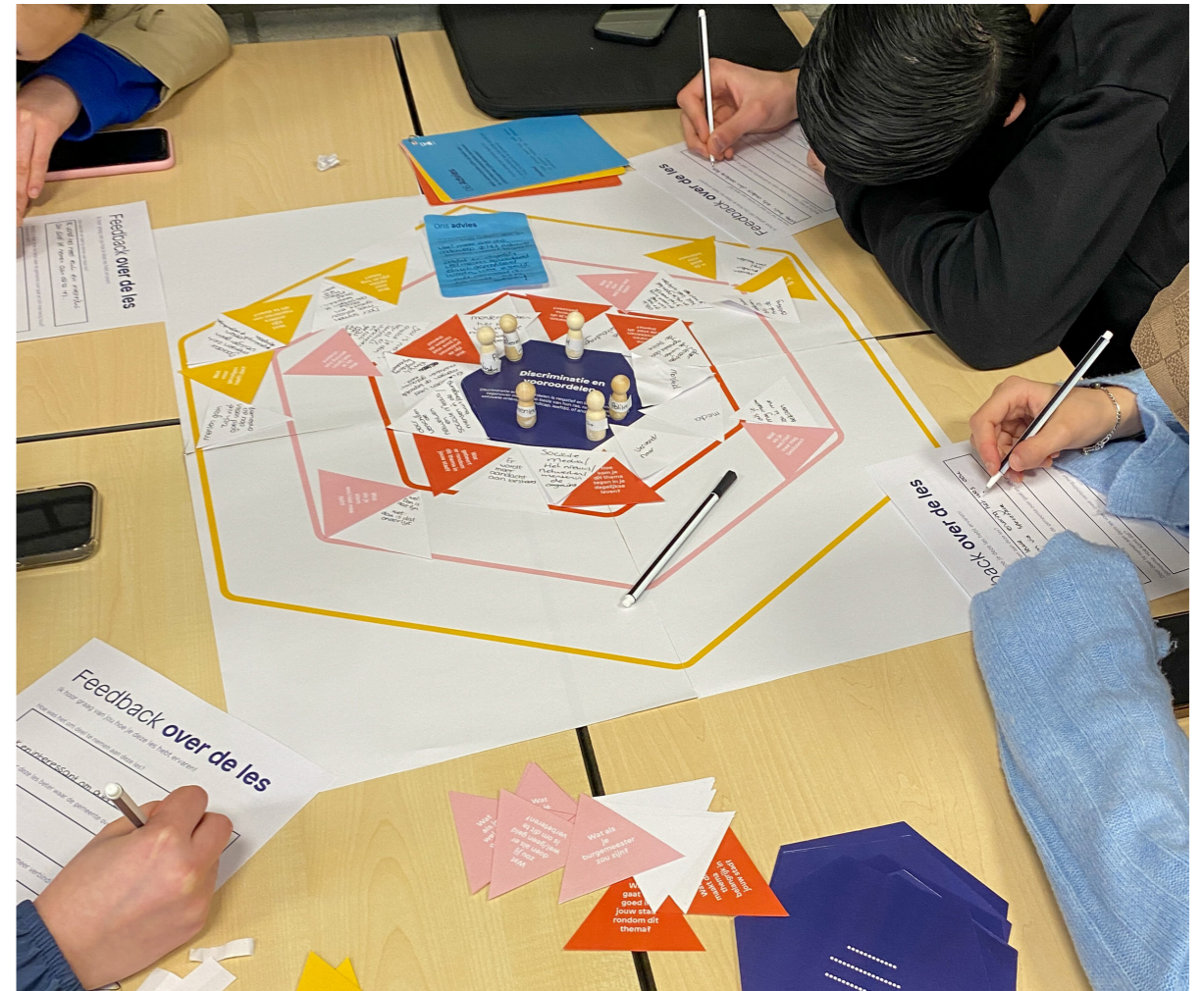


Figure 44. Students filling in the question form



Figure 45. An image of the setup in class

9.2.2 Main insights

Insights by observation

This section describes the observations while the students were executing the steps of the design (Figure 46). The insights are summarized to the corresponding steps of the de Meester Burger.

Step 0 Introduction

The introduction was clear and understandable for all groups, as they were able to proceed to the first steps in the instruction manual without any problems.

Step 1 themes

All groups were able to easily choose a theme without facing any difficulties. Remarkably, all groups chose similar themes, related to inequality and discrimination.

Step 2 involved

Three out of four groups faced some confusion when identifying the involved. Some students misunderstood this step by writing their names on the puppets. Additionally, one group stated that it was challenging to identify the involved stakeholders due to the broadness of the topic (discrimination and prejudices).

Step 3 questions

All students were able to choose a question tile easily, and answer the questions. All groups understood how to use the question and answer tiles. The individual aspect of this step enabled active participation of every student. However some groups did not really sustain the conversations by asking each other follow up questions. As a result, one group proceeded to the next step quite quickly.

Step 4 what if

Choosing and using the tiles was clear and straightforward for all groups. It was easy to understand what materials to use because of the corresponding colors in the guide. Some students were unsure about how to answer the what-if questions in the context of the chosen themes. They asked for additional explanation.

Step 5 ideas

Two groups asked for support in step five as they were unsure what to generate ideas for. It was unclear that they could use the insights gathered on the tiles as a base for their ideation process.

Step 6 advice

Using the advice card was very easy for all groups. The ideation process in step 5 functioned as a solid base to fill out the cards, provide a solution and advice.

Sharing the themes the groups have worked on, why they chose it and their advice to the municipality, was a beneficial step. The advice cards facilitated an easy sharing process for each group. Students tended to react to one another, by expressing their appreciations for other advices generated.

General

All groups were able to initiate the process independently as the materials were sufficient enough in guiding the process and initiating a conversation. However some groups went into more detail than others, by asking follow-up questions.

The materials were easy to use and understand. However some steps require more background information and clarity containing what the step is aiming for.

However it was clear that some groups worked more concentrated than others. Besides that the teacher noted that the students have a short attention span.

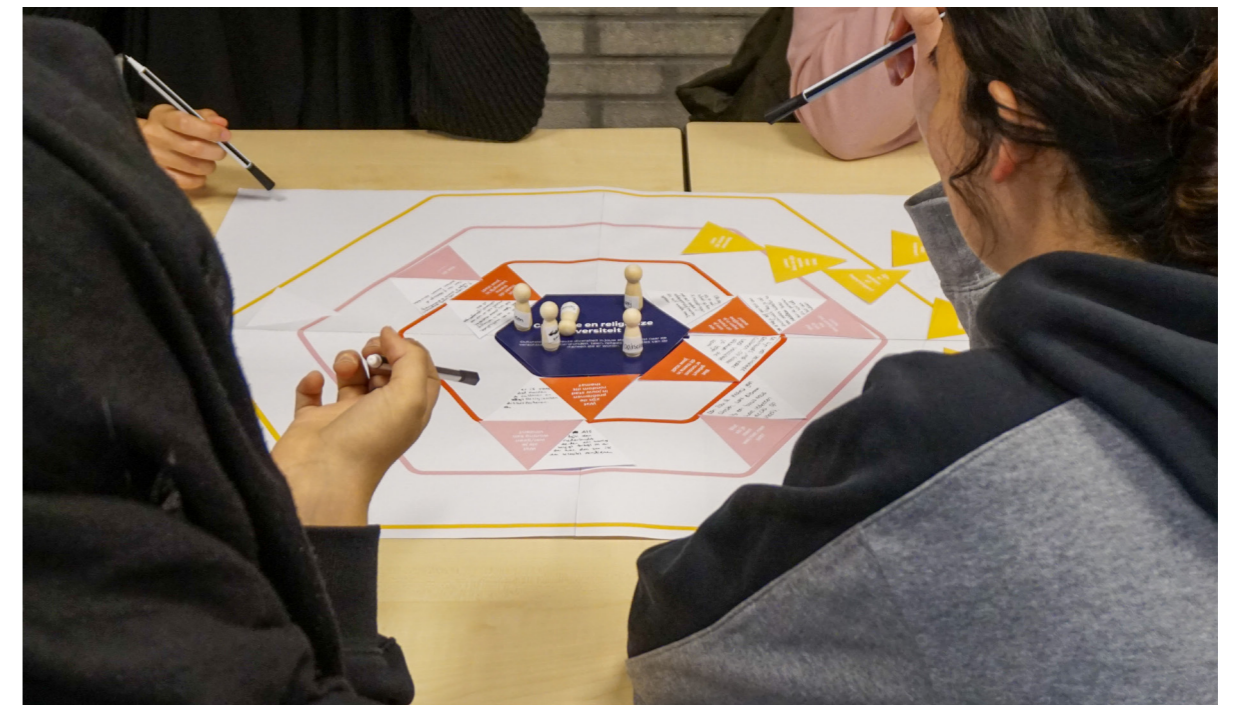


Figure 46. Students working with 'de Meester Burger'

Concluding

Insights questionnaire

This section describes the data gathered using the questionnaire. For each question a description of the most striking insights is presented supported by two or three quoted answers. This description is generated by counting and labeling what aspects were named in the answers. The scores on the 5-point Likert scale are visualized in a graph. The design requirement that is related to the question is stated in [brackets].

General

'What was it like participating in this class?'

"It was fun and enjoyable. I learned a lot about fellow students and about the topic."

"I thought it was a fun and educational class. I enjoyed doing something with the class and collaborating with others"

Eleven students mentioned they had fun during the citizenship class. Eight students also mentioned the class to be interesting and informative. Five students mentioned a positive note on working on the these types of topics and four students mentioned the collaborative setup as positive.

Feeling of understanding [U]

'Through this lesson, do you better understand what the municipality is about and concerned with? How does that come about?'

"I understand some parts of the municipality better. Not all of it. It wasn't all about politics. This was a topic I enjoyed working on because it interests me. My interests are not in politics."

"Yes, talking and brainstorming about the subject helps you understand it better."

Fourteen students gave a positive response to the question. Nine students specified that the topics helped to increase understanding. Three students cited that the question tiles were supporting the increase of understanding. Four students mentioned that talking and brainstorming on the topic helped to increase their understanding.

Feeling of belonging [B]

'By participating to this class I feel more belonging towards this topic and the municipality? How does that come about?'

"Because I now feel that I can participate and give solutions to the municipality."

"I feel connected to this topic but not to the municipality."

"Yes I do. I feel that more people disagree on this topic, and then you do feel connected to others."

Three students mentioned specifically that they did not feel more belonging to the municipality because of the class. Twelve students mentioned that they did feel more belonging because of the class. Three students mentioned that this appeared because they have increased their understanding. Seven students mentioned that talking about the topic helped to create a feeling of belonging. Five students stated they gained a deeper understanding of various viewpoints on the subject.



Figure 47. Students working with 'de Meester Burger'

Concluding

Question 1 - 4 [DRQ 5 & DRQ3]

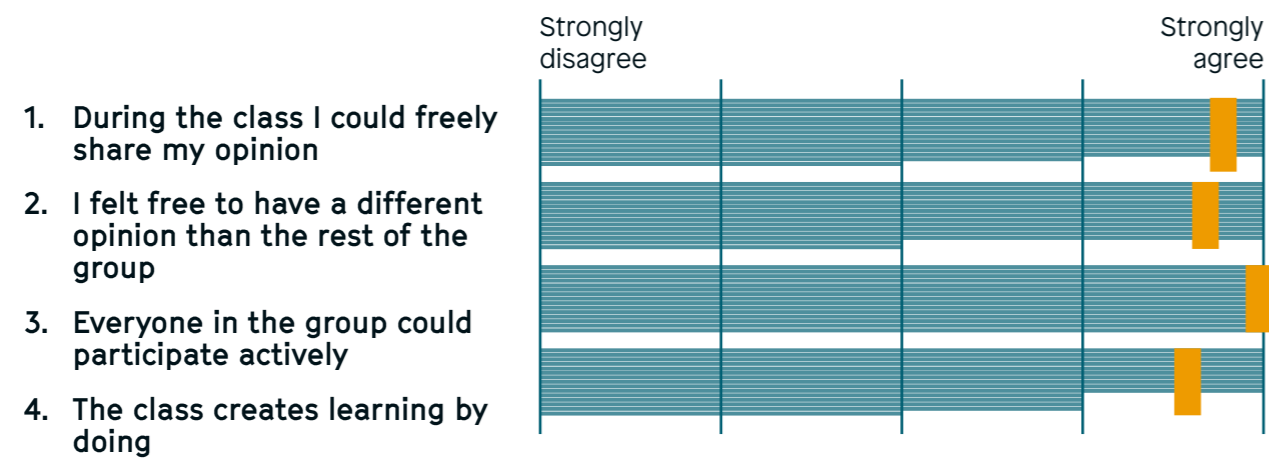


Figure 48. The results of question 1 - 4

“I felt free to give my opinion and think about the topic”

“Because I could share much of my own opinion and advice”

Three students mentioned specifically that they did not feel more belonging to the municipality because of the class. Twelve students mentioned that they did feel more belonging because of the class. Three students mentioned that this appeared because their understanding increased. Seven students mentioned that talking about the topic helped to create a feeling of belonging. Five students mentioned that they learned more on other perspectives on the topic.

Figure 48 shows the average scores of the answers using a Likert scale.

Question 5 - 8 [DRQ1, 2, 4 B2]

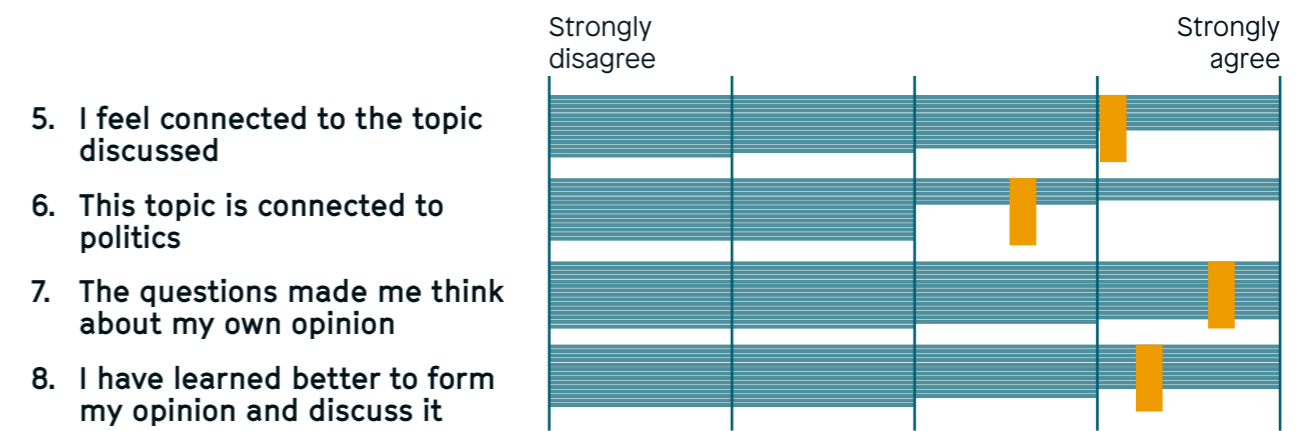


Figure 49. The results of question 5 - 8

“I think I learned a lot about this subject. I am dealing with this myself. However, I do not admit this. By facing this, I am also learning to deal with it.”

“Our topic is an important aspect in politics.”

One student mentioned that the time spent on the topic helped to learn better. Two students mentioned that they have to deal with this topic in their daily life. Two others mentioned that they feel related to the topic, one of these students mentioned to not really admit this relation. Finally two more students mentioned that they feel that this topic is important, in politics or in society.

Figure 49 shows the average scores of the answers using a Likert scale.

Concluding

Question 9 - 12 [DRQ7 U 1,2,3]

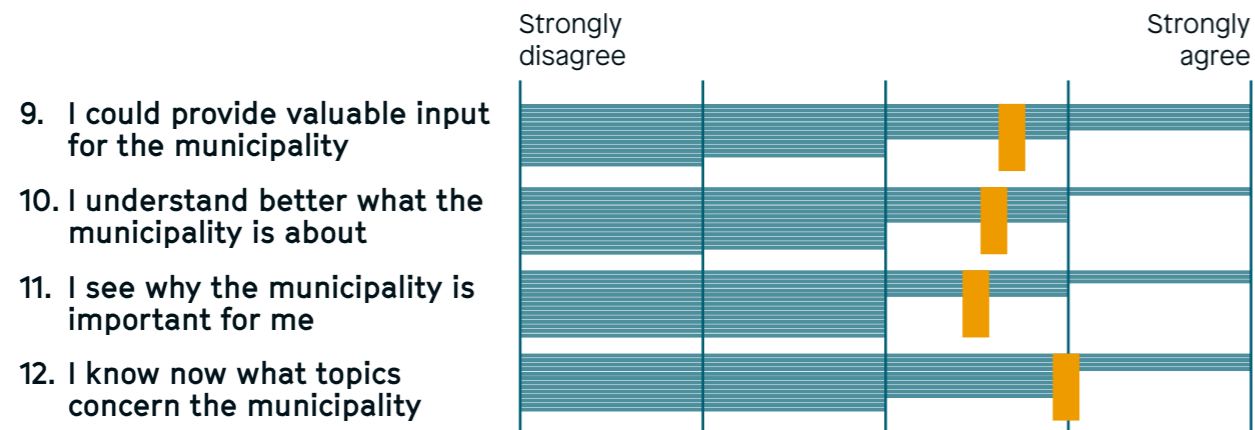


Figure 50. The results of question 9 - 12

“Politics is not so important for me.”

“Because now you know a bit more about the municipality.”

Four students mentioned something about their understanding of the municipality. Two students mentioned that they do not understand everything. Whereas two students mentioned that their understanding has grown. Two students mentioned something about the importance of the municipality and politics, one mentioned that it might be valuable to receive solutions via the municipality, where another student mentioned that politics is not important for them. One student stated not to be involved with politics, but that it should be. Finally one student mentioned that giving the advice helped the learnings.

Figure 50 shows the average scores of the answers using a Likert scale.

Questions 13 - 16 [U4 B1, B3]

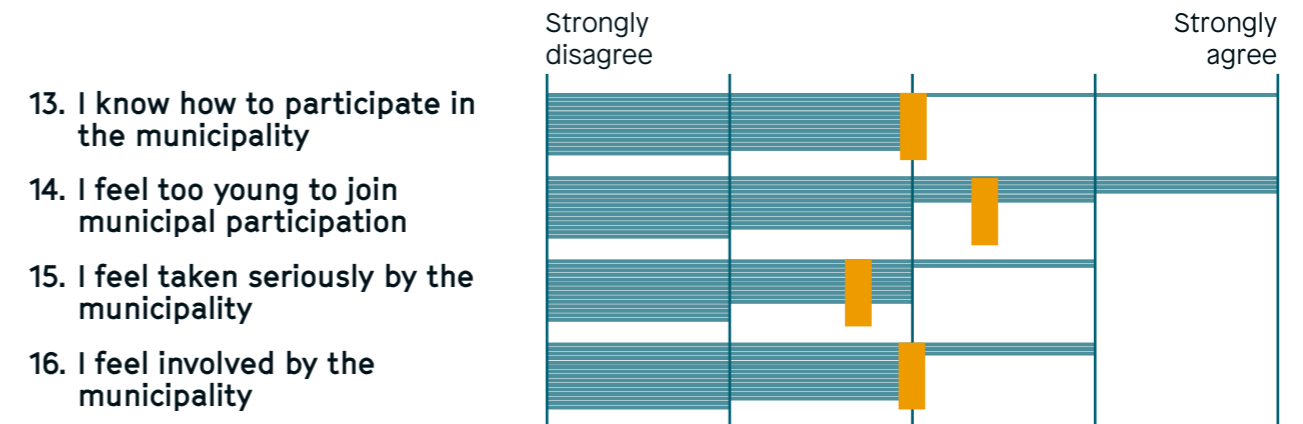


Figure 51. The results of question 13 - 16

“I’m 18 years old, but I don’t feel that way. Sometimes I still feel too young to be understood.”

“Because I have never seen or heard the municipality really ask young people or society a question.”

“I have no opinion about it because I don’t really feel involved in the municipality.”

Four students mentioned not to feel involved because they feel too young to participate, do not want to yet or experience that under 18 you do not have anything to say. One student mentioned not to think about what the municipality does. Four students mentioned something about the municipality involving citizens. That they did not see the municipality ask a question to youngsters or society or that they feel the municipality should take everyone seriously.

Figure 51 shows the average scores of the answers using a Likert scale.

9.2 Conclusions

This section presents the conclusions.

In summary

The first two research questions aimed to investigate citizenship education in the Netherlands, youths' experiences within education, and in what way youth develops a political attitude.

The findings show that learning citizenship skills and developing an attitude toward politics take place in a variety of contexts beyond the classroom. A variety of factors within these contexts play a role in shaping students' attitudes toward politics. The various factors in the contexts can either facilitate the development of a positive attitude or hinder this development and result in a more negative attitude. The attitude arises from the fulfillment of two fundamental needs, so-called feelings. The feeling of understanding and the feeling of belonging to the political system. The feeling of understanding and the feeling of belonging develop within the several contexts in which youngsters experience politics in direct and indirect ways. To integrate and communicate these insights a system map was designed.

The third research question focuses on the design. The system map helped to shape a design focus and design goal. The overall goal of the project is to work towards a more inclusive democratic system, specifically involving youth. Within the scope of the graduation project, the choice was made to strengthen the understanding of the relation between MBO students' daily lives and the municipality, by facilitating a moment to see this relation while performing an activity in class. Therefore a positive experience in class was designed to allow MBO students to develop a positive attitude towards politics, thus increasing the feeling of understanding and

belonging. The design requirements and the design goal are used to conclude the project.

To conclude

The insights of the final evaluation support the conclusions presented in this section.

The learning approach

The final insights of the evaluation show that students felt connected to the theme they worked on, but were less aware of the political relation of the themes. 'de Meester Burger' encourages a what-do-you-think approach due to the questions included in the various steps. Also, a learning-by-doing approach was experienced by the students, all students were able to actively participate. All of the above, facilitated by the setup of the various steps, switching from individual to group work, to plenary.

De Meester Burger shows to fulfill several aspects of the learning approach positively. The students felt connected to the themes and were somewhat aware of their link to the municipality. The tool encourages students to develop their perspectives and share these actively.

The learning environment

The insights related to the learning environment indicate that this tool allows students to feel safe in expressing their opinions within the groups, even if students disagree with their peers. According to the students' responses, the class was enjoyable and educational. This highlights that the tool stimulates for a

Concluding

learning environment that allows to develop citizenship skills.

The tool enables students to feel free and safe to express themselves within the groups. The class was perceived to be educational, implying that students were able to acquire new citizenship skills. However, it is difficult to say whether the feeling of being undervalued decreased considering students' perception of delivering valuable input. Furthermore, the feeling of being undervalued is a major issue that will not be dealt with in just one class.

Given that the test concentrated primarily on the students, the school's operation was left out.

Considering understanding and beonging

Based on the results of understanding and belonging, the following conclusions can be drawn. Most students stated that their understanding of what the municipality is about has increased. Considering why the municipality is important, the scores were slightly lower. But on average students share to have increased understanding considering the municipality. Understanding how to participate received varying answers, some students noted they did increase their understanding, were others did not state this.

Overall, the students feel too young to participate in politics. In addition, students felt belonging to the topic they worked on, but feel less belonging to the municipality. Also, the results showed that most students do not feel taken seriously or feel involved by the municipality.

We can conclude that this tool has the potential to increase the feeling of understanding. Although, the class helps students learn more concerning a specific theme, the increase in understanding of the municipality's, its importance and how to participate is increased less after one class. In terms of belonging, the tool has the potential to increase the feeling of belonging concerning the theme. However, an increase in feeling too young and taken seriously is something that needs to be considered over time.

Assessing the previous conclusions to the design goal we can conclude that students' understanding of the relationship between their daily lives has been strengthened to some extent as the students feel related to the topics.

'de Meester Burger' can facilitate a moment in class to see this relation. The various tests have proved that a meaningful conversation with insightful results amongst students is initiated.

Even though increasing the feeling of belonging was considered a byproduct of the design goal, working on topics that students are interested in and framing them in a political context can lead to an increase in the feeling of belonging.

Evaluating the results and the potential the tool has shown to increase the feeling of understanding and belonging. We can state that considering the SDT competence and relatedness are enhanced.

9.3 Limitations and recommendations

This section presents the recommendations and limitations of the graduation project. The insights are divided in two parts, the recommendations for the system map and for the final design.

System map

- » The system map can be tested with a broader group of stakeholders. This can improve the visualization of the factors by exploring overlap within the contexts, some factors may be relevant in multiple contexts. Testing with more stakeholders can help to identify these patterns.
- » Most likely, more undiscovered factors will influence the development of the feeling of belonging and understanding. Exploring other contexts could help to enrich and broaden the system map.
- » Testing the map with stakeholders can assist in identifying the needs of those who want to use the map. Aiming to improve the map's functionality and usability.

Final design

- » More testing and research is required to fully demonstrate the effectiveness of this design. Achieving intrinsic motivation does not happen overnight. Neither can complete skills on complex social issues and the municipality be taught in one single lesson.
- » The goal of the project was to develop a positive attitude by providing an in-class experience for MBO students. Aiming to increase their understanding and feeling of belonging. However, I believe that the political system as

a whole also needs some altering to aim for inclusivity and participation. This is a way larger and more context that asks for a different design challenge.

- » Additionally, it is also important to test students' experiences when working on other themes. Students almost always chose equality-related themes. It will be valuable to study what the effect of the tool will be, when students for example work on sustainability-related themes. It is valuable to investigate the impact on understanding and belonging when involving other themes.
- » MBO education involves many different types of students, types of education and levels. Testing often involved similarly aged groups in similar levels and education types. Testing the product with a broader audience is recommended.
- » The 'what-if' questions can be further developed and expanded if other themes are included.
- » The role of the teacher can be further tested, as this role was now fulfilled by the researcher. Also with that, it might be valuable to test involving an extra plenary moment in the middle of the session, as recommended by the teacher in the final test.
- » The municipality did not play an active role in the final test and product. However, the concept does allow and aim for the participation of the municipality. Therefore it is recommended to further investigate and involve the municipality in the class activity. It will be valuable to discover what effects this can have, especially on the feeling of belonging to the municipality.

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