Bottom-up approach in a suburban decision-making process: focusing on the youth

Master's thesis in Industrial Ecology & Quality and Operations Management

Abylaikhan Dauletalin
Dinesh Kumar Ananda Jothi

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CHALMERS
UNIVERSITY OF TECHNOLOGY

Department of Space, Earth and Environment
CHALMERS UNIVERSITY OF TECHNOLOGY
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Cover: Stakeholder map with Coggle tool

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ABSTRACT

Angered is one of the biggest suburbs in Gothenburg, Sweden with over 60,000 inhabitants. The local population is highly multicultural and largely comprised of long-term and recent immigrants. The current urban trends show that there is a clear socio-cultural and economic barrier between Angered and other areas of Gothenburg. In this regard, the youth segment who came or born here poses a high relevance to the future development and co-integration of Angered with other parts of a city.

Our research is based on the premise that young people play an important part in realizing sustainable urban development. What they bring along is development potential and willingness to contribute their energy and ability to envisage a better urban environment. However, youth's potential to effect positive change has not yet been entirely realized in Angered. Given the unique circumstances of the place, local youth could be viewed as passive recipients rather than enablers of change, a problem rather than a solution. Young people are rarely invited to the decision-making table and often, they have either limited means to participate in public life or do not know about available platforms. This is the gap that our research would like to assess. Widely referred to as 'the future', young people have the potential to play a vital role in achieving the Sustainable Development Goals (SDGs) by transforming the cities they call 'home' into sustainable communities.

The methodology used in the project is co-creative dialogue and triangulation. The research team conducted 20 interviews, 10 from Hammarkullen and 10 from Lövgärdet. Workshops with the local youth and provision of short surveys at the schools have been conducted in Angered region. Also, a series of interviews with major urban stakeholders, who have an impact on the decision-making process, have been done to get their insights and challenges on the urban development agenda. The purpose of having different data sets is to use the process of triangulation and find common areas of interest from stakeholders through the interviews and workshops.

The conclusive co-creative dialogue and the follow-up interviews accumulated in the final report will strive to potentially assist decision-makers in urban planning in facilitating the youth engagement in the region and reducing the socio-economic gap between Angered and other areas of Gothenburg city. Additionally, the research strives to be a valuable case study for implementing global UN sustainability goal 11 (SDG 11) "sustainable cities and communities", which can be used to assist other cities around the world to methodically develop their own urban agenda.

The report is written in English.

Keywords: Bottom Up, Sub urban Decision Making, Segregation, Social/Societal Development

Preface

About the Authors:

Abylaikhan Dauletalin is a Joint master's degree student studying Industrial Ecology at the University of Graz and Chalmers University of Technology. His primary background lies in environmental science, sustainable development, and decision-making models.

Dinesh Kumar Ananda Jothi is a master's degree graduate student studying full time at Chalmers University of Technology, Gothenburg, Sweden. With a bachelor's degree in Mechanical Engineering from India and a strong interest in Sustainable lifestyle, Change Management and Strategy creation.

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"The trouble with our time is that the future is not what it used to be."

Valéry

(1871-1945)

PHASE I

1. BACKGROUND

The current thesis report has been produced by two Master students at the Challenge lab platform of Chalmers University of Technology in Gothenburg, Sweden. The Challenge Lab is an innovative platform where Master thesis students can define their research interests by themselves through exploratory discussions with stakeholders, workshops and seminars (Phase I) and later form a two-person team and focus on specific research topic (Phase II). For the reader to understand the conceptual and chronological basis which led to the formulation and subsequent research of our specific urban topic, it is important to firstly describe the empirical and theoretical background behind special characteristics of the Challenge Lab platform.

1.1. Challenge Lab platform

Challenge Lab is a research platform located at Johanneberg Science Park of Chalmers University of Technology in Gothenburg, Sweden. The primary idea of the platform is to function as a neutral hub which provides intersection point between the academia, public and private sectors.

The inception of the Lab was initiated to provide a neutral area to integrate different perspectives and co-create sustainable future through transformative student projects (Holmberg, Andersson & Larsson, 2015). The distinguishing characteristics of the Lab are embedded in its structural framework, where Master thesis students conduct their work from the Triple-Helix (university-industry-government) perspective and follow the principles of the backcasting method.

Here in the Challenge Lab, Master thesis students take the role of "change agents" with the aim to solve complex sustainability challenges. For that, Master students bring together actors from the "Triple Helix", i.e. Academia, Public, and Private sector to build trust and engage in sustainability transitions (Challenge Lab, 2017).

The potential of the Challenge lies in the following aspects:

- Bringing together students from different academic and cultural backgrounds to solve pressing sustainability challenges from their shared perspective;
- Focus on holistic and integrated approach expressed through actionable project-driven research;
- Ability to connect student projects with different invited stakeholders to consult, cross-verify and discuss the details of possible implementation in a real-world scenario.

1.2. The aims of Challenge Lab

The aim of the Lab is, firstly, to provide a hub where different stakeholders can pose their concerns and gather around students to discuss the possible solutions to existing challenges. Given that students are neutral actors and do not belong to any faction and do not hold any intrinsic sectoral interests, stakeholders can be assured that the neutral character of the platform can give way to speak freely in a co-creative dialogue.

Secondly, to promote trust and open discussion among involved stakeholders through the students. As they often carry the capacity of simultaneously being unthreatening and challenging (Holmberg, Andersson & Larsson, 2015), they can take the role of being the highly needed change agents to society.

This cohort of Challenge Lab group consisted of 16 Master's degree students. It should be noted that the cultural and academic diversity in group members played an important role in ensuring richness of conversations, variety in projects, and evolution in personal views in the light of the challenges.

2. THEORY:

In this section we describe the theoretical basis of the Challenge Lab Master Thesis process, which was learned during Phase I and subsequently incorporated into Phase II of our research work.

2.1. Backcasting method

Backcasting is a method of strategic planning which serves as an alternative to traditional forecasting (Robinson, 1982). As the name implies, the cornerstone idea is to plan desired outcome backwardly, that is "from the future to the present" approach (Holmberg & Robert, 2000).
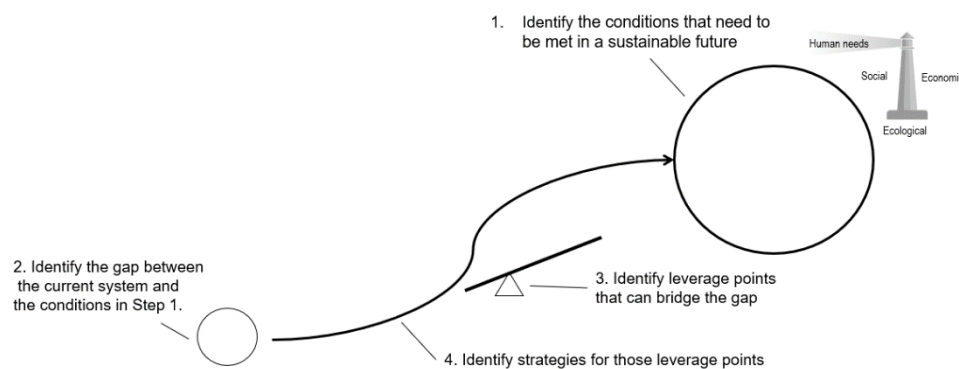

Fig. 1.: The four steps in the Backcasting framework (Holmberg & Robert, 2000)

The figure 1 above shows that the process of backcasting consists of 4 steps. From the above figure we can see that the first step in Backcasting is to define criteria for sustainability, since their identification can help to envision a better future and serve as a benchmark. Then we

move to step 2 where we describe the current situation in relation to the set sustainability criteria, this is important to identify the gap between the present conditions and the defined sustainable future. Step 3 is to envision future solutions where we foresee answers to reduce the gap. Finally, in step 4 we find strategies towards the defined sustainable goal (Holmberg & Robert, 2000). In addition, figure 1 incorporates the sustainable development concept in the form of a lighthouse. That is, it represents three traditional sustainability pillars (Society, Environment, Economy) with a particular focus on human needs and wellbeing as a light from a beacon (Holmberg, J., & Larsson, J. 2018), correspondent to the theme of our thesis, which also puts special attention to the human development dimension.

2.2. Triple-Helix perspective

Cooperation of stakeholders can often take years given different and sometimes contradicting interests. Building the right, meaningful relationships, sharing of knowledge and getting the support from each other in a transparent manner are the ultimate benefits of sustainable multi-stakeholder process. That is why an integral part of the Challenge Lab process is dedicated to stakeholder integration and collaboration. This mindset of knowledge sharing, and co-creative dialogue is expressed in Triple-Helix perspective (Holmberg, Andersson & Larsson, 2015).

Triple-Helix perspective is a concept developed in the 1990s by Etzkowitz and Leydesdorff (2000) which describes the growing shift in industrial societies from previously dominating "industry- government" dual relationship towards "university-industry-government" triple (hence the name) networking dynamics in knowledge-based society.

Based on international scholarship on this topic (Etzkowitz & Leydesdorff, 2000), the reason behind the inception of the Triple Helix includes three main elements:
1) in a society based on scientific knowledge, the role of universities in the interaction with industry and government is distinctively characterized;
2) three sectors (Academia, Private, Public) are eager to cooperate, while the innovative component derives from this interaction, rather than at the initiative of the state;
3) in addition to traditional functions, each of their three institutions partially assumes the role of another.

On the operational level the concept of Triple Helix can be used in the following manner. The Private sector, which is assumed to be responsible for innovation creation, and Academia (University), responsible for knowledge creation, could interact with the localized public sector with the aim to generate innovations which can be directly implemented at predominantly regional level to leverage holistic development leveraging top-down approach.

In Phase 1 the Triple-Helix concept has been expressed in terms of multi-stakeholder dialogues with Public, Private and Academia sectors along with Master students to discuss the pressing sustainability topics on a local level.

2.3. Outside in - Inside out perspectives

Outside in

"The most important problems that we face cannot be solved at the same level of thinking that we were when we created them."
- Albert Einstein

The outside-in perspective provides a way to understand sustainability transitions (Holmberg, 2014). The tools used in outside-in perspective are: Systems thinking, used to identify leverage points from where to intervene in locked systems (Meadows, 1997), the multi-level perspective (Geels, 2005), to understand on which level to intervene, and design thinking as an iterative process to improve a product.

Inside out

The definition of Inside out perspective is succinctly described by S. Covey (1991) in his classic book "7 habits of highly effective people". In this work he explains that if you want to change something you have to start with yourself. Even more than that, people must start from the deepest part of themselves - from paradigms, character and motives (Covey, 1991). The primary idea here is that usually it's not possible to change or improve other people or situations if the 'change-maker' did not improve first. Inside out is a continuous iteration of oneself in a pursuit for personal development which subsequently leads to responsible independence and effective interdependence.

Having that, there is an assumption that the root of many social issues is the paradigm of "from the outside to the inside". That is, everyone is convinced that the problem is "outside" and if that external "it" will disappear, the problem would be resolved by itself. The inside-out perspective offers another approach. As stated by Covey (1991) the principles of efficiency are laid down in our scenarios, in our minds, in our comprehension of experience. To understand and use them, to solve our most important problems, people must also learn to think differently, switch our paradigms to a new, deeper level, that is "from the inside to the outside"

In Challenge Lab both outside-in and inside-out perspectives have been incorporated into student learning agenda for diversified understanding. To explore Outside in perspectives, we had dialogues with stakeholders, multi-level perspective thinking with different levels (Landscape, Regime and Niche levels). For Inside out we had 'Self leadership' and thinking about oneself and his/her values. In latter sections the Multi-level perspective and Self leadership will be explained in detail.

2.4. Self-Leadership

In this section, we describe the concept of self-leadership and its relevance. Self-leadership is an inside out perspective, where we examine our own values and how it affects the decisions made on sustainability criteria by us (the whole C-lab Team).

Self-leadership is "the process by which you influence yourself to achieve your objectives" (Bryant, 2016, p. 1). Previously, self-leadership was viewed exclusively as one of the areas of leadership: the acquired ability to purposefully influence oneself to achieve one's goals. This is the basis for personal, team, business, or strategic leadership.

Self-leadership is scientifically grounded competence, a set of individual skills to manage their behavior, thinking, emotions (Neck & Manz, 2013). The person who possesses this quality has a clear idea of who he/she is, what one can achieve, where one consciously directs his/her efforts, what are his/her current goals and how to achieve them. In this regard, self-leadership has recently become an increasingly relevant direction, applicable, primarily in the field of management consulting, where the issues of motivation, goal-setting, and strategic planning are most vividly expressed. Self-leaders are effective in setting and achieving personal and professional goals, in addition, they inspire others to develop their personal and professional life (Quinteiro, Passos, & Curral, 2016).

2.5. Systems thinking

In this section we describe the concept of Systems Thinking and how different systems (like effects of technology on policy and culture, norms etc.) interact. The system is an abstract concept that allows us to structure the world around in a form convenient for the analysis. So, a system is a collection of related pieces of entities which can be related under the same topic (Meadows, 2009). Systems thinking is a practical approach to the perception of the world, which greatly accelerates the ability to analyze, make decisions and learn (Elecky, 2015). Practical because it is formed by practice, and not grown from abstract mathematical theories.

2.6. Multilevel perspective
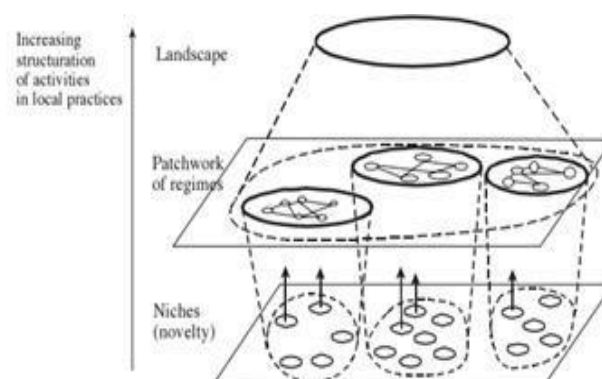
Fig. 2., Multi-level perspective and interactions between niches, regimes, and landscape (Geels, 2005).

It should be noted that sustainability problems are not one dimensional and require holistic approach, that is when talking about sustainability we usually talk about wicked problems (Churchman, 1967) Since wicked problems are hard to define it can be useful to apply Multilevel Perspective (MLP). MLP is a holistic perspective where the different levels interact (landscape, regime and niche levels) and how they affect each other.

According to the article "Processes and patterns in transitions and system innovations" by Geels (2005) there are three levels in MLP, the landscape level, regimes and niches (see Figure 2). The landscape level is defined by external factors outside such as globalization, sustainability issues etc. The author argued that it is tough to change systems from a landscape level but the changes at this level affect the levels below such as regimes and in turn niches. At the regime level is structured through socio-technical systems such as knowledge, policy, technology, legislation, market, culture and norms. These systems are dynamic and affect each other even when there are incremental changes. The last level is the niche where we can see novelties which can bring in larger changes and if a niche technology survives the competition it has the possibility to affect the regime and maybe even the landscape level.

Backcasting can be used to tackle wicked problems and it can be supported through the theory of leverage points. Meadows says that in a system a small change in one thing can bring in large changes in everything, meaning that the systems are intertwined, and even small changes have large backlashes (Meadows, 2009). Therefore, as soon as we start to think systematically, we get several important advantages:

- The ability to generalize and disseminate their experience gained in one area to the outside world
- Universal "toolkit" for analysis, forecasting, and development of new systems.

2.7. Design Thinking

A methodology for solving technical, business and other tasks, based on a creative, rather than an analytical approach. The main feature of design thinking, in contrast to analytical thinking, is not a critical analysis, but a creative process in which sometimes the most unexpected ideas lead to a better solution to the problem (Ismesteva, 2015).

The very word "design" is most often associated with us with an object or a result, but this is not its only meaning. Herbert Simon in his book "Sciences of the Artificial" (1969) defined the design as a process of converting existing conditions into desirable ones. Thus, design thinking is a process that always focuses on creating a better future and searching for new solutions for complex problems in a variety of areas. An important aspect of design thinking is that it can be used as an innovative tool to solve problems.

According to Simon (1969) in the design mindset, there are 7 stages:
- definition of the problem;
- study;
- formation of ideas;
- prototyping;
- choosing the best solution;
- implementation of the solution;
- evaluation of results.

During the passage of these stages, problems are formulated, correct questions are asked, ideas are invented, and the best solutions are chosen (Simon, 1969). In this case, these steps are not linear - different stages can be held simultaneously and return to certain stages if necessary.

2.8. Neutral arena for integrative dialogues

Throughout the lab process, the role of space is crucial. Not only on a theoretical level – in terms of space which fosters trust and collaboration for stakeholders – but also in physical terms, independent of any specific institution. At Chalmers University of Technology there are positive experiences from using neutral arenas to involve actors in change processes (Holmberg et al., 2012). The strategy builds on three building blocks to achieve change: create a neutral arena/organization, build on individual engagement and involvement (bottom-up) and communicate a clear commitment from the management team (Holmberg, Andersson & Larsson, 2015).

3. METHOD

In the following section we will describe the methodological conduction of Phase I.

3.1. On backcasting aspect

In the initial stages in the C-lab students were taught to practice the essence of backcasting principles and perspectives. The whole team worked with the backcasting principles in mind to get the inside-out perspective to clarify how we perceive the aspects of sustainability and what are the values associated to these beliefs.

3.2. Outside-in

As previously mentioned, the Challenge Lab provides the neutral arena for stakeholders from the triple-helix model (Public, Private, and Academia sectors). Throughout the Phase 1 period, three inclusive stakeholder dialogues have been conducted dedicated to the topics of Circular Products and Services, Mobility, and Urban Futures. The idea behind these dialogues was to unfold the silos of individual sector and discuss the current situation and ways to solve pressing issues in these focus areas. Participants, including both stakeholders and students evaluated the positive effect of such dialogues in terms of picturing a bigger perspective on problematics and finding possible unconventional ways for common development.

Each stakeholder dialogue had been finished off by trying to identify leverage points, that is, important points where efforts should be put to address the challenge. Characteristic for a leverage point is that several important actors have energy to together address the challenge from this point. First leverage points are identified together with the stakeholders and then by students in the following reflection group discussions.

3.3. Inside-out

The inside-out aspect of Phase 1 comprised of several self-leadership workshops and activities given by C-Lab staff and by invited tutors with the aim to explore our core values to understand the complicated system we live in. A significant part of these activities focused on group discussions and daily iterations of what was learned. All these elements were meant to teach us, students, to assess our own values related to sustainable development, become aware of our strengths and weaknesses, and ultimately realize our potential to become self-confident and responsible change-makers.

4. RESULTS

There were three specific outcomes from Phase 1. Sustainability framework, formation of team and research questions.

4.1. Sustainability Framework

The C-lab team defined the criteria for sustainability based 4 dimensions Well-being, Societal, Economical and Nature (ecological factors) which are described below.

Nature

- Substance[1] emission: Nature is not subject to systematically increasing concentrations of substances.
- Substance extraction: Substances are not extracted in a way that disturbs the balance of natural cycles.
- Ecosystem balance: Exist in harmony as one system, enabling ecosystem services and biodiversity.

Economical

The economic system is an instrument that enables the other criteria, to be met efficiently and effective in such a way that:
- Resources (include natural and manmade) are used indefinitely non-depleting.
- It ensures a fair distribution of resources.
- It is resilient to disturbance and disruption and is flexible enough to adapt to changing conditions.
- It facilitates transparency and trust.

Societal

A sustainable society is a system of individuals built upon the following criteria:
- Empowerment.
- Equity & Justice.

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[1] Substance is in this context is defined as a species of matter of definite chemical composition.

- Trust (such as between individuals, transparency).
- System for well-being (maintain access to food, medical service, support & safety).
- Openness to Development and Novelty.

Well-being

- Everyone should have the right to human basic needs such as health, security, food, water, sanitation, recreation, shelter, energy.
- Human life should fulfil psychological needs, such as affection, understanding, participation, idleness, creation, identity.
- Everyone should have the equal opportunity and freedom.
    - To choose or to opt out.
    - To express one's identity.
    - To pursue their own goals, objectives and commitments without limiting others' freedom or harming others.

Characteristics of the Sustainability framework was incorporated in the latter part of the research.

4.2. Team formation and research questions

In the final stage of Phase 1, our team was formed as both of us (authors, Abylaikhan & Dinesh) understood that we share a common interest to explore the aspects of societal sustainability. After that our team started to formulate research questions on specific topic and simultaneously started to plan and engage with stakeholders to set up future activities such as interviews and workshops. Because of these activities our team ended up in the following research questions.

- Are there any needs that the youth in Hammarkullen and Lövgärdet districts of Angered perceive as sustainability issues and how can they be addressed?
- Can bottom up perspectives provide a better view on a sustainable solution to the suburbs of Gothenburg?
    - If youth (age 15-30) are to be a part of decision-making process, how can we address and incorporate their input?

5. DISCUSSION

In this section we discuss our reflections from the Phase 1 process from Challenge Lab.

5.1. Reflection of the initial stage

The first phase of Lab focused on understanding the current state – identifying the issue and learning about it, both from academic point (lectures, workshops) as well as by immersing the students in the problem through insights from invited triple-helix stakeholders. Sometimes, given the gravity of complex multi-layered issues, this eventually results in a 'it isn't possible

to do anything about it, the problem is just too large' feeling among the Lab participants. For this phase to be successful, there was capacity building necessary for the Lab team to learn how to gather data in an effective and insight-focused manner. Using backcasting approach as well as self-leadership methods, the team got important skills in interview, observational, and other research practices.

It is also important to mention the diversity aspect of the Lab. People within the team learn from one another as much as they learn from the outside environment through the process of making sense of all the data together and seeing it from one another's perspectives.

Phase 1 provided a deep space for reflection, again both conceptually through workshops, lectures and physically, by stakeholder dialogues with representatives of academia, municipality, and private sectors. Following that, Lab participants gathered together daily to share the experiences, stories, data, and insights. The focusing questions of those meetings were "Based on what you've seen and heard, what knowledge have you acquired? Who are the main stakeholders in this field? What ideas do you have about beginning to act in that field? How will you know it's creating value? With these emerging progresses, the Lab team began to formulate their own research focus.

5.2. Identifying common interests

Kicking into the next phase of prototyping research focus was a time to work out the synergies between different individuals to form teams around different areas of interest. People may want to work on the same problem but from different perspectives or angles so it's important to allow space for students to negotiate their shared understanding of the approaches they want to take together. To do that each Lab participant presented their own topic of interest and the way to approach it. It followed by the discussion of pros and cons of the idea by other lab participants and coordinators.

The prototyping phase was about iteration, fast trials, and not being precious about ideas that fail. It was essential for the participants to hold their ideas lightly, so they can come up with a solid ground for subsequent research process. Objectively analyzing the weak and strong aspects of ideas is the way we improved the likelihood that the lab will create a work with impact.

5.3. Facilitation of the lab process

The process of a Challenge lab is often dynamic and full of divergence, convergence, emergence, emotions, turmoil, and teamwork challenges that it needs to be effectively and calmly controlled. Having strong facilitators in the room can ensure that conflicts feel productive and not like road blocks. To address that aspect, Lab coordinators carefully taught, assisted, and guided the processes within the Lab including discussions, failures, learnings, workshops, consultations, and the process of identifying personalized research focus.

5.4. Shared perspective

As an iterative process, sharing the results and experiences across the participants in phase 1 was essential to ensure that further iterations take into considerations any learnings. Common get-togethers by Lab participants, regardless whether it's in a short & intense, or longer & more intermittent, were important so that they can share findings to benefit the longer-term goals of the Lab.

PHASE II

1. Introduction

Below the authors would like to introduce the reader with the context of the topic, problem identification and its significance, as well as the response in terms of research actions made.

1.1. Context

The way of life of people is an important indicator of socially oriented policy (Tuhbatullin, 2004). Within the framework of suburbs, social problems expressing the essence and content of a way of life are of relevance. Thus, the way of life is a universal criterion of the social situation and therefore expresses the overall psychological climate of a bigger city. Considering that suburbs make up a significant part of the city's settlements, the problem itself acquires an all-national character. Understanding the specifics of certain groups within the suburb, their pressing problems and concerns, their aspirations and opinions on current state of life, is important to devise an efficient and transparent urban development. The solution to the problems of local population determines the close connection between solving the issues of social and economic development of suburbs and improving the living conditions of people. This dependence necessitates an integrated approach to studying the trends in the development of social processes in settlements of this type (ibid.), and this requires scientifically based coordination of the development of many aspects of human life. Their totality, characterized as a complex formation with various kinds of features (socio-historical, socio-economic, socio-demographic, socio-cultural, national, and other characteristics) defines the 'health' and integrity of the general society.

In the thesis research we wanted to explore this notion of social integrity in the suburb environment with a focus on the youth segment of population. Given the timeframe allocated for the research, we limited ourselves to the consideration of this problem only within one geographical case area - the suburb of Angered in Gothenburg city, Sweden. On the territory of Angered, there are about 11 district areas. However, in terms of our research, we further focused on two districts of Angered, namely Hammarkullen and Lövgärdet. This allowed us to identify the general trend of development and the specifics of its manifestation in small urbanized settlements of Angered.

1.2. Background

Over the past years, valuable work has been done by local social researchers and institutions

who worked in the field of citizen participation in Gothenburg. In this regard, we can note such works as "Mellanplats" project, Institute of Social Sciences at Hammarkullen district, notable youth affairs workers such as Eva, Lasse, and others. Their input throughout our research was highly valuable to grasp the understanding of the current conditions of Angered segment in Gothenburg. In the perspective of their research and work focus, the main aspects were the development of the citizen participation in local urban management, infrastructure spacing issues, socio-demographic processes and the spiritual culture of the urban population.

1.2.1. Mellanplats project

This project was conducted in cooperation with the consortium consisting of seven institutions, four of which were directly involved in this project: Chalmers University of Technology, University of Gothenburg, City of Gothenburg, and Region of Västra Götaland.

The research plan of the Mellanplats project (2013, p. 1) states the following: "The project's aim is a transdisciplinary production of knowledge about the role of citizen initiatives in local governance and how current design and planning practices may be developed to more fully draw from these initiatives as resources for sustainable urban development. This requires a reflective process involving research and practice in concrete planning situations. The project proponents were specifically interested in responses to urban deprivation and performed a case study in a Swedish suburban area suffering from socio-economic stigmatization".

The main research question of the project (2013): How can citizen initiatives interplay with invited participation in local development work?

1.2.2. Stadslandet project

The project was initiated by the Gothenburg city municipality and operated with support from the European Regional Development Fund (ERDF) in the suburbs of Angered and Eastern Gothenburg. The project aimed through targeted interventions, increase district attractiveness, growth and jobs. As part of the project, the pre-study "Urban – Rural Gothenburg" was performed from 2012 to 2014 (Mistra Urban Futures, 2016). A new project application to Tillväxtverket (The Swedish Agency for Economic and Regional Growth) was launched in September 2016 for the project Stadslandet, which started by the beginning of 2017 and was expected to last for three years, i.e. 2017-2019.

The urban challenges addressed in Project Stadslandet are following:
- gap between the urban, central parts of the city with the more rural outskirts of the municipality and the exposed position in the peri-urban district in between;
- low level of self-sufficiency in the peri-urban districts.

Project Stadslandet´s overall goal is to develop test and demonstration environments for a low-carbon economy and thus creating conditions for green innovation and green business development between urban and rural (Mistra Urban Futures, 2016). Project activities aim to

strengthen Gothenburg's overall ability to convert to a sustainable society from an economic, social and environmental perspective.

However, even though various social processes taking place in cities have become the subject of research by experts and scientists from various fields of knowledge, many aspects of the urban development remain poorly understood. It should be emphasized that there is not enough work on a systematic analysis of the functioning of various structures of the urban society, on solving social problems of improving the environment of human life and the way of life of the population of different types of suburbs in the city. The regularities of the functioning and development of the social, economic, political and cultural spheres of the city remain inadequate through the prism of the way of life of its population, considering the characteristics of different types of urbanized settlements and groups. At this point, it should be noted that the body of research related to the area of Angered is subject to further development. Moreover, the extensive research work specific to youth engagement and their involvement in public decision-making in Angered remains limited both in local Swedish and English languages.

The current thesis work tried to complement existing pool of knowledge and bring a new perspective by using direct bottom-up approach when integrating with the focus population group in Angered. It is based on the premise that young people might be the agents of change for a sustainable urban development. However, youth's potential to effect positive change has not yet been fully explored collaboratively with other stakeholders from different helixes (Academia, Public and Private sectors respectively).

1.3. Research questions

- Are there any needs that the youth in Hammarkullen and Lövgärdet districts of Angered perceive as sustainability issues and how can they be addressed?
- Can bottom up perspectives provide a better view on a sustainable solution to the suburbs of Gothenburg?
  - If youth (age 15-30) are to be a part of decision-making process, how can we address and incorporate their input?

1.4. Delimitations

Since the research has been conducted in Sweden, with primarily the local population, the language was a barrier given authors' limited knowledge of Swedish. Having that, certain aspects of the topics covered could have been explored in more details during interviews.

Due to certain unwillingness of government representatives and public servants to share the data, this research does not provide fresh information on the annual allocated scholarships, the number of enrolled, expelled students, number of graduates that are already employed and overall performance, etc. All provided data was extracted from open sources, news, reports of authorized bodies.

Due to the absence of information the researchers of this thesis relied on the networks to identify representatives and students, as well as to distribute surveys.

Some educational facilities were informed in advance about the coming survey and therefore certain groups of students could be provided for participation, while others had not been notified about the survey at all. Unfortunately, this fact was considered only after the survey and data collection.

Anonymous student surveys were conducted in classrooms and canteens. After conducting the questionnaire, individual or group survey were conducted with students and representatives of institutions. In some cases, teachers were present in classrooms during anonymous surveys and interviews, due their intention and will to stay. Given this fact, the results of some student interviews and surveys may be biased, even though students and teachers were friendly and open to each other and were not afraid to raise problematic questions or express critical views. The sampling was not representative to specifically Angered area, which is another delimitation of this study.

One of the main limitations of the study is that respondents were surveyed in only 2 of the several district territories of Angered. Taking into account previous experience of cooperation with representatives of the central executive bodies and unsuccessful attempts to obtain fresh data and conduct interviews, these regions were chosen due to the administrative opportunity to make an appointment with representatives of the authorities and education system employees.

It is worth mentioning that local representatives and teachers of educational institutions were willing to get in contact. Local representatives, teachers, as well as administrative staff directly contacted the students, and they were cooperative during surveys. Some of them also provided the necessary information. For example, as part of unplanned visits, representatives of one of the regional schools gladly interrupted the educational process, provided classes for interviews, and showed an accommodation, library and general conditions for studying.

2. Key Concepts

In this section we discuss the different theoretical concepts used in this report.

2.1. Citizen participation

> *"Tell me, I forget. Show me, I remember. Involve me, I understand"*
> Xun Kuang, Xunzi book, 312-230 BC

Citizen or public participation is a continuous process of interaction (communication) between the institution (e.g. city municipality) responsible for deciding and citizens whose interests may be affected by the direct or indirect consequences of the planned decision, as well as between citizens and those state related bodies that regulate this type of activity.

According to Karpov (2012) the communication process should be specially organized, so that:

- The public was fully informed about the stage of project development and the opportunities for participation
- An active collection of citizens' opinions was carried out, their perception of the project, their preferences for any alternatives related to the project
- The public understood the mechanisms of problem research and decision-making

Thus, for a more complete understanding of the essence of this process, we should emphasize that "participation" is a communication process that obeys all the laws of networking "from many to many". In turn, the term "decision-making" is understood as a process of rational or irrational choice of alternatives, which aims at achieving a realized result and includes the following stages (Karpov, 2012):

- Situational Analysis
- Identification of the problem and goal setting
- Search for necessary information
- Forming alternatives
- Formation of criteria for evaluating alternatives
- Evaluation
- Choosing the best alternative
- Development of criteria (indicators) for monitoring
- Implementation (execution)
- Performance monitoring
- Evaluation of the result

It should be noted that the key focus group in such process is a public itself.

Levels and forms of public participation

Since public participation is a human right and not an obligation, it is easy to assume that different people are willing to spend a different amount of effort to participate in discussing issues that directly affect their welfare or do not affect at all. On the other hand, the opportunities provided by law, the situation and the organizers of the process also differ.

To generalize the variety of manifestations of "participation" in real life, the concept of "participation ladder", first proposed by Sherry Arnstein, is usually applied (Arnstein, 1969). Ladder allows one to demonstrate that not all interactions about the project (decision) is a full-fledged participation. The schematic illustration of the ladder is given in Figure 3.
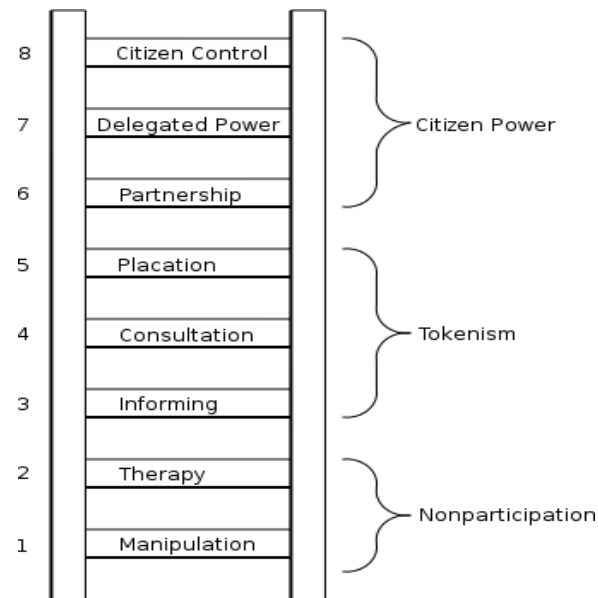
Fig. 3. Arnstein's ladder of citizen participation (Arnstein, 1969).

As shown in Figure 3 manipulation is not considered as participation - provision of incomplete, unreliable information by the customer or state authorities, involving "actors" who perform the roles of "ordinary citizens" written for them by the organizers, filling in the hall at hearings hired by the crowd, the creation by the project customer or administration of special paid groups or involving citizens to participate in individual events for material incentives. Likewise, the "therapy" is not considered as participation - the statement by officials of soothing comments, such as references to the expertise and approval of "competent authorities", the underscoring of the positive aspects of the project, the promise of economic and social prosperity.

According to Arnstein (1969) the minimum level of participation is the dissemination of complete and reliable information: the simplest form of one-way communication between the developer and the public to maintain awareness of the decision-making process, but without the ability for the public to comment on the documents or otherwise participate. Information can be provided through the media (distribution of press releases, holding press conferences), as well as by holding exhibitions of documentation, distribution of printed materials through organizations visited by people and other methods.

The current thesis wanted to assess and explore the premise of the 'real' public participation, specifically in the context of the youth. Real participation begins when the decision-making body shares with the public some of its powers, allowing not only to choose options for ready-made solutions, but also to formulate these decisions, as well as to determine what, in fact, is the problem.

One of the levels of real participation is co-creative planning, the cooperation of the government and the public with the common responsibility of the parties for planning and

results, for solving complex issues and resolving contradictions. Joint planning can take place in the format of advisory groups, working groups, negotiations. Sometimes more complex formats are used, such as "seminars on the future search", "planning cells", etc. The scope of the transferred powers and responsibilities can vary quite a lot.

Civil control is the highest level of public participation for solving the most important issues of community life by the forces of its members themselves. The most famous form of civil control is a local referendum.

It should be noted that participation in management is a "non-payment" process. The higher the level, the greater the resources spent by the public. According to Karpov (2012) the actual processes of participation always resemble a pyramid - by how the number of people with different degrees of involvement is built. For a million people informed of the problem, only 100,000 passively express an opinion (if they are asked), one thousand will take part in consultations, 100 people will be ready to participate in joint planning and 10 will spend enough time to participate in the process on an equal footing with its initiator and state bodies (i.e. Will be ready to exercise civilian control). Due to differences in goals and objectives, what seems acceptable in the field of public relations turns public participation into its opposite - manipulation, lack of participation. To avoid blunders, we recommend that you adhere to certain principles that reflect the essence of the participation process.

2.2. Social Integration

The United Nations (UN) define social integration as a concept which aims to "foster societies that are stable, safe, just and tolerant, and respect diversity, equality of opportunity and participation of all the people" (United Nations, 2009). In this thesis we focus on this definition of integration by the UN and discuss the aspects of social integration throughout the report and compare it with the empirical study.

2.3. Segregation

According to the article "Segregation – prevalence, causes, effects and possible solutions", the author Guevara (2015) identified three most commonly discussed variations of segregation described below:

1. Socioeconomic segregation or class – between different income, professional or social groups.
2. Ethnic segregation – between groups with different nationalities, religious or ethnic origin.
3. Demographic segregation – between different age groups, types of household or gender (p. 8).

In the context of this thesis we focus on the first two categories, as the primary sample group studied is youth from age period of 15 to 30 as this is the main age group applying for jobs.

This definition of youth comes from the UN report "Youth sustainability network report" (2017).

During the study it became clear that segregation is based both on socio-economic class and ethnicity. Therefore, Guevara's definition seemed apt and is the one relied upon in the rest of this thesis.

2.4. Top-down and Bottom-up models of governance

According to the World Bank Report on Governance and Law (2017) "governance is defined as the process through which state and nonstate actors interact to design and implement policies within a given set of formal and informal rules that shape and are shaped by power" (p. 3). Power in this case is defined as "the ability of groups and individuals to make others act in the interest of those groups and individuals and to bring about specific outcomes".

An expression of the 'essence' of each state is the way it is governed. Governance is a purposeful allocation, that is, related to the setting of a goal, which should be aimed at the development of a specific area, for example, economy, security, and the development of society. Such goals may be as follows: protection of citizens, creation of conditions to produce goods and services necessary for settlement, ensuring social activity of citizens. According to Kozbanko (2002) the following criteria can be assigned as the most significant characteristics of the governance: to respond to changes in the society; to have a comprehensive character by considering any problem in interrelation with other problems; efficiency and effectiveness; provision of confidence for the general society.

Several researchers (Skvortsova, 2010, Lee, 2003, Kooiman, 1999) consider the governance as a social tool for solving social problems of community. For example, according to Skvortsova (2010, p. 9) these are "systems of measures aimed at implementing social programs, maintaining income and living standards of the population, providing employment, as well as supporting social sectors and preventing social conflicts"

To be able to present the specifics of the process of formation and implementation of state governance several models are used. One of the most famous and relevant socio-political criteria depends on who plays the main role in setting goals and objectives in the development of public policy. Based on this criterion, Kozbanko (2002) distinguish three models of governance. The first model is called the "**top-down**" model. According to this model, all decisions are made at the highest state levels and then brought to the lower levels of general society, where community plays a passive role and act as simple performers. This model of governance is also known as centralized model.

The second model is "**bottom-up**", more broadly known as democratic (Kozbanko, 2002). In this model the formation of policy begins with the lower structures of public administration. Community groups and organizations are involved in its development. They can also directly participate and contribute in various programs and projects. Based on their proposals, an

integrated state policy is developed.

The third model is "**mixed**". The model combines the first two approaches (Kozbanko, 2002), when there are mechanisms to involve citizens and governmental body in the development of policies with strong centralized management but at the same time with full inclusion of community in the process of decision-making.

In the context of our thesis we specifically tried to explore the potential of bottom-up and mixed decision-making. Where direct contribution and active involvement of the general community (specifically youth) are tangibly considered in the municipal decision-making and subsequent policies which to a larger or lesser extent affects their life.

2.5. Youth

According to the United Nations Department of Economic and Social Affairs (UNDESA) youth can be defined as "a period of transition from the dependence of childhood to adulthood independence". That's why, as a category, youth is more fluid than other fixed age-groups. Yet, age is the easiest way to define this group, particularly in relation to education and employment, because 'youth' is often referred to a person between the ages of leaving compulsory education and finding their first job (UNDESA, 2013, pp.1-2).

In our study we came across youth groups who study at school from age 15-22 and who are in search of a permanent job between the ages of 22-30. Hence this definition of youth is suitable for our thesis.

2.6. Racialization

According to Gans (2017, p. 2), racialization is defined as "the extension of racial meaning to a previously racially unclassified social relationship, social practice, or group". In the study we came across the term racial segregation upon stigmas and this definition fits the report.

2.7. Triple and Quadruple helix concept

The main thesis of the triple helix concept is that in the system of innovative development, the institutions responsible for creating new knowledge begin to occupy a dominant position. The reason for such an important transformation was the logic of the knowledge development, which generates more and more synthetic trends, which include both fundamental and applied research of interdisciplinary nature. It could be said that in these areas, the formation of "clusters" is observed that creates the future potential for innovative development, since the connections between scientists, entrepreneurs and users are qualitatively different, as well as the functions performed by individual participants (Etzkowitz & Leydesdorff, 2000).

According to the Triple Helix Association (2016) the model of Triple Helix includes three main elements: (1) in a society based on scientific knowledge, the role of universities in the

interaction with industry and government is distinctively characterized; (2) three sectors (Academia, Private, Public) are eager to cooperate, while the innovative component derives from this interaction, rather than at the initiative of the state; (3) in addition to traditional functions, each of their three institutions "partially assumes the role of another." Institutions that can perform non-traditional functions are considered the most important source of innovation.

The concept of Triple Helix is assumed to be working in the following manner. The Private sector, which is responsible for innovation creation, and Academia (University), responsible for knowledge creation, interact with the Public sector with the aim to generate innovations which can be directly implemented at predominantly regional level to leverage holistic development through top-down approach.

Transition to the Quadruple Helix

The model has further developed when the researchers Carayannis and Campbell (2009) introduced a third, more complex, mode for producing knowledge (referred as Mode 3) which considers civil society as a full-term and equal fourth sector. This renewed concept has been named Quadruple Helix. As seen in Figure 4 ,it incorporates all the elements of the Triple Helix while integrating them with a **bottom-up approach** including **civil society.** They explained it by stating that the Mode 3 Knowledge Production System architecture focuses on and leverages higher order learning processes and dynamics that allow for both top-down government, university, and industry policies and practices and bottom-up civil society and grassroots movements, initiatives and priorities to interact and engage with each other towards a more intelligent, effective, and efficient synthesis (Carayannis & Campbell, 2009).
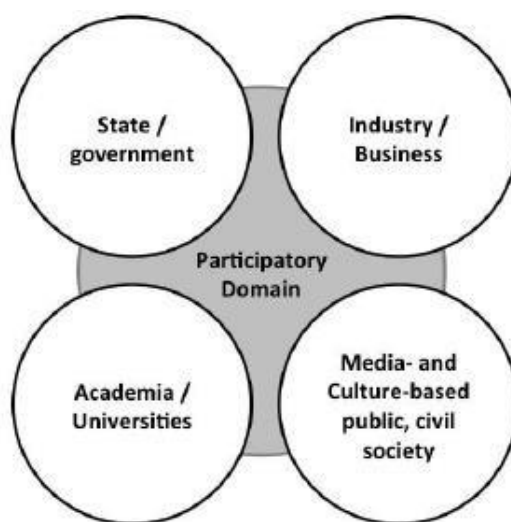
Fig. 4. The Quadruple Helix model (Van Waart et al., 2015)

At the same time, the model of **Quadruple Helix** was structured by saving all the communication between Triple Helix sectors (Private, Public and Academia) and by determining the role of **civil society** (Yawson, 2009). According to the report of EU Committee of the Regions (2016) the sectoral characterization in Quadruple Helix can be described as following: academia and private sectors provide the necessary conditions for an integrated

innovation ecosystem. Governments provide the regulatory framework and the financial support for the definition and implementation of innovation strategies and policies. Civil society not only uses and applies knowledge and demands for innovation in the form of goods and services, but also becomes an active part of the innovation system. Information and communication technologies (ICT) work as an enabling factor of bottom-up participation of civil society.

Since the current thesis is primarily focused on the civil society and its interrelation patterns with other sectors, the concept of Quadruple Helix plays an important role as one of the key concepts in understanding the dynamics and opportunities of stakeholder integration.

3. Problem and Significance

To understand the scope of the problem it is important to clarify specific criteria tailored to it, so it would be possible to pinpoint the symptoms and work on them. In the current research we aim to search for criteria which determine the level of social development in local suburbs.

According to the work 'The way of life of the population as the main criterion for social development of a suburb' by Tuhbatullin (2004), when devising strategic tasks for development and management of integrative processes, specific features of each urban group (e.g. youth), its social and economic potential, the value-motivational and demand orientation of the population, established norms of life activity and the specificity of people's way of life should be considered. The population of each city represents a social-territorial community, fulfils certain subjective functions in relation to the entire state of the social system. At present, a significant part of the population lives in urban areas. It is natural that the problems of the social development of suburbs have their own characteristics, without a deep study of which it is impossible to improve the effectiveness of managerial decisions aimed at optimizing the livelihoods of the population of the overall city. Therefore, in the center of our research, one of such communities - the young population of Angered suburb in Gothenburg city, Sweden - appears as the subject of life activity and the reproduction of internal and external social interrelations. In the conditions of changing social relations and new socio-economic landmarks of Sweden's development (at the time of this research work), there are great opportunities for adequate scientifically based backcasting and designing of various aspects of public life based on the use of the development potential of youth in suburbs.

Obviously, the problem of comprehensive changes in people's way of life in accordance with their needs and value-motivational attitudes is extremely difficult as each person has his/her own values and opinions. Hence the real carrier of a way of life is a specific person whose life activity is realized within the framework of social communities of different levels (national, social-professional and social status, age, etc.), we specifically concentrated on personal interaction with our focus stakeholders, through face-to-face interviews and interactive workshops. This approach allowed us to supplement the picture of people's way of life by introducing a very important personal (subjective) component into it. That is, by using the bottom-up approach. In addition, it became possible to examine the nature of the processes of economic reform on human activities through the prism of public opinion of residents of

Angered and other parts of Gothenburg city.

The presented panorama of the objective determinants that opt the nature of changes in the living and working conditions of the population of Angered suburb is by no means sufficient for a comprehensive analysis of the dialectics of people's way of life, where a wide range of personal factors are needed that record the degree of involvement of a person in a wide range of social relations, the degree of his/her involvement in the process is a vital activity, as well as the subject's attitude to many forms of manifestation of this activity.

4. Methodology

In this chapter, we will describe the methods and tools used to conduct the research. All the steps involve the principles of back casting, with the interviews and workshops. To address the above-mentioned issues, we conceptually divided the thesis work into three research actions. Firstly, to understand the historical social trends of youth (UNDESA, 2013) dynamics in Angered, we conducted both interviews with local population and literature review. Secondly, to identify the current situation (needs, concerns, and aspirations) of youth in Angered, using a bottom-up approach (Kozbanko, 2002), we actively engaged several key stakeholders in the focus area to identify opinions about these aspects from the first-person perspective. Thirdly, to discuss findings and connect these needs, we have arranged a dialogue with all relevant stakeholders (local municipality, NGOs, business and youth representatives) to come up together and openly discuss the possible ways to collaboratively address these needs (Etzkowitz & Leydesdorff, 2000).

Upon the completion of these three parts, we have accumulated the gained knowledge by analyzing all the responses through **triangulation** which can be described as the collection of data from two or more sources to gain multiple perspectives and validation of data (Carter et al., 2014, p. 1). This is followed by writing the current final report with the aim of it to be used as a helpful reference material for further research in the focus area, and to be used as a practical methodology/case study in the field of sustainable urban development, specifically in efforts to implement UN Sustainable Development Goal number 11 (Sustainable cities and communities) in the integrative 2030 Agenda for Sustainable Development (UNDESA, 2015).
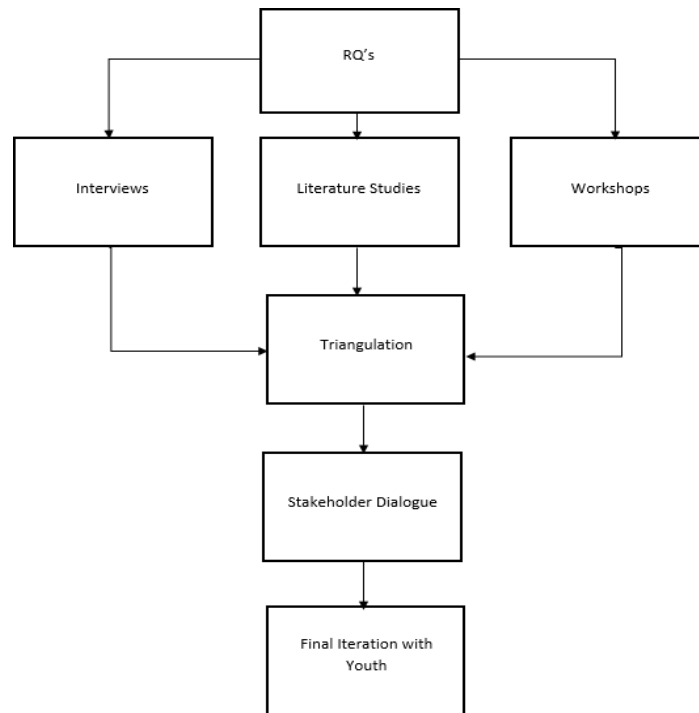
Fig. 5.: Flow of the different stages in the methodology

From figure 5 we can see the flow of the whole methodology; we start with the research questions that were created in Phase 1. The interviews and workshops gave access to stakeholders and their perspectives, the outcome of interviews and workshops were used in triangulation where we created strategies based on the information from them. The strategies were iterated with the stakeholders and finally with the youth as we could not bring the youth to the dialogue due to inconvenient time scheduling.

4.1. Semi Structured Interviews

With the understanding of backcasting, we formulated some standard questions for the interviews and workshops considering sustainability criteria, current situation and possible future solutions. The interviews were conducted with 4 helixes, namely the academic sector, public sector, private sector and the youth population associated with the region. The four helixes were chosen because we were triangulating the outcomes of the different stakeholders to understand if they had similar perspective, so we would arrive at a specific problem or a key concern.

All 3 steps were running in parallel, we transcribed the results of interviews and workshops and isolated them into different groups to analyze them as one at the end of the empirical study. Another important aspect of the interviews was to obtain contacts based on their reference through snowballing technique which "emerges through a process of reference from one person to another quickly building up and enabling the researcher to approach participants with credibility from being sponsored by a named person" (Streeton et al., 2004, p. 37).

We have youth as a focus in the project and it was interesting for us to see how and if the youth's voice were heard and how they were incorporated in the planning processes. Hence, we had to conduct interviews with stakeholders from the municipality. The interviews were semi-structured with key questions from backcasting perspective and follow-up questions based on individual's position and perspective. There were 36 interviews with a total of 39 participants of which 7 stakeholders were from the Academia, 19 from the Public sector, 2 from the Private sector and 11 from the youth in Angered. All the interviews that were conducted with the Academia was face-to-face, 16 face to face interviews with the Public sector and 3 group interviews with two participants in each interview respectively, 2 face-to-face interviews from the Private sector and 11 individual interviews with the youth from Angered. Since we had a youth from age 15 to 30 as our focus, our workshops incorporated the inputs of youth from age 15 to 20 and we had to conduct interviews of age groups 20 to 30 since we could not get all the youth from age 20 - 30 under one roof for a workshop as they were employed and had different work routines. The age groups from age 15 - 20 were reached through schools and hence we could perform workshops with the youth from school.

During the interviews, we requested the participants if we could record the interview upon ethical considerations (Bryman & Bell, 2015) and proceeded with the interview. Me and my partner choose roles and alternated between taking notes and asking questions and transcribed them. Since in our research we wanted to involve the stakeholders closely, we had set up follow-up interviews with few key stakeholders, so we could assess our current situation and if we are going astray.

4.2. Workshops

The workshops were conducted at Angered Gymnasium with the school youth. The first two workshops were twofold, in the first half the '**brain writing**' session (McNicholas & Carolyn, 2014) has been conducted, where we separated the class into two groups and handed papers with specific question in which students were supposed to write down their idea on what they would do or accomplish for solving a specific problem. After that, the paper would be passed around the table clockwise or anticlockwise, and the rest of the group would comment on the ideas from the each other. At the second half of the workshop's students were given a short survey that they filled, which contained a few demographic questions and a few specific questions related to the urban development of Angered as seen in Appendix B and Appendix C.

For the third workshop, we had a short time period of 30 minutes, and upon the discussion with our supervisor and one of the stakeholders, we decided to conduct a short, interactive game with students. The game we played had an imaginary scale along the floor of the room, one end of the scale was a 'strong yes' and the other end of the scale was a 'no' and the one in between was 'maybe'. We prepared 2 questions based on the inputs from the prior two workshops. These questions were posed to the students and they could move on the scale. After they fixed their position on the scale, they were asked to discuss in their group to come up with 2 or 3 top reasons why they chose that spot on the scale. Finally, when the workshop was done,

we asked the youth to provide a solution to the problems that they have discussed during the game and noted down their responses.

The final two workshops were conducted in similar fashion as earlier. Since the earlier workshops took a lot of time, we could not have the discussion session hence we improvised and removed the survey at the end and incorporated demographic questions in the 'brain writing' exercise and added the other questions in the discussion at the end of the workshop.

4.3. Triangulation and Strategy creation

Since we interviewed different stakeholders, we wanted to incorporate all their perspectives hence we prepared questions for the interviews and workshops based on the 4 steps in backcasting. This made the triangulation (Carter et al., 2014) easier, when we transcribed the interviews, we looked at most often spoken/commented topic among the group of stakeholders from academic, public, private and the youth respectively. The perspectives from the workshops and the interviews conducted were then triangulated based on similarities and sectoral groupings that they shared. These aspects were the drivers for us to create strategies based on the outcomes of the workshops and interviews. The strategies were split into top-down and bottom-up categories based on who is the key driver to the strategy, e.g.: any strategy which involved policy making were top-down and community initiatives were bottom-up. Both these strategies require bottom-up and top-down support to have effective integration (Kozbanko, 2002).

4.4. Stakeholder Dialogue

To test and discuss the feasibility of these strategies we invited stakeholders from different sectors for a dialogue at the Challenge Lab. The stakeholder dialogue had 5 participants (3 from the municipality, 1 from the private sector and 1 representing research community) and 2 facilitators. The dialogue was conducted in two parts; the first half of the workshop we had discussed the top down strategies for 90 minutes. One of the stakeholders was selected as a secretary who took the initiative to summarize and make notes of the discussion. At the end of each session the leader summarized the main conclusions of the discussion. After the break, participants discussed the bottom up strategies in a similar fashion. The last 30 minutes of the dialogue was dedicated to the reflection on how the dialogue turned out to be and if the methodology used in the research was effective or not.

4.5. Stakeholder Map

From the stakeholder dialogues that happened in Phase 1, we had come across few key stakeholders that we contacted initially and interviewed them. Also, contacting other relevant stakeholders that we found on the internet. These stakeholders were utilized to perform snowballing (Streeton et al., 2004) through which other key stakeholders working within the network. The linkage between the stakeholders were based on the answers provided by the interviewees.

4.6. Final Iteration with Youth

Further, since we did not have any youth participants in the dialogue, we requested one of our stakeholders, working with youth in school, to give us 30 minutes to conduct a short workshop with local students. The purpose of this workshop was to verify the results of the stakeholder dialogue and if stakeholders had previously discussed and/or implemented any of the youth's concerns based on the strategies provided.

5. RESULTS

In this section we will discuss the results obtained from empirical study and from the iterative dialogues sessions with the public, private, academia and youth sectors. In certain cases, we have translated the Swedish language answers to English using web translation services and with support of our Swedish colleagues at the Challenge-Lab.

5.1. Cumulative results from individual sectors

<u>Civil society</u>

- *Youth*

From the interviews with the youth, we have identified that they discuss segregation as one of the primary criteria with ethnic, cultural and geographical segregation within segregation; lack of infrastructure was the second most discussed topic; and lack of integration was also discussed. Other important aspects which discussed were transparency and trust from the government (Governance); Lack of positive role model (father figure), and lack of safety during the night in Angered.

- *Parents*

We have also interviewed few teachers in local schools from Lövgärdet who gave their perspectives as parents. They mostly talked about lack of positive role model; lack of Integration; lack of Infrastructure in terms of play areas, youth houses, drama clubs (activities); lack of Family education in terms of birth control, responsible parenting, finally they talked about lack quality education and segregation through stigmatization by media.

<u>Public Sector</u>

Most of them talked about Integration (in terms of integrating the whole city and inter-societal integration); Also talked about infrastructure (in terms of school); lack of quality education; more social spaces; then about segregation (in terms of cultural segregation); Finally, they also discussed to be increasing the number of activities, governance and safety in common spaces.

<u>Private sector</u>

Most key discussed topics are Integration (inter-societal integration was highlighted); then quality of education (Business, Science); then Infrastructure in terms of jobs and opportunities for the youth (hubs); and then Segregation in terms of ethnic segregation; and finally, Criminality. Those are the main topics of concern for private sector

<u>Academia</u>

Stakeholders from this sector mostly talked about governance in terms of involving community in decision-making; Existing bureaucracy which makes decision-making slow and less transparent; Lack of exit -strategies (explain what it means); Integration through increased jobs to elevate economic standards It should be noted that criminality and safety aspects have been mentioned across all sectors.

5.2. Triangulation of Interviews/workshops

The purpose of triangulation is to collect different perspectives through face-to-face interviews and workshops and validate the data (Carter et al., 2014). Upon triangulation in the quadruple-helix model identified the following prime factors: lack of Integration, low Infrastructure (in School, Transport and Housing), Segregation, lack of quality education. These are the top 4 prime factors discussed among all sectors. Also, to note that criminality, more activities (in terms of sport, movies both for the old and the young), lack of governance, lack of a positive role model and lack of safety were also discussed but not as often as other factors.

5.3. Strategy Creation

The first set of rough strategies that were created as an outcome of triangulation, they were presented to the stakeholders on the dialogue session and were asked to review them. Based on their comments, an improved set of strategies were made and then presented to youth asking them if these strategies would have significant change that they seem needed. We divided those strategies into Top-down and Bottom-up Strategies/Ideas.

5.3.1. Top Down Strategies/Ideas

- To create frameworks for collaboration between civil society and public, private and academic sectors with a focus on self-sustaining life in the suburbs.
- To create more business opportunities in Angered and make it attractive for organizations to set up the region (to raise economic standards).
  - Removing the race-based segregation in employment, it should be regulated (policies)
  - Utilize the language skills in Angered, for example, to open new business employers may need different language users
  - Understand and be open to new business opportunities more suitable for

the region.

- The municipality should allocate budget and provide resources for the creation of new hubs where youth can connect and collaborate with different stakeholders (all the helixes).

5.3.2. Bottom-up Strategies/Ideas

- Municipality/private companies need to be synchronized, they must work together; be present and stick around in the place (Angered)

- Create a sense of unity and safety in Angered by educating parents about values, Swedish culture etc. which in turn facilitates social integration and personal responsibility

- Create a feeling of ownership and oneness through communal activities between different districts within Angered

- Facilitate the youth mindset for early socio-political activism through bottom-up initiatives (youth thematic clubs, projects, seminars, stakeholder meetings, discussion gatherings) for the early development of socio-political activism and self-responsibility in the region among youth.

- Provide flexible starting plans for obtaining housing for the youth (credit plans, discounting). This flexible plan can be introduced in all major Swedish banks.

- Increase culture-based crowd events such as festivals with showcasing different cultures as its themes.

  - A whole Angered festival involving all districts (not only Hammarkullen festival)

- Social research should be conducted in collaboration with the stakeholders as an exit strategy to hand over the research.

5.4. Stakeholder map

As the result of the interviews a stakeholder map illustrated in figure 6 has been created. This stakeholder map represents individuals from different helixes who were interviewed during the thesis project. To keep the element of anonymity we did not add family names of our interview respondents and only showcase their first names. The different colors signify direct and indirect connections between the stakeholders. Specifically, direct means that the connections are established through direct referral whereas indirect means the connection which have been observed though the connections. For example, in the map above you could see that Per and Saied knows Torbjörn but they were not directly connected in terms of bottom-up youth integration, whereas Ulf and Tobias are directly connected. The '#' symbol represents the number of connections departing from every stakeholder.

Fig. 6. Stakeholder map through snowball sampling

5.5. Stakeholder Dialogue and Final Iteration with the Youth

The following section shows the verification and comments on the strategies by the youth from Angered Gymnasium, these strategies were co-created with the stakeholders as an outcome of the stakeholder dialogue.

The following table is split into 3 columns. The first is the category if it's a Top Down Strategy (T.D.S) or a Bottom Up Strategy (B.U.S). The second column are the new strategies formulated after comments from stakeholders. The last column is the verification by the youth. Since there were many youths present, we divided them into three groups (Group A, B and C) and presented the strategies and asked them to review it and their generalized comments are presented in column.

5.6. Strategies/ideas:

Category and number of strategies	Stakeholders (Private sector, Academia and Public sector)	Youth (age 16-20) (Verification of the strategies)		
T.D.S 1	To create frameworks for collaboration between civil society and public, private and academic sectors with a focus on self-sustaining life in the suburbs.	Group A	Group B	Group C
		It was a good idea	Did not understand	Did not understand
T.D.S 2	To create more business opportunities in Angered and make it attractive for organizations to set up the region (to raise economic standards). • Removing the race-based segregation in employment, it should be regulated (policies) • Utilize the language skills in Angered, for example, to open new business employers may need different language users • Understand and be open to new business opportunities more suitable for the region.	Group A	Group B	Group C
		Did not Understand	Good idea	Really good, Volvo in Angered. More restaurants bigger companies with warehouse jobs
T.D.S 3	The municipality should allocate budget and provide resources for the creation of new hubs where youth can connect and collaborate with different stakeholders (all the helixes).	Group A	Group B	Group C
		Good idea	Good Idea	Sounds Great
B.U.S 1	Municipality/private companies need to be synchronized, they must work together; be present and stick around in the place (Angered)	Group A	Group B	Group C
		Good idea	Good idea	Trust the youth in decision making, Idea-making and action making, more funding for the youth council, more dialogue meetings are needed.

B.U.S 2	Create a sense of unity and safety in Angered by educating parents about values, Swedish culture etc. which in turn facilitates social integration and personal responsibility	Group A	Group B	Group C
			Good Idea	Reduce the load of parent education from children and give that responsibility to government.
B.U.S 3	Create a feeling of ownership and oneness through communal activities between different districts within Angered	Group A	Group B	Group C
			Do not understand	
B.U.S 4	Facilitate the youth mindset for early socio-political activism through bottom-up initiatives (youth thematic clubs, projects, seminars, stakeholder meetings, discussion gatherings) for the early development of socio-political activism and self-responsibility in the region among youth.	Group A	Group B	Group C
			Yes, Good idea	
B.U.S 5	Provide flexible starting plans for obtaining housing for the youth (credit plans, discounting). This flexible plan can be introduced in all major Swedish banks.	Group A	Group B	Group C
			Good idea makes easier for youth and shows that young people are treated seriously.	
B.U.S 6	Increase culture-based crowd events such as festivals with showcasing different cultures as its themes. • A whole Angered festival involving all districts (not only Hammarkullen festival)	Group A	Group B	Group C
			Yes, highlight the different cultures. that will reduce segregation between districts and ethnicities	

B.U.S 7	Social research should be conducted in collaboration with the stakeholders as an exit strategy to hand over the research.	Group A	Group B	Group C
			Try to implement the things that we came up with, such as more youth clubs and festival	

6. Discussion

In this section, we discuss the data obtained from the interviews, workshops and literature review amongst the four helixes of Public, Private, Academic sectors and the Youth.

The prime criteria of this research were to find out if there are needs of the youth from Hammarkullen and Lövgärdet that need to be addressed and if bottom-up perspectives provide a better view on a sustainable solution with youth as key drivers. Our target was Hammarkullen and Lövgärdet, but we were not able to conduct an in-depth research in these areas due to lack of relevant youth from the respective districts. However, we have significant data from the whole region of Angered. We could conclude that the needs of Angered youth primarily revolve around issues of the lack of infrastructure, social and racial segregation, integration, lack of employment, and equal opportunities.

From the research we could see that the youth from age 22 to 30 could contribute to the urban decision-making process. There are participatory processes continuously on-going in Hammarkullen, the examples include Mellanplats project, the former Centre for Urban Studies, Professionsutbildning Centrum i Angered (PUA) and Lärandets Torg. In a similar fashion our project aims to contribute new knowledge in terms of engaging stakeholders, along with youth from Angered, by dialogue processes but with a focus on exit strategies. During interviews with the community in Hammarkullen it was noticed that there are many projects done by the academic sector but there is a feeling shared by the local people that there are no follow-up procedures which in turn creates a sense of frustration when there are many projects, but participants do not see what happens after they have been interviewed. On an overview most architecture course related projects (e.g. Chalmers course on Designing and Planning for Social Inclusion) looks like it lacks exit strategies. However, this was seen during our research from the perspective of the residents, when we talked with the students who were part of the course they seemed to focus on the academic criteria rather than supporting initiatives Also, there are 11 stages of citizen participation described by Karpov (2012), and we have observed that forming alternatives, formation of criteria for evaluating alternatives, evaluation of the ongoing project, to choose the best alternative, development of criteria (indicators) for monitoring, and evaluation of the final result is lacking in Hammarkullen and Lövgärdet districts of Angered. It should be noted that the key focus group in this process is the public itself. Also from Arnstein's (1969) citizen participation ladder we can observe that the current level of

participation in Hammarkullen and Lövgärdet is 'Tokenism' (consultation, giving and gathering information from the local community), also seen by Stenberg (2013) that institutional and systemic change can take place in citizen participation, but we believe that there are opportunities to leverage participation into the next level of 'citizen power' (which includes features such as citizen control, delegated power and partnership). Increasing citizen participation could also have the potential to increase cultural integration between different ethnicities, but in Hammarkullen and Lövgärdet we found that it is not completely realized according to the working definition of UN (2009). Also, safety was a key concern from the community in Hammarkullen and Lövgärdet due to increasing rate of criminality among the youth. It can be due to the youth frustration created by a lack of job opportunities and the sense of segregation both in terms of socio-economic or class segregation between different income, professional or social groups and ethnic segregation between groups with different nationalities, religion or ethnic origin in accordance with the Guevara's (2015) definition on potential segregation causes. Through the empirical study we could also see that there is a form of mental segregation, which can be described as a feeling that is generated within the mind, when a person or group of people believe that segregation is still taking a place on a subtle level, even though the gap is officially reduced.

According to Gans (2017) definition of racialization, we can see that there are stigmas built upon Angered closely related to racialization, and from the empirical study we could see that there are stigmas built both ways whereas local residents in Angered do not want to involve with locals from other region in Göteborg and residents from other parts of the city do not want to come to Angered because of stigmatization (criminality and lesser association to Angered). From the UN we define the youth from age 15-30 to be the focus group in our study and they are affected by the aspects of segregation, racialization and lack of participation also that the youth have been the major drivers and we can see that from Stenberg and Fryk (2012) that youth have led to constructive way of supporting local transformations and we agree and believe it might be beneficial for the system to move to 'citizen power' rather than 'tokenism'. According to Kozbanko (2002) the mixed model which combines both top down and bottom up approaches leads to a final decision made by the governmental body, but we want the youth to be a part of the decision-making process where the power is diffused equally between the public (youth) and the Government.

Throughout the research as a primary methodological tool used in the Challenge Lab we adhered to the principles of backcasting. As described previously, it is a methodological tool which involve the identification of future sustainability criteria, then going back to the present situation, identifying gap and envisioning future solutions, the final step is to create practical strategies to achieve set sustainability criteria. However, we noticed that backcasting does not include the past origins of the topic in hand thus limiting our research which required incorporation of the past of Hammarkullen and Lövgärdet as they were part of Miljonprogrammet, which could have given us more context and understanding of the social construct of Angered. Moreover, we focused our research in Angered and did not interview many stakeholders from the rest of the city which may have skewed our research towards Angered perspective, but the stakeholders who represented ethnical Swedish background from

the public sector shared similar concerns. We focused our workshops in Angered Gymnasium which contained participants from the north-eastern parts of Gothenburg, not just Angered, but we did not have many participants from Hammarkullen and Lövgärdet districts, we also see that the north eastern parts of Gothenburg might have similar conditions with Hammarkullen and Lövgärdet. It should be noted that there were significantly more responses from Hammarkullen than Lövgärdet due to limited connections to build upon and lack of interest shown by the youth in Lövgärdet.

The methodology used in the report involved a lot of participants which required a lot of time throughout the whole duration of the thesis, and hence we should have delimited our focus to Hammarkullen or Lövgärdet and conducted fewer workshops, interviews to allow more time for analysis and evaluation of obtained data.

From the academic perspective, the current research work can be a useful reference material for academic institutions in other cities and countries with similar conditions as Gothenburg. From the planning perspective, it can be used as a case study for municipal bodies to capitalize on strategies and recommendations during the urban planning process, specifically in relation to citizen participation and youth engagement.

7. Recommendations

In this section we have few recommendations for the stakeholders to consider also to keep in mind that the strategies were created to help support these initiatives and they are presented in the results section.

1. Create **open platforms** for **youth led hubs**, improving youth **participation horizontally (self-sustainable).** A place like Mixgården in Hammarkullen with more focus towards youth expression, their initiatives, discussion with their peers. All these initiatives can be subsequently expressed in terms of points, opinions, and recommendations which can be discussed with other stakeholders (e.g. municipality). Such a hub should have certain agenda of activities related to public engagement with the focus on daily concerns and interests of residents. Additionally, young entrepreneurs can use the platform to share ideas, search for grants and sponsoring companies, present their business plans, and possibly start new businesses/start-ups with the help of such platform. The hubs should have a management where the leaders are elected from representative districts of which 50% is youth and 50% is a government body and research community (academia). The youth who are benefitted by this and who end up being entrepreneurs could further support the youth house, in addition to the initial support from the municipality until it becomes self-sustainable.

2. Use of **digital media**, to teach the youth about **responsible citizenship** and **create feedback mechanisms**, with municipal bodies, making youth as partners to become **equal competent citizens**. Today we live in a digital era and everyone is connected to the internet through their e-devices. The right use of such virtual possibilities can be a powerful tool to integrate horizontal participation in public life since there is no hierarchy in this environment, and

therefore every interested resident can access it at any time and freely share their thoughts on certain topics of concern or interest. The digital platform can be created to integrate the youth with the decisions made by the municipality, so they get feedback on the inputs provided by the youth this is to build trust by creating transparency. The youth who are not part of the existing social system can also participate on the social media platform

3. More research should be done in terms of **participatory structures**, **adult-parent education**, guided by the '**citizen ladder**' vision of Arnstein (1969). Currently there is less adult-parent education related to the local culture and customs in Sweden, a set of syllabus and/or courses can be developed to educate parents about responsible parenting and uplifting of youth to nurture and encourage better integration into Swedish culture and values. This creates possibilities for the youth to have positive role models which is lacking in Angered.

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9. Appendices:

Appendix A: Summary of Brain Writing

Idea	No. of students with similar idea
Social Integration	9
Segregation	12
Infrastructure	
Housing	14
Transport	4
School	3
Criminality, Gangs and Drugs	5
Activities for youth and old	4
Quality education	6
Employment	2
Islamic way of slaughtering animals	1
Like everything in Angered the way it is	1

Appendix B: Brain writing and Questionnaire from workshop 1 Gender:

Age:
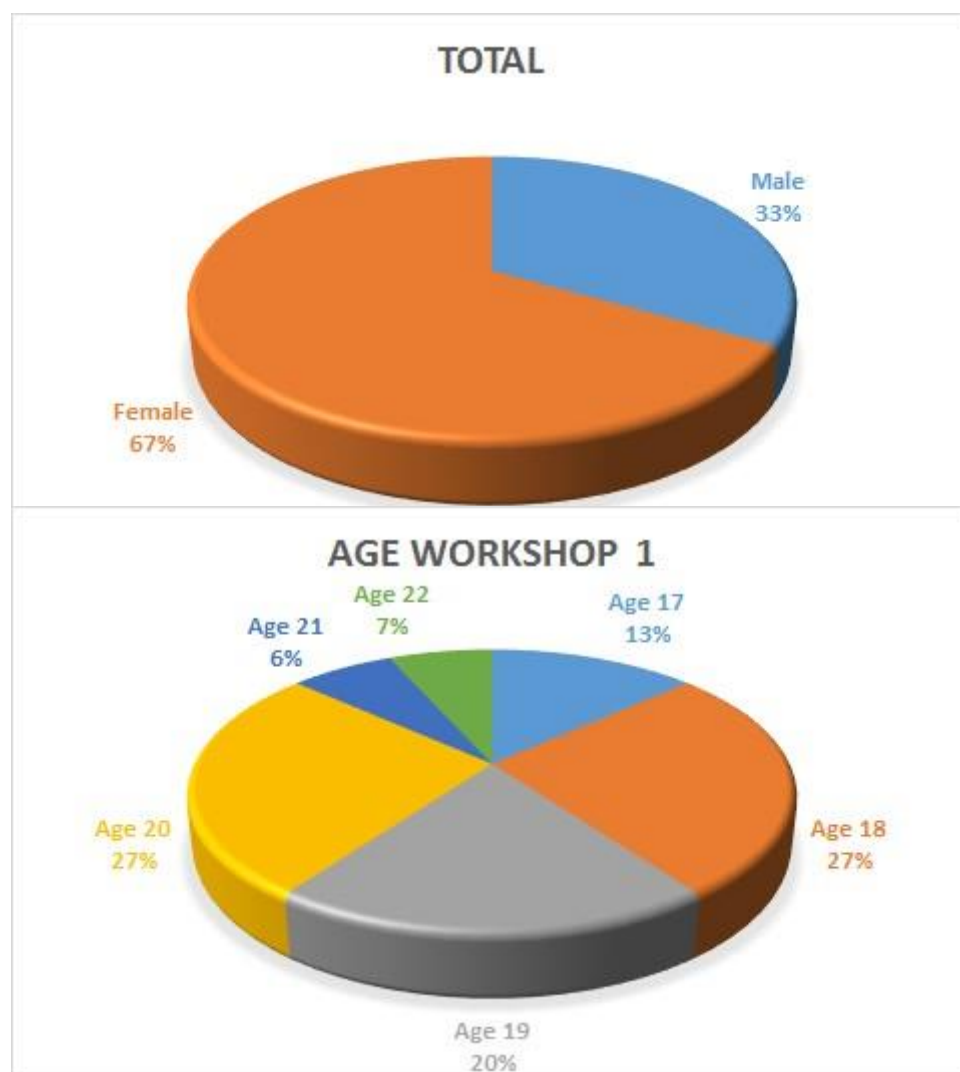
Brain-writing game question: If you are a mayor of the city, with all decision power, what would you like to change in Angered?

No. of students with similar idea	Idea	Summary of comments from the group upon rotation	Summary of the idea
3	Improving social integration	- Majority agrees - It's the most important political issue that needs to be	- This is something all of us agree with and an important topic we need to focus on - It should improve, and they

		improved - It's a good idea but it is hard to improve	agree on it, but it will take time - Everyone agrees with my idea it seems to be a big problem for the others as well
2	1. Invest money in innovative transportation Invest in electric vehicles. More central dumps. This can be done by prioritizing our taxes 2. Better transportation	1. Majority agree - Need to pay taxes to deal with it - 'In what way?' 2. All agree	1. Manageable with the right people 2. They all agree
2	Reduce segregation	- Majority agrees - 'how will you integrate Svenson's (typical swede) with non-Svenssons?'	- Beautiful houses built in the hood/ghetto, so everybody will live near each other
2	Creation of more living spaces/housing	- Majority agrees - One agrees that special housing is needed for many young people	- Majority agree that more housing is needed in Angered

2	Reducing racism and discrimination	- Majority agrees
		  - How do you reduce discrimination?
		  - There's always going to be discrimination
			- Discrimination is not good for the people we should love each other. We can change this then we have respect to each other.
			- It's good and everyone agrees.

1	More activities in Angered	- Majority agree	
1	Making Angered more environmental	- All agree	- It's the same and everyone thinks it's a good idea
1	Having more school	- All agree	- All agree that Angered needs more schools
1	More safety during	- Majority agrees	- Create job opportunities for

	the night		-	One replied with suggestion to not go out during the night		going out at night and following people home	

Questionnaire results

Student No.	How do you feel about current situation in Angered?	What aspects in school that needs change for making your learning better?	What are the things in your area that you live in would like to remain the same?	What activities in region would you like to have to make it better?	Do you think Angered is segregated and feels like it's not part of the city?	What do you see as main problem if there is a problem in system?	Other comments
1	Irresponsible	Making individual plans	I don't know	Brander collection of beer at the bar	Yes	Hypocritical PC-people who don't want to be a part of their failed multi-cultural experiment	
2		Change study times for students					
3	Nice	Well done	Wow	Don't want	Yes	Nothing	No
4	It's good	Everything g is going well		To build more stadiums here in Angered	I don't feel it		
5	Stable	More empathy from teachers	The love	More sports that the youth like	It's not a part of the city	There is no justice	
6	Not that good	The way of teaching and treating the pupils	Morals and respect to each other	The girl's youth	Yes	Criminality is becoming higher among teenagers	I want the crime to be reduced here in Angered
7	There is too much discrimination	Not so much lessons,	School	Go outside, like bowling or	Not too much bad people	Nothing	No

		more lesson at home		something!			
8	I don't have anything negative to say really	Cleverer that wants to learn and take school seriously	I like everything g at my area now	More activities to people that like to hang out late at night	Yes, due to prejudice	That the government doesn't listen to people of Angered	No
9	No idea, I don't hang around much in the region now that it's winter currently.	Nothing. The school is doing a well job, the rest is for me to work on.			Yes. It feels like it's a totally different country.	The problem would be safety/security problem I would say.	
10	Good	Subjects about technology y and physiology y	Trains and train stations	More activities for youth	Yes		
11	Good	Better food perhaps	Trams and Busses	Have nothing to suggest	No	Probably the criminality	No
12	Little worry	We need more teacher in here	Diversity of culture and the people from different countries	We need some activities that the region can attract more people from other parts of the city	Yes, it's felt like Angered always being a segregated part. Another city ignores Angered	Nothing	
13	Nothing, I don't feel uncomfort able living	Lockers, books	People don't need to change	We can gather more Swedish people to come visit	Yes, I have always thought about that	No, there is no problem	

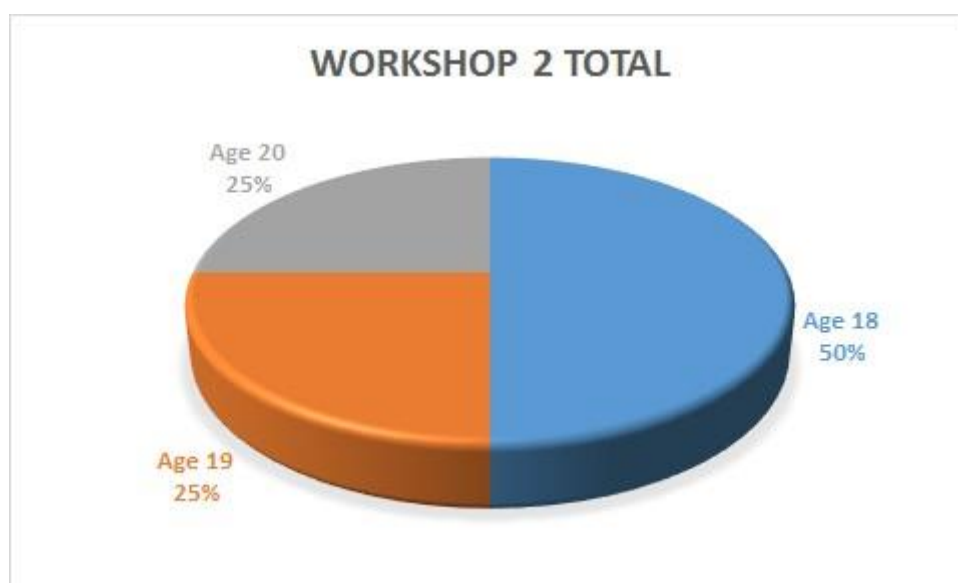|				us, maybe talk to them more so they can understand Angered			
14	This is good	Do more exams	Angereds gymnasiet	Sports	Yes	Transport	No, thanks
15	I think it is too much discrimination	Not so much lessons	School	Going out	Not too much bad people	Nothing	

Appendix C: Brain writing and Questionnaire from workshop 2

Workshop 2:
Gender:

Age:

Brain writing

No. of students with similar idea	Idea	Summary of comments from the group upon rotation	Summary of the idea
2	1. More buildings and infrastructure, not just in Angered but in the whole	1. All agree that more buildings are necessary for present and future population of Angered 2. Majority agree	1. Everybody needs this, and everyone needs an apartment or room 2. I think all people need to build

	Sweden. 2. More infrastructure like train bridge between Hisingen and Angered	- One agrees, but I think we should give more priority to shelter and food	bridge between Hisingen and Angered to travel faster
1	Start a company to slaughter animals the Islamic way	Everyone agrees	In short, I want to say that this is one of the important things in this society because a lot of Muslims are here, and they need it.
1	Swimming pool only for women	Everyone agrees	It is good to see everyone agreeing this idea thank you
1	Angered is a big and beautiful place but criminality or gangsters must be stopped	None agree with the Idea - Angered isn't a place of criminality that just prejudice - That is just a stereotype, people talk about the stereotypes instead of the good things in Angered	
1	I would like to change the way youth of Angered see this world, as in their sight on this world. To make this world better for them and the people around them	- Majority agree that this is a good idea and problematic topic in Angered - One agrees but poses a question on how exactly the author would change the youth of Angered	Yes, I think my fellow brothers think my idea is a good one. The rest are up to you guys. Hope you do something about it.
1	I really like Angered, but I think many people have Stereotypes about Angered and I would like it to stop!	Everyone agrees	The comments also say that most people agree with my opinion.
1	We should respect our teachers at school	- Majority agrees - One agrees but wrote that the hired teacher need to focus more on discipline. For her that is important	I am so happy for your comments!
1	I want Angered to stay as it is. Nowadays you see that every forest and tree are cut down to build more houses and I really don't like it	- All agree	Many think the same way as I and that it is only good

1	I like everything in Angered	- Half of the group agree - Half of the group disagree	There are some good things and some bad things about Angered
1	We should stop all homeless people and giving them more jobs or let them study for a better life	- I think it is a better idea for everyone to learn Swedish as everybody needs job and money - Actually, I think the most important thing for a society is that we should have better service in our studying system and we need to make even better studying methods - To stop homeless, you should build more buildings - Nice, we may have some problems, but I think there are people that are more unfortunate than we are - Agree	Different opinions that keep me creative. I see that my idea is great to understand how people think

Questionnaire results

Student No.	How do you feel about current situation in Angered?	What aspects in school that needs change for making your learning better?	What are the things in your area that you live in would like to remain the same?	What activities in region would you like to have to make it better?	Do you think Angered is segregated and feels like it's not part of the city?	What do you see as main problem if there is a problem in system?	Other comments
1	It can be a lot better	More teachers	People that make this area good	I don't know	Yes, and I think this is something we need to focus more on	Integration is the main problem	
2	Good	Teachers	Transport	Sports	Yes	Stereotypes	
3	Good	Nothing	ICA maxis	Better transport	Yes	Criminality	
4	Bad	Change everything					
5	Disappointing	My fellow students	The mosque in my area	Influencing the youth	Yeah, somehow, I mean it's getting better	The parents	

6	Somethin g we should change	It's okay for now	People	Sports events	Yes, always	Integration	
7	Don't know the situations	Nothing	Angered Arena	Youth Houses	Yes	The segregation	
8	Excellent	Physics, chemistry & biology teacher (s)	Most of the things	Two buses in Rannebergen	Sometimes because Swedish people do not live here	We have too much books in a year and that is too much	We need H&M in Angered central

Appendix D: Brain writing and Questionnaire from workshop 4

Workshop 4
Gender:

Age:

Brain writing

No. of students with similar idea	Idea	Summary of comments from the group upon rotation	Summary of the idea

4	1.Stop Racism, better school education, better food in school,	1.- Leisure activities should be
		   - Better environment to study
		2. Everyone agrees
		   - maybe the communities here in
			1.--
			2.--
			3.--
			4.To reduce segregation, we need to

	better care, better environment for study, get engaged with Swedish people 2. No more segregation, as some of my friends concern about things that is discouraging in Angered it's the segregation because the yearn to have Angered as part of Sweden not just it feels like its own country. 3. Show the people it's not dangerous in our streets and welcome Swedish people. 4. Segregated area, a mixed society is always a better solution	Angered are fine with that, I mean maybe they see like home and have people who speak the same language and have the same culture around. -To make the culture in Angered get spread out to other parts of Gothenburg, and the Swedish people participate in activities here in Angered which is what you mean is a great idea. - This topic is difficult, but your idea is brilliant, and it'll be supportive. 3.Everyone agrees - Sometimes it's dangerous at the night when a girl walks alone. Because you don't understand what they say so you feel more uncomfortable. - Perhaps having a police station centered in Angered would reduce crime rate. - The Government should try to have a specific way of mixing people from different countries into a community. - Why just Swedish people? Why not welcome everyone? 4. Everyone agrees - From one side is good and you can meet and learn a lot of cultures but from the other side sometimes you don't feel so welcome - How do we make it, so it is less a segregated area?	create activities, events, housing, jobs (white collar jobs) that would make those in the urban areas come to such area as Angered etc.
1	No graffiti!	- That can be a good idea - Graffiti in Sweden is not a big issue, but if it is good to stop it, then prevent it - To certain areas I could agree with this. Cleanliness around the environment is also good - I think graffiti is a form of art (not the bad words or racist statements but the drawings). But if we make it legal, like you take a permission for the place that you want to do the drawing on would be better - In my opinion graffiti is there to make the grey streets more beautiful	
1	- People are not socializing. Make small groups where	- All agree	

	students get to know each other - With the whole school, not just group of specific classes		
1	- Breaking barriers: no separation between groups, students to teachers, etc. - More interaction - No use of cell phones - Introduce yourself and engage (which country and culture you are from)	- Majority agrees - One student wrote: "first point is fantastic, I agree with the point for equality. But the second one disturbs my perception of today's society"	
1	Some young people in Angered have neither good living conditions nor suitable role models/examples. It can be solved by politicians paying more attention to the suburb	- Kids who get good role models usually turn out to be good adults - Not just politicians. Everyone.	I agree. Everyone should pay more attention, but politicians have more power.
1	Find a solution for homeless people starting from Angered area (maybe by building a center that educate them or a "Jobhornet" to train them for different work skills	- Majority agree that education is valuable and can solve many problems (low crime rates, good economy, etc.) - One wrote: "Those people are mostly illegal here, I think it is crazy how the government help so much people and they do not work or want to succeed. They should move away!"	
3	1. Angered area needs more infrastructure to develop the youth and the community in general 2. Cafeteria for students 3. Create a free infrastructure for multi-activities for youth and adults	1. - Agree, because all what you hear about Angered is Angered school - How is the infrastructure going to develop the youth & community? Activities like football clubs would be better - Although new areas have been built, many parents cannot afford to let the children participate, politicians can increase the child benefit for parents that need it 2. All agree	1. With all the comments written above the fact and idea is true and that we need change on this matter 2. We need to have a place to hang out and it must be cheap because we don't work. And owners should employ only students

| | | | | | | | 3. - Majority agree
- One wrote: "I believe that we already have a lot of activities. But maybe finding a way to motivate people to participate would be good" | |

Questionnaire results

Student No.	How do you feel about current situation in Angered?	What aspects in school that needs change for making your learning better?	What are the things in your area that you live in would like to remain the same?	What activities in region would you like to have to make it better?	Do you think Angered is segregated and feels like it's not part of the city?	If yes, how do you think young people can help improve the situation?	What do you see as main problem if there is a problem in system?	Other comments
1	Feel disappointed, the region does not fit the Swedish Society	While learning languages, you need to interact with citizens	The transport system works well	Recreational activities should be improved	yes	The young people should be oriented in other to change the situations	Segregation	
2	Arguably, okay	The learning system is good to my own best of knowledge	The stores and shops are okay, but we need something different	Sport activities mostly for the youth	Yes, I strongly agree	In the future, we the youth will have a better way to mix all the people together	Segregation, lack of activities for the youth, all the jobs in Angered are already occupied	Nothing much
3	I feel unsafe, sometimes	To have more activities to improve the development of a student	Politeness from the people who work around Angered	Safety, Segregation (People)	Yes	Take the initiative to break barriers and promote equality to the youth		
4	I think	Quality	The	More	Absolutel	To start	Criminalit	

	there are many things that could be done but they are not done	of food is fundamental	hospital is good	social activities that will improve sociability for people	y	talking to each other	y	
5	It's getting better	School doesn't have any creative rooms where you can socialize			Yes, but it is getting better	Yes, to increase awareness	Bad reputation	
6	Good							
7	Like it	We need more hours to learn Swedish		Sports and activities	Yes, and not only angered	Create something	There are so many refugees	
8	I do not like many people smoking around here and throwing the cigarettes on the floor	More speaking activities		Sport activities	No		I don't know the whole Angered area, I just walk around school and to the bus station, so I have no idea	
9	As a student in Angered we see the reality especially with segregation. I feel bad sometimes case some	Since we are in Sprintus program and trying to learn Swedish it's better to have a Swedish speaking environment	The improvement of the School		Yes!!!	By promoting good things about Angered	Segregation	

#								
	people thought that Angered is just immigrants here.							
10	Getting better		Youth centres	Let people to not fight	Yes, we must welcome more people	Focus more on School	It's, too much immigrants	Help each other, some don't get the help they need and go on the wrong road
11	Good	By making teacher of subjects like math, physics, etc. explain the subject lesson by lesson, not making it a self-study material	Diversity	Computer skills for students	Kind of yeah	By spreading the cultures in Angered to the other parts of the city and by adding events that include Swedish people.		Give these surveys and ideas to Swedish people I guess.
12	Politicians need to be more attentive	Skilled tutors to help with your homework	That we embrace different cultures and learn from each other					
13	Worried about the future	Better teachers that cares about the	Diversity	Almost everything. Do everything the same	Yes	Show the good Angered in media in a	The lack of trust	

		students.		way you do it in Askim, for example.		positive way.		
14	It's quite good, but they need to take care more of it to make them feel that they are part of the city	more activities with languages, a plan for students to make them know what they are doing	different nationalities and different languages when everyone can feel themselves at home	youth activities, and politicians	yes, I think so	when they make kind of stuff do different ages, and make something attract all the nationalities at the same time, use language that everyone can understand or help them understand it (basic Swedish)	the exclusion that governments does	

Appendix E: Brain writing

Workshop 5

Gender:

Age:

Brain writing:

No. of students with similar idea	Idea	Summary of comments from the group upon rotation	Summary of the idea
2	1. Better schools in Angered 2. I think we need several schools in the area	1. Majority agree - One wrote: "I don't agree with you because Angered also have problem and we must	1. Most of the people think this is a good idea 2. Majority agreed with me that we need more

		have a solution to it" 2. Majority agree - No, we have enough	schools in Angered
2	1. I think if Angered had sport clubs maybe it will help the young gang members. 2. We have problem with gang members, and I think the politicians need to work that and police officers.	1. Few agree, and few don't agree - I think it's good but it already has those clubs, so I don't think it needs any more - I don't think because Angered has already sport clubs and we still have gang members. - I think sport help people get mixed and forget all the problems. Sport just give all fun. - For sure! The school can start with a club or something at first. 2. Everyone agrees - Of course, there is gang members in Angered and that's an issue.	
2	1. A lot of young people in Angered they used to do some drugs and control of other who lives in this area, it is difficult to solve the problem 2. I think we have many people who sell drugs, and I think we can solve this problem by creating different activities to youth.	1. Few agree and 1 does not agree. 2. Everyone agrees	
2	1.Remove Segregation 2. I think the problem in Angered is Segregation, we can solve this to mix up with Swedes	1. Everyone agrees - By making a small movement and take it step by step we can make it. 2. Everyone agrees - We can tell people good things about Angered so they change their mind.	
1	Problem we have in Angered is that people think that there are too many refugees	4 disagree with the idea and 2 agree with the idea - I do not agree	People don't agree with me because maybe they not understand what I

67

|		because we give everyone a chance to finish school even if you don't have very good Swedish	mean.
1	I should think about the quality of teachers', their knowledge and method to teach students	- All agree	Everyone agrees
1	More hospitals. We have hospitals here, but we can't perform surgeries there. I am going to change that	- All agree	Everyone agrees with my idea and that it is a good thing
1	More cafeteria	- All agree	My idea is good, and everyone agrees that we need more cafeteria
1	Create more jobs in Angered to remove the alcoholics	- Majority agree - One wrote: "I strongly disagree with this idea because in Angered there are no alcoholics and even if we have, there are not so many, and they are doing fine in my opinion"	
1	Remove all the bullying around the area	- All agree	Everyone agrees with this idea
1	More leisure days for young and old people	- All agree saying that young need active recreation and old people feel lonely	Everyone agrees
1	Providing more direct buses to town	- All agree	Everyone agrees with me and this is a good thing
1	There is no integration here in Angered and what we can do to solve it is to do more activities together and attract more locals	- I don't think we can solve this problem that way, because the government have already built a segregated city - I think if we come together and do some activities it will be easier to solve this problem - I agrees	

		- Maybe the schools should get involved too - I think it is hard to solve this problem because it is too late	

Appendix F

Interviews

We have not included all the answers from each sector and have taken topics that were often mentioned throughout the interviews. However, all the individual interview transcripts can be found in a link shown in the Appendix F.

In the pie charts below, you can see the total percentage of sectoral and gender division:
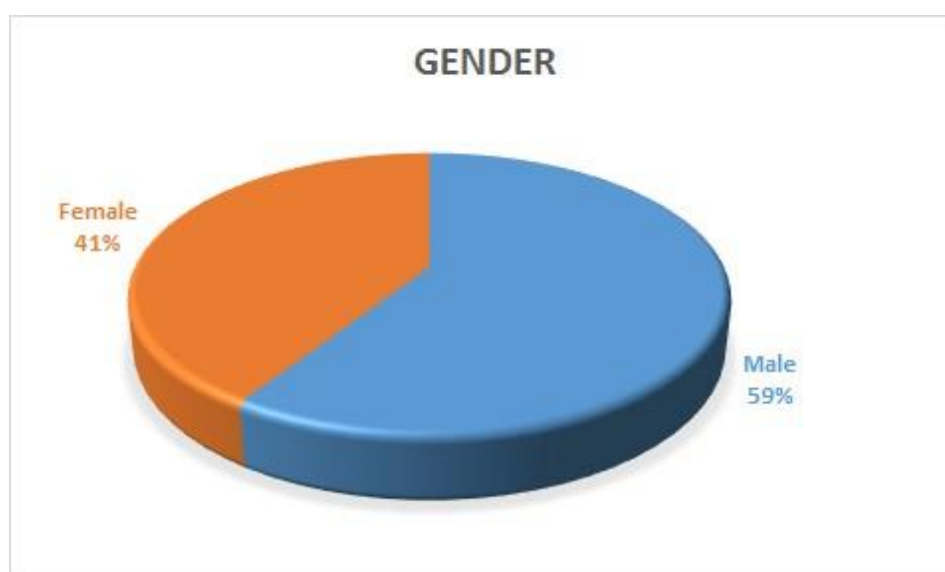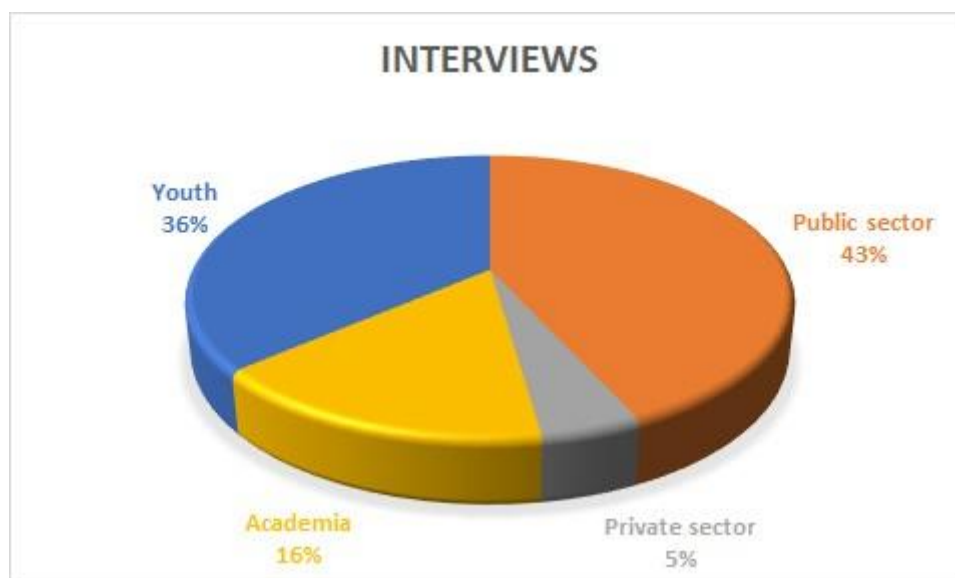
Interview with Public Sector

There were 19 interviews with the Public sector with 4 follow-up meetings with Peter Rundqvist and 3 follow-up interviews with Tobias.

View upon Sustainability criteria:
- Safer common spaces
- A platform for youth which promotes entrepreneurship and knowledge sharing
- Nature Tourism in Angered
- Increased youth awareness and responsibility
- Stable jobs for the youth
- Lower criminality and illegal substance usage

Current Situation
- Business side and local companies' initiatives are low
- Making profit is problematic for youth (lack of skills, platform to start from)
- Culture clash and misunderstanding
- Lack of citizen engagement points (e.g. football clubs, social hubs) - long time to establish
- Problem of stakeholder collaboration. Each have own ambition,
- Great natural scenery, but lack of tourism conditions
- Lack of public spaces in terms of movie theatres, hotels, hostels
- Lack of relevant education (science, business)

Future Solutions
- Establish or improve nature tourism conditions in Angered (business idea for youth?)
- Effective marketing of these opportunities in the region
- Increased access to education for youth to train mindset for innovations and entrepreneurship
- Use unique knowledge of different cultures (e.g. in urban farming)
- Integrate local stakeholders through seminars
- Establish hubs and get them working to nudge entrepreneurial environment

During the follow up interviews with Peter Rundqvist (Stadslandet):
- He provided us with contacts in Lövgärdet
- Connected us to Researcher Matthias who helped us with the synopsis
- Promote urban farming
- Gentrification
- Planned and arranged a tour of Angered
- Mass media is driven by sensation
- Youth should change perspective about the jobs in construction medical sector, since there is a feeling that they are not interesting

Follow up interviews with Tobias Johansson (Framtiden):
- 'Stop whining and start working hard' - youth want self-pity
- Provided us with a report 'Dislandrrknackning in Bergsjislanden' - Report on what the tenants think.
- Gave us contacts of stakeholders associated with Lövgärdet (Angered)
- Promote local success stories in Angered for Motivation

Interview with Private Sector

There were 2 interviews in this sector with 4 follow up interviews with Per Östling (First-to-Know company).

View upon Sustainability criteria
- Create an environment for creative thinking through hubs for the youth
- Create job opportunities for different ethnicities

Current situation
- Stigmatization of mistakes and lack of innovation therefore fewer job opportunities
- Racial discrimination, youth criminality

Future Solutions
- Creation of more hubs for youth job opportunities to foster youth innovation and stakeholder integration.
- Bergsjöpoolen is currently happening in Begsjön where they hire young people over a period of 10 months and provide responsibilities to maintain Bergsjön and keep it clean (use the text elsewhere).
- Create better economic models to provide jobs (Integration by diversifying living spaces)

From the follow up meetings with Per we discussed the progress of our thesis and trying to get their opinion how the current scenario looks

During the Follow up interviews Per suggested to learning by doing is a best way of working without having any preconceptions before working with the youth. Earlier we were working with a triple helix perspective and Per said that we have transcended into a multi helix since we were also working with youth apart from other stakeholders.

Interview with Academia

We have conducted 7 interviews with the representatives of Academia.

View upon sustainability criteria
- Handing over the research project involving the locals with more permanent bodies and sharing the results of the progress back to the locals
- Standardized decision-making process in the municipality co-created with researchers
- Voice the concerns instead of silence, and engage in discussion platforms to speak up and learn about each other for mutual understanding

Current situation
- Inconsistent work with local stakeholders/community; adding them in the middle or the end of the process to satisfy a formal requirement
- In Sweden, the formal communication is highly bureaucratic which causes a substantial time spending for making decisions
- Weak economic power in Angered, lack investment interests to develop the suburb
- Inconsistent follow-up procedures after research/project; lack of mechanisms to practically incorporate and implement gained knowledge in everyday work

Future solutions
- Working with stakeholders from the beginning phase of research/project to build transparency, trust and accuracy of data; to avoid hurdles and misunderstanding for practical implementation
- Simplify the process of decision-making for faster reaction and implementation for results
- To create more economic power in Angered the city needs to invest in the region
- Establish common exit strategies to follow-up and effectively capitalize on derived research and project results

Interview with the youth (Age 15- 30)
View upon sustainability criteria
- Every youth have the right to good education and work opportunity
- Everyone has means to get living space
- Equal status for all ethnic backgrounds
- Transparent government-civil society (young) relationships
- Social integration with no or at least less racism and prejudice in work employment for youth
- More Swedish stores in Angered
- Everyone will vote
- Open and safe conditions to commute during the night
- Better mobility for people and freight
- Equal society

Current situation
- Bad media coverage of Angered
- Racism, discrimination in work employment
- Low self-esteem of youth in Angered (some hide the fact that they are from Angered to get the job)
- Segregated society
- Angered centrum does not feel like a centrum
- Environment, barbecue, a forest, the best part of Lövgärdet
- Lövgärdet centrum is a nice place with more lights where people can socialize and meet
- Young people only communicate within their own cultural group, a lot of them still stuck in the old mentality of their previous countries
- Lack of apartment opportunities for youth, majority lives with parents because they can't allow own place

Future solutions
- Build trustworthy, transparent communication between government and society (youth)
- Government should use social media to reach local youth, show that they are interested in them, break the alienation stigma
- Use or create positive role models instead of American ghetto image
- Create pink houses where youth can express themselves (e.g. music recording)
- Regulate the media coverage showing the positive aspects of Angered (not only negative aspects)
- Work on fighting racism and prejudice in work force, provide more work opportunities in Angered (Hammarkullen)

Local community perspective

View upon sustainability criteria
- Parents who are conscious about birth control and who take full responsibility in taking care for all their children
- Children are raised by both parents
- Transparent media coverage which shows good things as well as bad

Current situation
- Fears for their children due to youth criminality in the place
- Wants to relocate to a different place (not Angered)
- Appreciate the culture and surrounding environment and only want to relocate for children's future (due to criminality)
- Slang issue, some parents don't want their children to be infected by it, as they need to learn proper Swedish
- Alienation of local youth from broader society due to their own narrow socio-cultural circles
- Parents are not involved enough in their children lifestyle (esp. in earlier age when it can be changed (age 12-17) to prevent them from joining gangs, smoking, drugs. Partly, because some parents did not educate themselves
- Lack of relevant public spaces for youth (boredom and therefore street dangers)
- Media coverage (bad things are covered most of the time)
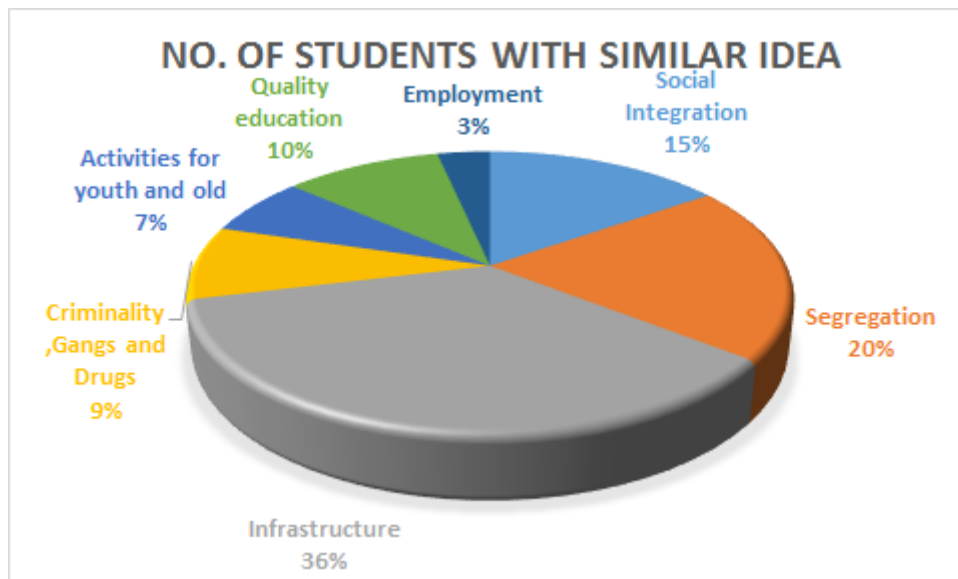- Lack of the positive role of father figure

Future solutions
- Engage parents in children lifestyle, esp. in earlier stages when behavior can be changed
- Create healthy public spaces, leisure places where children can socialize in safe environment
- Create or strengthen existing places where local youth can integrate with broader city (other youth)
- To build a relationship with kid, instead of just having a kid
- Educate kids on how to be a healthy member of society (show them that it's possible)
- Give to youth activities that are free, more resources outside of school, new professions, tell them find a new line to go and study, a new profession for people to work with, so it has slots to be filled, e.g. of policeman and social worker. A new job, something specific to this area, for this era, new type of education, and new job prospective
- Big play garden, which is open for extended time, make it more available, where little teens can go and play with different games
- For older teens, they can create their own initiatives, for example establish drama club

Workshops with school youth (age 15-22)

To cover a wider span of youth views and opinions, complementary to more individual interviews, we conducted 5 workshops at Angered Gymnasium with students in age range from 15 to 22. The total number of participating students throughout all workshops was 99. The purpose of workshops was to gain more comprehensive and complete data about the youth views about different aspects of surroundings they are living in.

Brain Writing (Workshop 1,2,4 & 5)

NO. OF STUDENTS WITH SIMILAR IDEA

Quality education 10%
Employment 3%
Social Integration 15%
Activities for youth and old 7%
Criminality ,Gangs and Drugs 9%
Segregation 20%
Infrastructure 36%

Please note that infrastructure section has been divided into 3 subsections (Housing, Transport,
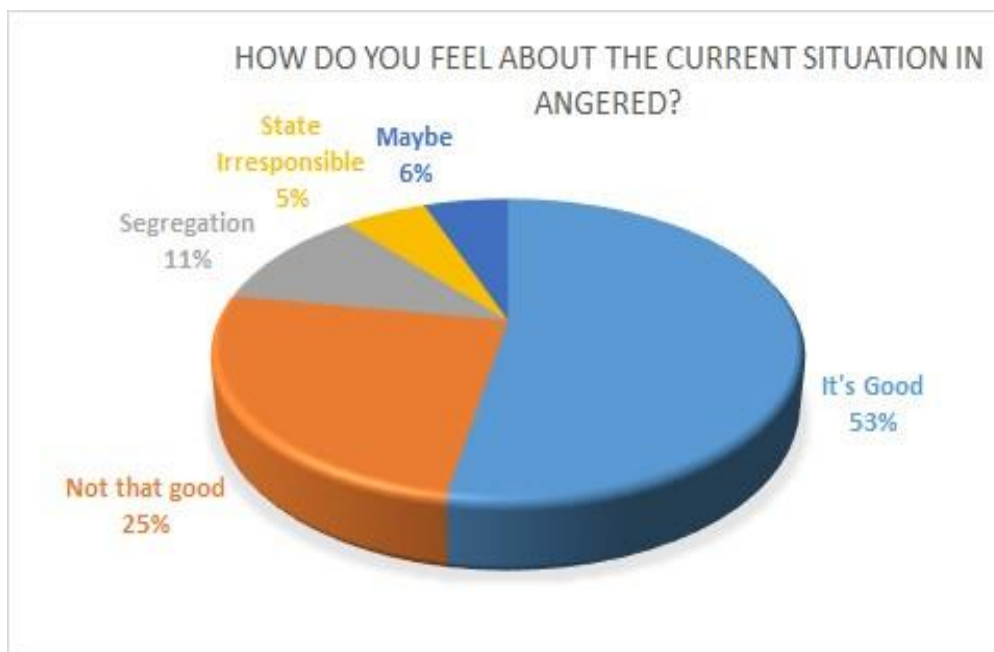

INFRASTRUCTURE

School 14%
Transport 19%
Housing 67%
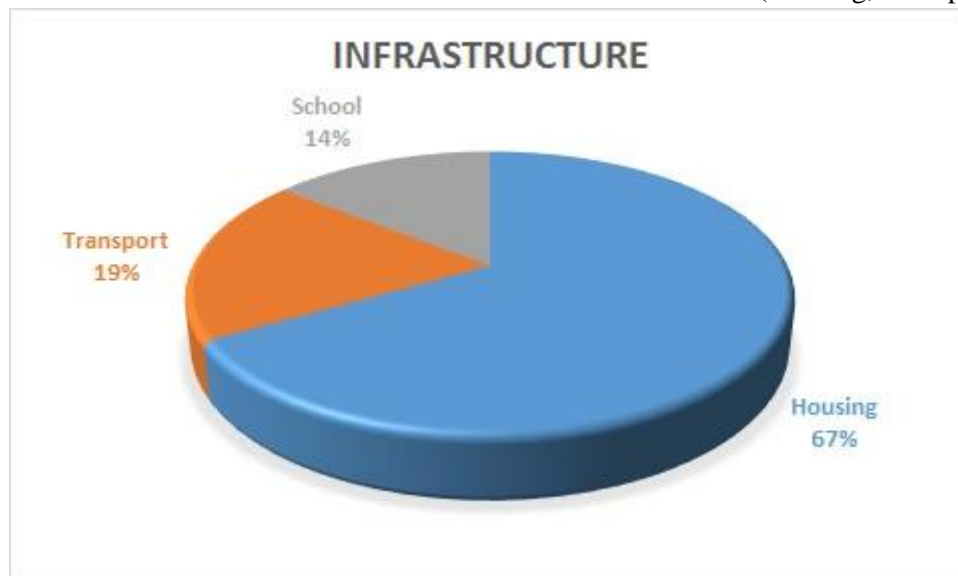
Questionnaire (Workshop 1, 2 and 4)

Three workshops included survey questions which had to be answered individually by 37 students in total. The remaining 2 workshops did not include it due to the time constraints and blending demographic aspects of survey with brain writing game. We accumulated the survey results in the form of pie charts for better clarity of presentation. It should be noted that only those answers/topics which had been mentioned 2 or more times were added to pie charts, whereas the single answers are presented as a text below it.

Since every individual has more than one comment it may not have statistical significance rather it shows most the responses by the youth (age 15-22).
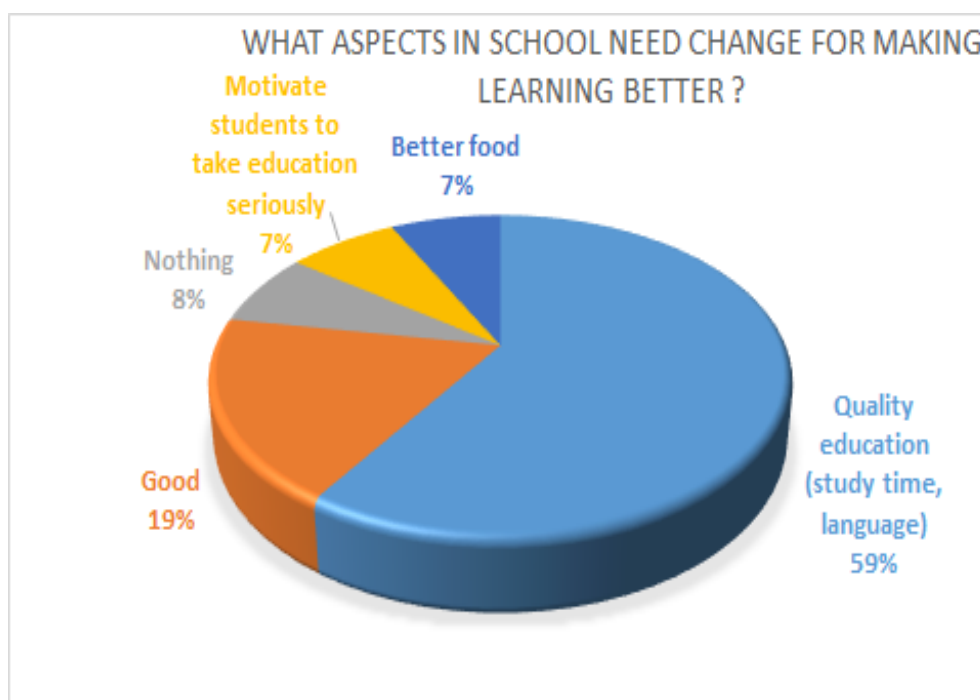
Question 1

HOW DO YOU FEEL ABOUT THE CURRENT SITUATION IN ANGERED?

State Irresponsible 5%
Maybe 6%
Segregation 11%
It's Good 53%
Not that good 25%

Single answers to question 1 include:
- Nothing to negative to say
- Unsafe
- Smoking and Littering
- Integration

Question 2

WHAT ASPECTS IN SCHOOL NEED CHANGE FOR MAKING LEARNING BETTER ?

Motivate students to take education seriously 7%
Better food 7%
Nothing 8%
Good 19%
Quality education (study time, language) 59%

| Individual Plans | 1 |

Integration (Learning)	1
Activities (Student development)	1
Infrastructure (School activity house, Library)	1

Question 3
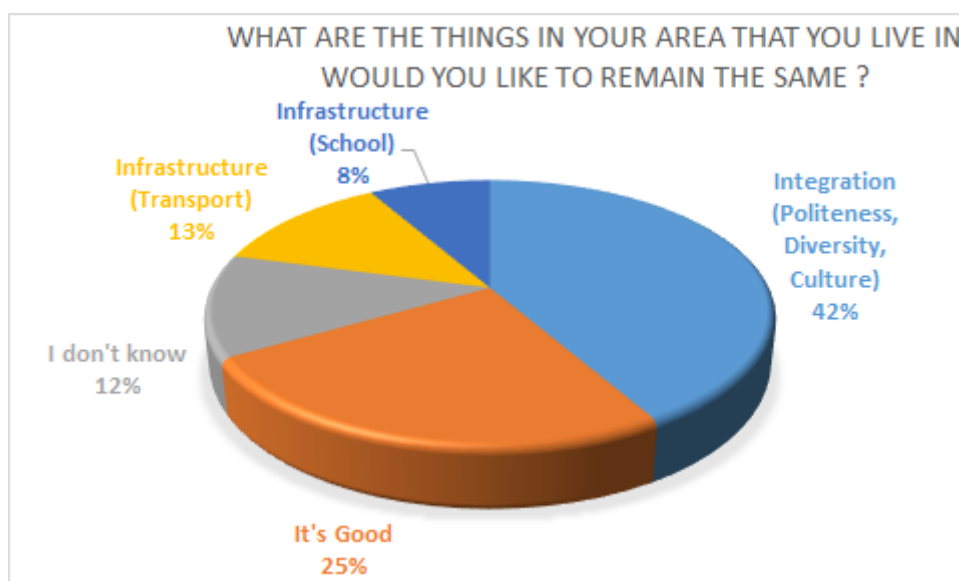
Infrastructure (Shopping, Youth house)	1
Infrastructure (Housing, sports)	1

Quality Education	1

Question 4

WHAT ACTIVITIES IN THE REGION WOULD YOU LIKE TO HAVE TO MAKE IT BETTER?
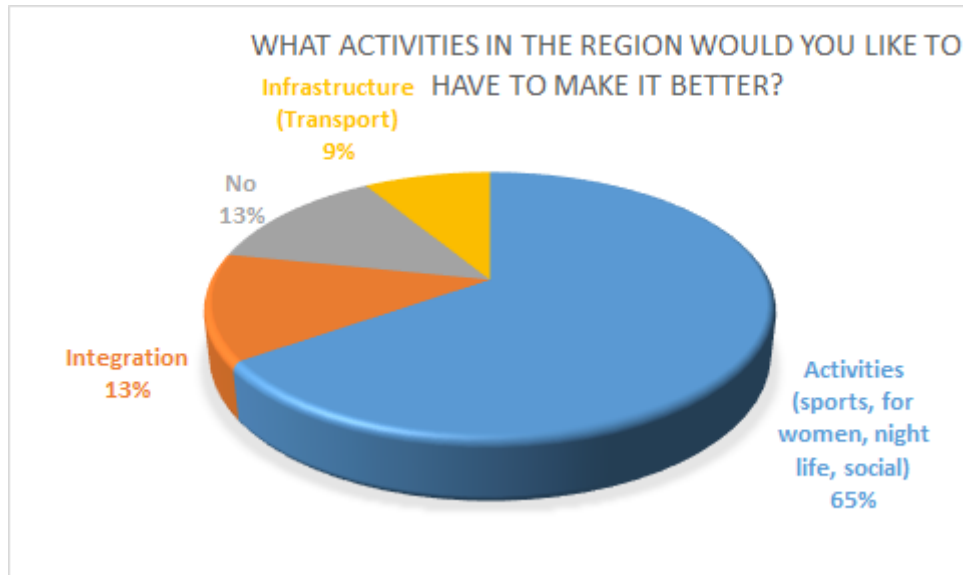
It's good	1
Infrastructure (housing, stadium, youth house)	1
I don't know	1
Stereotype (Positive role model)	1
Safety	1
Segregation	1
Criminality and gangs	1

Quality education	1
State irresponsible	1

Question 5

Question 6

Question 7

WHAT DO YOU SEE AS THE MAIN PROBLEM, IF THERE IS A PROBLEM IN THE SYSTEM ?

Streotypes 9%
Integration 9%
Many refugees 8%
Segregation 26%
Criminality amoung teens 22%
Nothing 26%
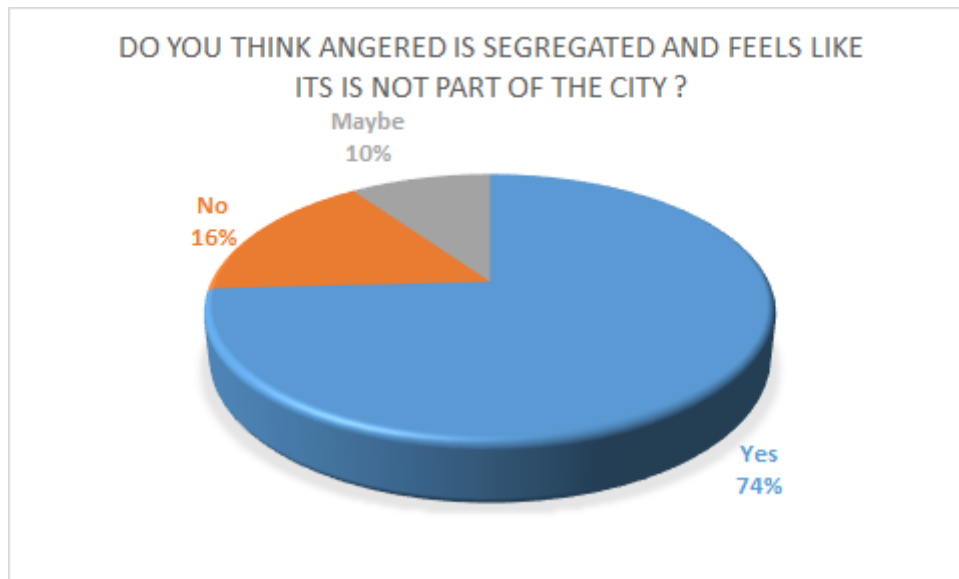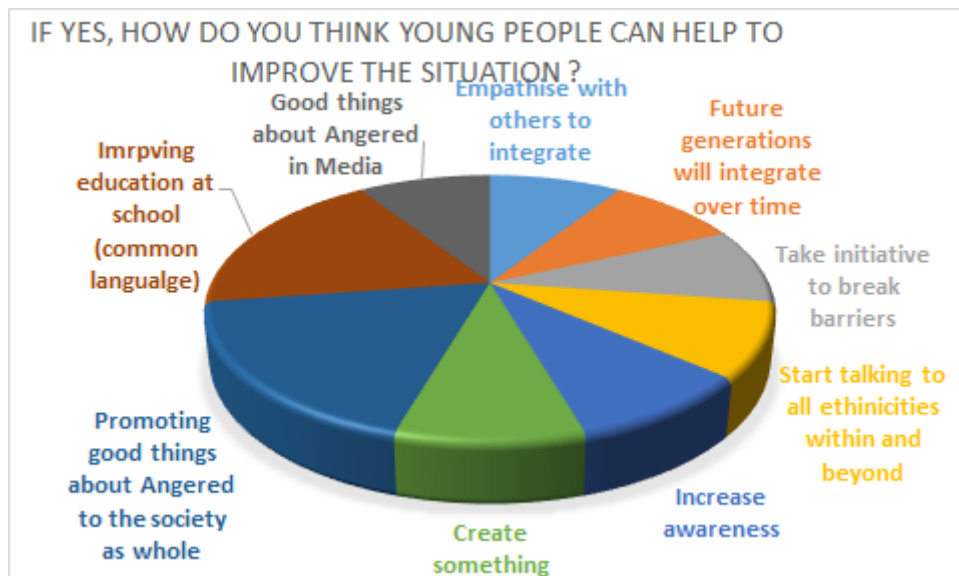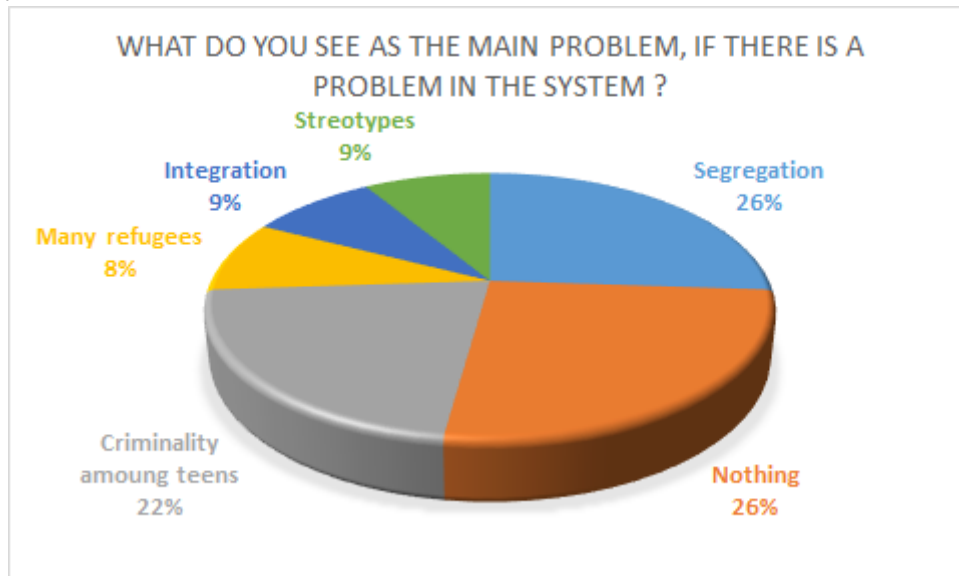
State ignorance	1
Safety	1
Infrastructure (Transport)	1
Activities for youth	1
Lack of jobs	1
Lack of Trust	1
Parents	1
Quality of education	1

Region from workshop 1:

Total vs Region
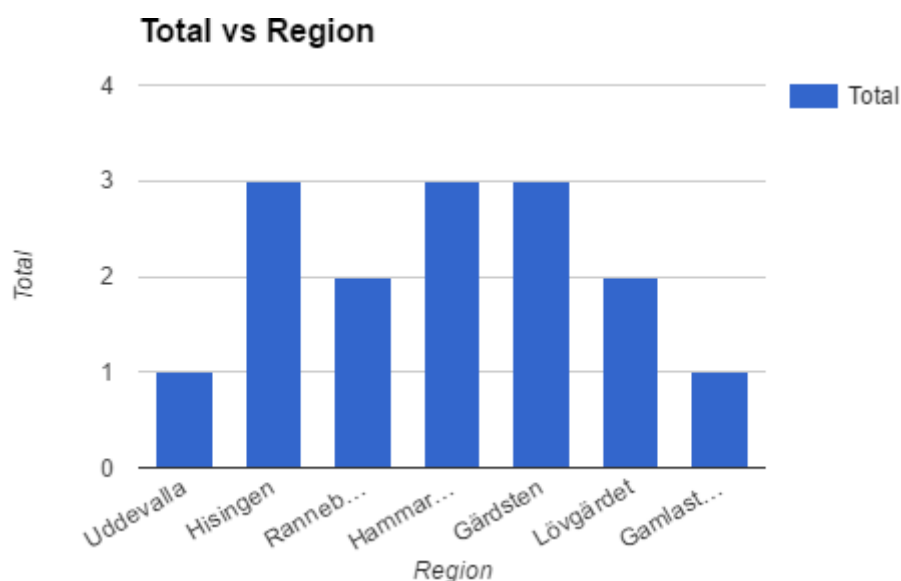
Region from workshop 2:

Total vs Region
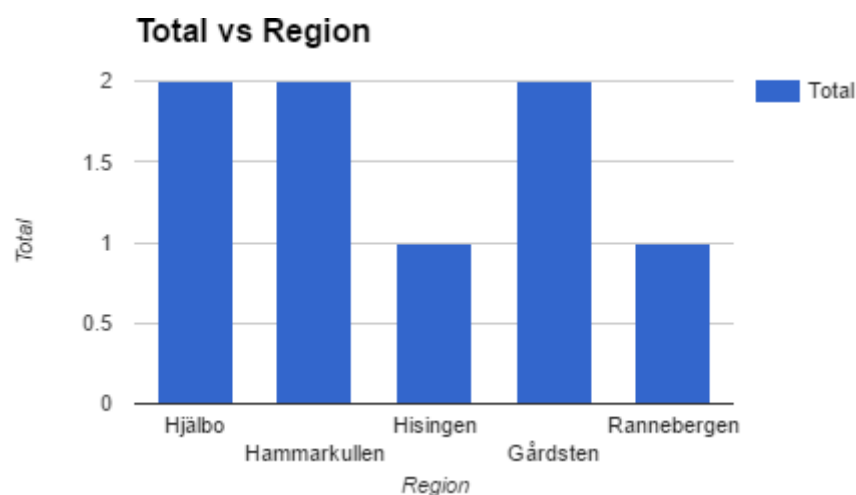
Workshop 3 - Line game results

As described in the method we used a different approach for workshop 3, that is an interactive line game. We asked two questions:

1. Do you think Angered is isolated from the rest of the city?

2. What should the participants who stand in 'maybe' and 'yes' do to move to 'no' position where Angered is not segregated?

To answer the first, question the workshop participants separated into three groups across the imaginary line in room, where "yes" is one end of the line, middle is "maybe", and another end of the line is "no". It could be said that most students tended towards the position of "yes", less chose "maybe" and just a few "no". After clarifying the positions, students discussed in their respective groups their rationale for choosing a specific side.

Below are the responses from the youth. Youth who stood in 'Maybe' motivated: "A little bit split, but a part".

Youth who stood in 'No' motivated:
- "we are part of the city"
- "we can go and come to and from the city within 10 minutes by tram"

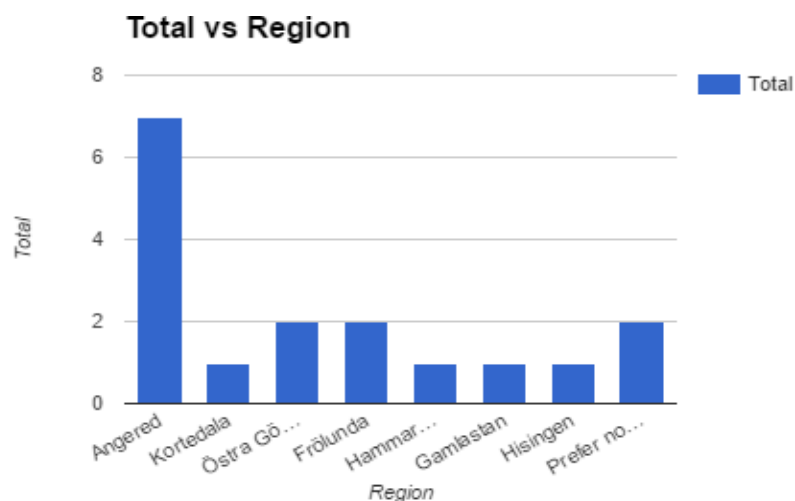For the second question the youth who chose 'maybe' and 'yes' replied with the following answers:
- Interact more
- More events
- Co-operation
- Show the positive parts
- People here daily try to make a change
- Only bad things are new
- Immigrants should work in media.

Numbers: 9 Yes (Angered is segregated); 7 Maybe; 4 No

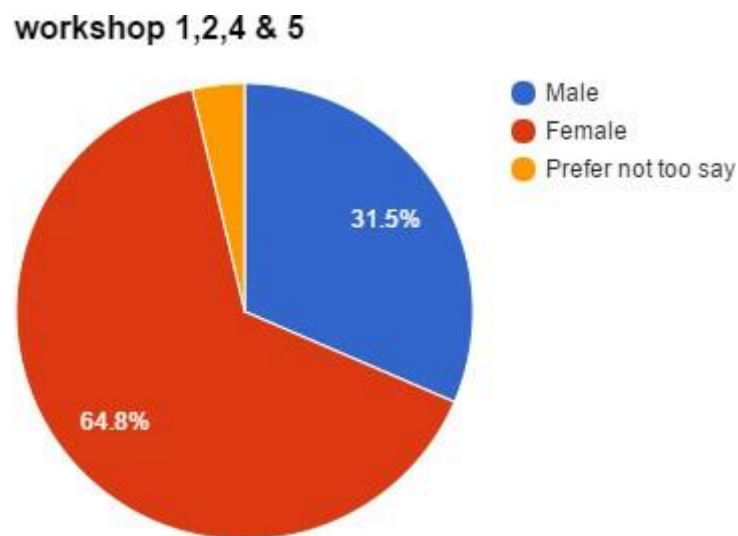Region (Workshop 4):
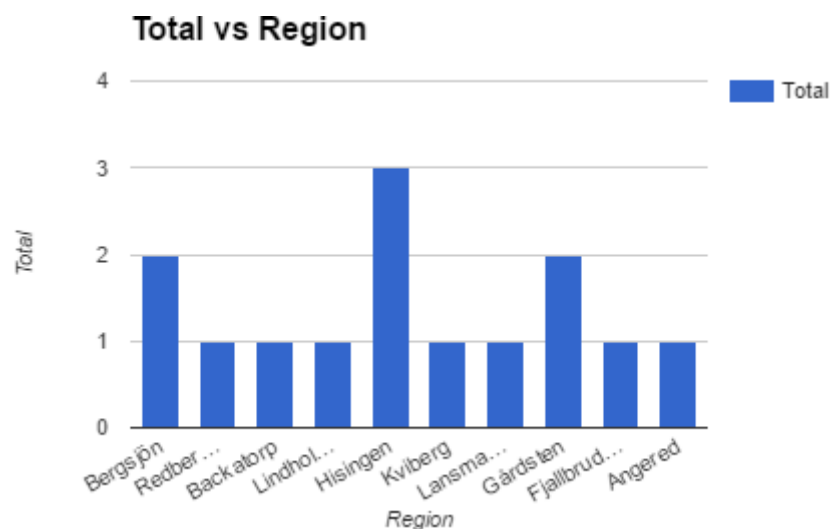
Region (Workshop 5):

Through the workshops, we identified 2 from Lovgärdet and 6 from Hammarkullen and the rest were from different parts of Angered and Kortedala that participated in the workshops and interviews.
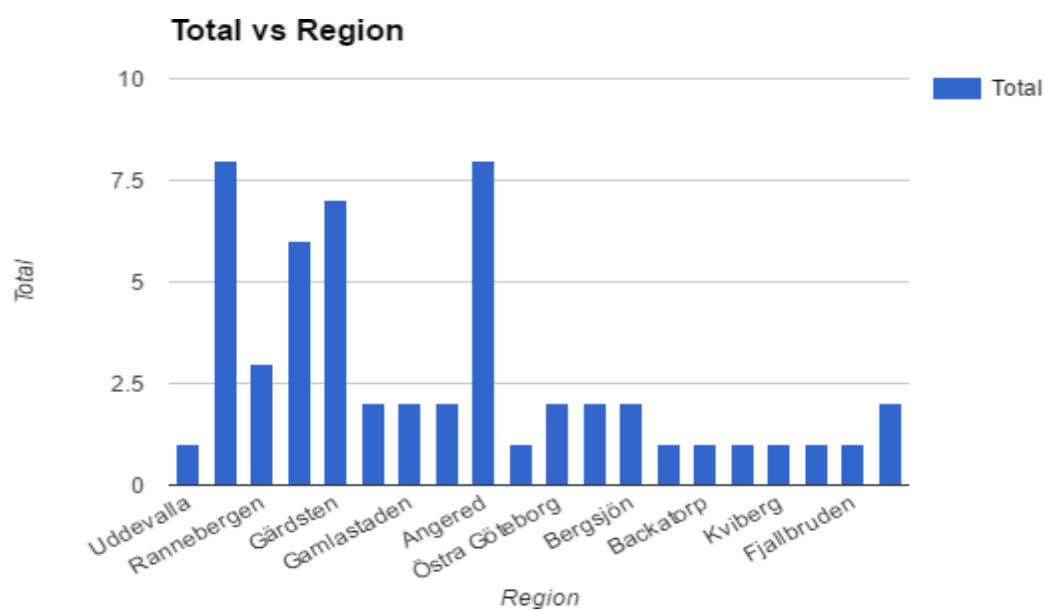
Cumulative demographics of all workshops

In this section, you will see the overall Gender, Region and Age for workshops 1,2,4 & 5.

Gender:

Region (Workshop 1,2,3 & 5):

Age: