



YouCount
Youth Citizen Science

D1.3

Methodological Framework for Data Collection and Analysis

Julie Ridley¹, Ingar Brattbakk², György Pataki³, Alexandra Czegledi⁴, Fortuna Procentese⁵, Flora Gatti⁶, & Reidun Norvoll⁷

- 1 School of Social Work, Care and Community, University of Central Lancashire, Preston, UK
- 2 & 7 Work Research Institute, Oslo Metropolitan University, Oslo, Norway
- 3 & 4 ESSRG, ESSRG KFT, Hungary
- 5 & 6 UNINA, Università Degli Studi Di Napoli Federico II, Italy



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101005931

Reference list 1

Project Acronym	YouCount
Project Name	YouCount – Empowering youth and cocreating social innovations and policymaking through youth-focused citizen social science
Grant Agreement no.	101005931
Start date of the project	01/02/2021
End date of the project	31/01/2024
Work Package producing the document	WP-1: Developing the framework and stakeholder mobilisation
WP Leader	KTU
Other Partners involved	1. Oslo Met, 10. UNINA, 9. ESSRG
Deliverable identifier	D1.3
Deliverable lead beneficiary?	7. KTU or 4. UCLan
Internal Scientific Reviewer	György Pataki, ESSRG
Date of delivery	28 th February 2022
Version	1
Author(s)	UCLan (Julie Ridley), Oslo Met (Ingar Brattbakk, Reidun Norvoll), ESSRG (György Pataki, Alexandra Czegledi), UNINA (Fortuna Procentese, Flora Gatti).
Classification	Public

Disclaimer: This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No101005931. The opinions expressed in this document reflect only the author’s view and reflects in no way the European Commission’s opinions. The European Commission is not responsible for any use that may be made of the information it contains.

Table of Contents

EXECUTIVE SUMMARY	7
1 INTRODUCTION	8
1.1 Project aims	9
1.2 Research questions	10
2. METHODOLOGICAL DESIGN.....	13
2.1 Overview.....	13
2.2 Co-creative & participatory	14
2.3 Multiple case study	15
2.3.1 Ten local cases of Y-CSS	16
2.4 ICT tools for inclusive science practices	18
2.5 Focus on Gender.....	19
3. DATA COLLECTION METHODS.....	20
3.1 Multiple methods	20
3.2 State-of-the-art literature reviews	21
3.3 ‘Dialogue forums’	22
3.3.1 Dialogues with young researchers.....	23
3.3.2 Discussing themes from literature reviews	24
3.3.3 Dialogues with community youth.....	25
3.4 YouCount App Toolkit.....	25
3.4.1 App design and timeframes.....	28
3.5 Additional methods	29
3.6 Gender data.....	30
3.7 Social innovation process data.....	32
4 DATA ANALYSIS STRATEGY	33
4.1 General outline.....	33
4.2 Cross case analyses	34
4.2.1 Social inclusion opportunities including positive drivers	34
4.2.2 Gender	35
4.2.3 Innovation, social change and CSS	36
SUMMARY	38
REFERENCES.....	40
APPENDICES.....	44
Appendix A: Local Case Abstracts	45

List of figures

FIGURE 1: INTERRELATIONSHIPS BETWEEN WORK PACKAGES IN YOUCOUNT	8
FIGURE 2: MULTIPLE CASE STUDY INCLUDING 10 CO-CREATIVE Y-CSS CASES FOCUSING ON SOCIAL INCLUSION OF YOUTH WITH DISADVANTAGES	15
FIGURE 3: DATA COLLECTION PROCESS IN YOUCOUNT TO BETTER UNDERSTAND SOCIAL INCLUSION AND SOCIAL INNOVATIONS NEEDED	20
FIGURE 4: TIMELINE YOUCOUNT APP	29

List of tables

TABLE 1: REVISION HISTORY.....	5
TABLE 2: TERMS AND ABBREVIATIONS.....	6
TABLE 3: EXAMPLES OF LOCAL CASE TOPICS AND INITIAL RESEARCH QUESTIONS.....	11
TABLE 4: TEN CASES OF YOUTH CITIZEN SOCIAL SCIENCE IN YOUCOUNT	16
TABLE 5: WHAT, HOW AND WHEN GENDER-RELATED DATA COLLECTION IN YOUCOUNT	31
TABLE 6: OPERATIONALISING THE ANALYTICAL PERSPECTIVES FOR THE CROSS-CASE ANALYSIS OF SOCIAL INNOVATION	36
TABLE 7: APPENDIXES	44

This document is shared under Creative Commons Attribution 4.0. International License (CC BY 4.0).

Cited as: Ridley, J., Brattbakk, I., Pataki, G, Czegledi, A., Procentese, F., Gatti, F., & Norvoll. R. (2022). *Methodological Framework for Data Collection and Analysis*. 10.5281/zenodo.6303118

D1.3: Methodological Framework for Data Collection and Analysis

This deliverable presents an early methodological framework for the hands-on youth citizen social science (Y-CSS) study, describing our plans for data collection and analysis which remain under development, including the YouCount App toolkit that will be piloted in Spring 2022. It builds upon the conceptual framework in D1.2, the ethical framework and work securing ethical approvals established in D2.1, and the strategy for evaluating Y-CSS.

The vision of YouCount is twofold, addressing and combining both the scientific and societal needs of our time. The scientific *vision* of YouCount is to strengthen the transformative and participatory aspects of citizen science (CS) and social science, by enabling citizen participation in all facets, reaching out for a more egalitarian way of conducting science. The societal *vision* of YouCount is to contribute to create inclusive and innovative societies for European youths and to empower them in promoting active citizenship and a just and equitable future, particularly for youths with disadvantages.

Table 1: Revision history

VERSION	DATE	CREATED BY	COMMENTS
1.1	21.02.22	UCLan	First draft sent out for review of co-authors, case partners and scientific reviewer
1.2		UCLan /OsloMet	Second draft to co-authors
1.3		UCLan	Third version
1.4	28.02. 2022	P1, Reidun Norvoll	Final version 1 submitted

Table 2: Terms and Abbreviations

ABBREVIATION	FULL TERM
CS	citizen science
CSS	citizen social science
C-YCS	young citizen scientists from the local community or targeted organisation or population (lower level of participation)
D	Deliverable
EC	European Commission
EU	European Union
ICT	Information and Communications Technology
LL	Living lab
PAR	Participatory action research
RRI	Responsible research and innovation
R-YCS	Young citizen scientists participating in the research team
SME	Small, medium enterprises
UN-SDG	United Nations Social Development Goals
WP	Work Package
YCS	Young citizen scientist
Y-CSS	Youth citizen social science
YouCount app	YouCount app Toolkit on the SPOTTERON CS platform

Executive Summary

This D1.3 Framework for data collection and analysis is rooted in Work Package (WP) 1, Task 1.5 Develop data collection framework for multiple case study, including the SPOTTERON ICT platform. It is an integrated framework for data collection and analysis in WP 2 (social inclusion study) and WP 3 (social innovation and gender studies). In particular it addresses the work of Task 2.4 - Develop and refine the design and methodology for each case study; T3.1 Cross-case analysis of social inclusion opportunities; T3.2 Cross-case gender analysis; T3.3 Cross-case analysis of innovation processes, social change and the role of citizen social science (CSS); and T3.4 Cross-case analysis for positive drivers. The primary focus is on the social inclusion sub study, but the framework also touches on the social innovation and gender studies. It provides details of the 10 local cases being developed in nine countries in a multiple case study of co-creative youth citizen social science (Y-CSS) in Europe.

This Report comprises four parts: (1) an introductory overview of YouCount's six overlapping WPs and four sub studies; (2) the planned participatory and co-creative research design and approach for the multiple case study and use of ICT tools for inclusive science practices; (3) details the data collection methods that are both common to, and unique to the local cases; and (4) sets out the data analysis strategy and preliminary plans for cross case analyses.

The main target group for this Deliverable is the YouCount consortium partners themselves as this document collates the plans and descriptions of the common methodological approach in the local cases as well as highlighting variations across the cases. It serves as a reference document for all YouCount team members including individuals joining the project at a later stage. As flexibility is at the heart of the YouCount approach, this is a 'living' document, offering an initial starting point that will be further amended to reflect empirical findings and practical experience at the end of the study.

1 Introduction

YouCount is a complex, inter-country project with a substantial number of partners, diverse groups of young people and other stakeholders that requires coordination of research tasks in and across local cases throughout the project period to secure scientific quality. This need for structured data collection and analysis framework to support cross-case analyses, however, must be balanced alongside the ambition of the project to be innovative, to work co-creatively with youth, and to conduct responsible research and innovation (RRI). The latter, together with the desire to be genuinely co-creative with youth, necessitates taking a more flexible approach to methodological design and implementation than tends to be the case in conventional scientific projects, thus enabling greater responsiveness to the young citizen scientists (YCS) and research experiences along the way. Moreover, whilst the core research focus across the multiple case study is on aspects of social inclusion, this will continuously adapt to the local context and different youth groups. Furthermore, an open and responsive approach is necessary when conducting research and innovation that includes young people who have experienced various disadvantages or who are not used to science.

The YouCount consortium are thus engaged in data collection and data management in several overlapping WPs and four sub-studies: 1) the development of a framework for Y-CSS; 2) implementation of a multiple case study of Y-CSS projects in nine countries across Europe; 3) evaluation of the process, outcomes, and impact of the Y-CSS activities, and a multi-criteria assessment of the costs and benefits of Y-CSS; and 4) creation of social and scientific impact through widespread scaling up and continuity. The overall and specific objectives for the project are detailed in six interrelated Work Packages (WPs) represented in Figure 1 below:

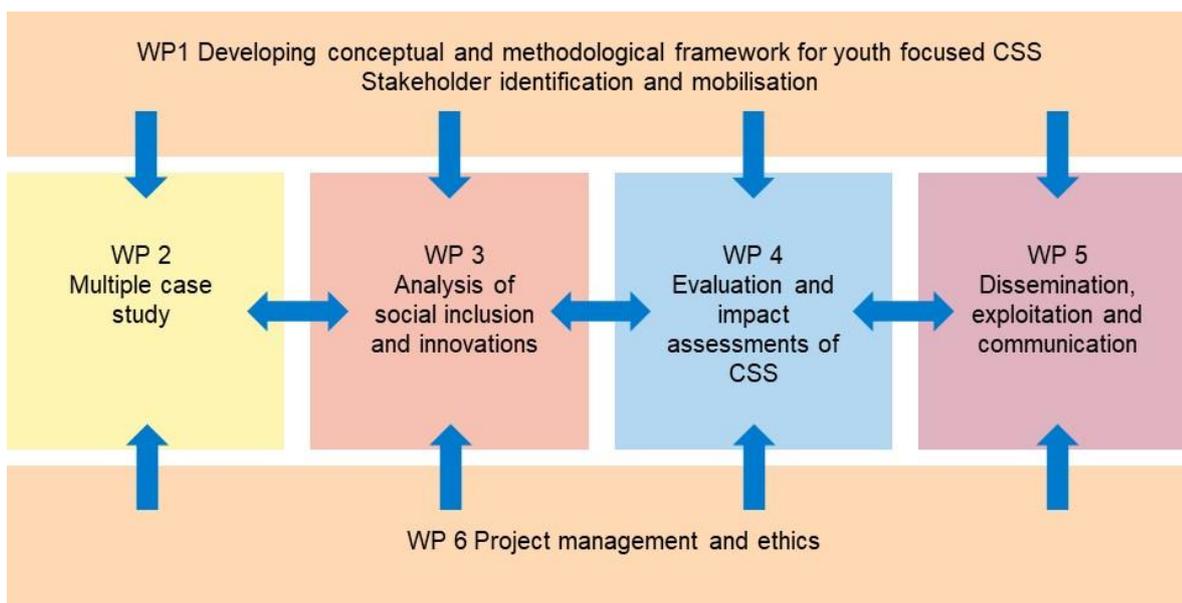


Figure 1: Interrelationships between Work Packages in YouCount

This Report focuses primarily on sub study 2, research exploring young people’s views and experiences of social inclusion, and as such will inform sub studies 3 and 4. It presents the overarching methodology for implementing the multiple case study describing data collection and analysis aspects that are common across the local cases as well as the variety of qualitative methods different partners may use to explore social inclusion and innovations with young people. The document has been prepared as part of YouCount’s WP 1 to establish the framework for co-creative CSS and stakeholder mobilisation, and specifically addressing Task 1.5 (Develop data collection framework for multiple case study, including the SPOTTERON ICT platform. [m3–11]). It also collates the collective thinking of all partners engaged in WP 2 implementing their local case as part of the multiple case study. Specifically, this deliverable contributes to WP2 Task 2.4 (Develop and refine the design and methodology for each study); and WP3 T3.1 (Cross-case analysis of social inclusion opportunities), T3.2 (Cross-case gender analysis), T3.3 (Cross-case analysis of innovation processes, social change and the role of CSS), and T3.4 (Cross-case analysis for positive drivers).

The general principles for the multiple case study implementation were defined in the EU Grant Agreement (GA). This deliverable does not replace established agreements between consortium partners. Consequently, this deliverable includes a presentation of the overarching cross-case data collection for the multiple case study and approaches to data analysis in the sub-studies represented in WP 2 and WP 3. Moreover, it gives a brief description of current state of development of the YouCount app toolkit. This framework comes at an early phase of the project when many aspects of the local cases and the YouCount app are yet to be settled in collaboration with YCS. The intention, therefore, is that this Report will outline an overarching structure which will be adapted flexibly to local case topics and contexts. While there are core elements of data collection outlined in this document, additional methods of data collection and analysis are an inevitable feature of a flexible design. This deliverable is thus an evolving blueprint for co-creative Y-CSS providing a short introductory overview of our plans at one point in time. The plans will evolve and develop further during 2022 and 2023. A final framework will be presented in future publications and educational materials from the YouCount project.

1.1 Project aims

YouCount is an EU project funded under Horizon 2020, the Science with and for Society (SwafS) programme. Its key objective is to generate new knowledge and innovations to increase the social inclusion of youth through co-creative Y-CSS, where young people contribute as citizen scientists. Secondly, it aims to provide evidence of the outcomes or impact of Y-CSS. Thus, there are two main strands of inquiry in YouCount that have a bearing on our plans for empirical data collection and analysis:

Strand 1: Increased knowledge about positive drivers of social inclusion and new social innovations and policymaking (WP 2 and 3).

Strand 2: Increased knowledge of Y-CSS for scaling up (WP 1, 3, and 4).

The first strand of inquiry, which aims to explore individual, relational, social, and environmental factors contributing to empowerment and increased social inclusion and discovering new social means and policymaking for increasing social inclusion is of most importance for this Report. Data collection and analysis plans for the evaluation and impact studies are published elsewhere (Juricek et al., 2021). This Report primarily presents our data collection and analysis plans for achieving strand 1, touching briefly on our plans for documenting and identifying societal outcomes of co-creative Y-CSS. For more information about how YouCount is addressing strand 2 see D1.2 (Butkevičienė et al., 2021) and the evaluation strategy Report (Juricek et al., 2021).

An earlier Report from the YouCount consortium presents the conceptual, innovative, evaluation and ethical framework for youth citizen social science, identifying ‘social inclusion’ as a broad concept referring to ‘citizens’ chances to access the same opportunities and resources to participate in economic, social, political, and cultural life within a given society’ (Butkevičienė et al., p12). It also highlights three dimensions of social inclusion from the literature that we will use to group the local cases. These dimensions are (a) social participation (including employability); (b) social belonging and connectedness; and thirdly, (c) citizenship and civic participation. Largely missing from the extant literature, however, are the perspectives of young people, especially as researchers or YCS. In response, the YouCount project will conduct hands-on CSS working co-creatively with young people, adopting innovative methods to empower young people and generate new knowledge.

1.2 Research questions

The following theoretical and empirical research questions apply across YouCount and will be addressed by all the local cases in the multiple case study. Firstly, YouCount seeks to address three key theoretical research questions, namely:

1. Which individual, relational, social and environmental factors contribute to positive experiences of social inclusion and why?
2. What kinds of means and policymaking for social inclusion are considered most promising for social inclusion and why?
3. To what extent and how are these experiences, opportunities and innovations gendered?

Furthermore, the research on social inclusion conducted by the local cases starts by addressing the following three main empirical research questions:

1. What are young people’s own views on what the critical issues are for social inclusion?
2. What is young people’s experience with opportunities for social inclusion in their daily lives?
3. What new means and policies for social inclusion are needed?

Building upon these initial research questions, local cases will tailor and modify research questions that each local case will address through collaborative processes with the young researchers. This is an essential aspect of the methodological framework, ensuring the empirical evidence collected is appropriate to each case while at the same time, seeking to answer the three overarching empirical questions across a multiple case study. A one-size fits all approach would have been inappropriate in this study. We foresee cases tailoring the research questions as the case develops, and thus, for data collection methods to be flexible throughout the entire period of the project. This is in line with our key aim to be co-creative, involving young people in all aspects of the study. Table 3 below provides some examples of initial research questions posed by cases, which are relevant to the case topic.

Table 3: Examples of local case topics and initial research questions

Social Inclusion Topic	Initial Research Questions
Employment, social entrepreneurship	<p><i>How is the experience of social inclusion among young people in this District connected to employability and social entrepreneurship?</i></p> <p><i>How are opportunities for work and social enterprise located within this District?</i></p> <p><i>What are the challenges when it comes to social inclusion for youth and young adults in this country?</i></p>
Participation opportunities for young migrants and refugees	<p><i>Which civic engagement opportunities do young refugees and migrants have?</i></p> <p><i>Which opportunities are missing for young refugees and migrants to meaningfully participate?</i></p>
Connectedness and sense of belonging	<p><i>What does it mean to belong?</i></p> <p><i>What are the enablers and barriers to a ‘sense of belonging’?</i></p>

How does living in this city affect sense of belonging?

What innovative methods help researchers and communities to understand young people's social inclusion and potentially bring about change?

2. Methodological Design

2.1 Overview

YouCount seeks to explore meanings and perspectives of ‘social inclusion’ and its positive drivers, in particular from young people’s perspectives (Butkevičienė et al., 2021). Social inclusion is taken as a broad, multi-dimensional concept, that can be understood as both a process and a goal (Rich et al., 2015), and is highly dependant on social contexts and norms in different cultures and communities (Pirani, 2013; Yang et al., 2019). Moreover, social inclusion processes can be both dynamic and interactive, and can involve different levels (Giarè et al., 2020; Moyano et al., 2020). In order to develop new knowledge of youth’s views and experiences of social inclusion across multiple countries, therefore, and to identify the positive ‘drivers’ of social inclusion, each sub study will comprise a convergent parallel design, utilising a combination of qualitative, indepth methods alongside quantitative methods including larger samples of youths from nine countries. This will allow us to utilise the potential of a multiple-case study.

Critically, it incorporates a **co-creative and participatory approach** to Y-CSS involving young people facing different kinds of disadvantage and living in different cultural contexts. Thus, it is important we understand what supports social inclusion (‘drivers’) from the perspectives of young people who face different kinds of challenges. It is central to YouCount that Y-CSS is conducted *with* rather than *about* young people, that the research and social innovations are co-created. Our aim is to include the YCSs in the choice and design of the local and sub studies as far as possible, aspiring to be co-creative not only in relation to the qualitative data collection but also in development of the YouCount App and other quantitative surveys.

A **multiple case study** is central to meet YouCount’s ambitions, incorporating multiple cases of co-creative Y-CSS located in different cultural contexts, youth groups, and social inclusion topics relating mainly to either participation, community belonging or citizenship and rights. In **developing ICT tools for inclusive science practices**, the design also recognises the potential of innovative CS applications to empower young people and to democratising science. Finally, given that various social dimensions will impact the youths’ experiences and needs (for example, age, gender, social class, ethnicity, migration, community context), the YouCount project integrates multi- factorial and intersectional cross case analyses. At the same time, the gender dimension is given special attention as a priority focus for the EU.

2.2 Co-creative & participatory

YouCount responds to the pressing need to develop more knowledge and innovation to create more inclusive and youth-friendly societies from young people’s perspectives to improve their situations and shape more cohesive societies across the EU. Participatory and co-creative methods are at the very heart of YouCount and Y-CSS, tangibly demonstrating the innovative potential of youth. At the same time, the project will explore how to make co-creative designs possible in large EU CS projects. The earlier D1.2 report on the conceptual framework has already established the co-creative principles and theoretical framework underpinning the ideals and aspirations of YouCount, alongside outlining concrete recommendations for dialogical process implementation (Butkevičienė et al., 2021, p37). YouCount has its roots in both participatory action research (Karslen & Larrea, 2014) and CS (Strähle et al., 2020). Combining these, we aspire to conduct scientific practices that are diverse, inclusive, flexible, and reflexive in implementing co-creative hands-on Y-CSS.

Explicitly, Task 2.4 in WP 2 states that young people will be involved in an ongoing way in the design and methodology for each local case [m8–27]. Young people in the case research teams (R-YCS) will help decide the research focus and questions that the local case will address, and together with academic researchers will decide on the most appropriate methods for data collection at the local level. In YouCount, young people are also involved in shaping the detail, piloting, and modifying data collection tools such as the YouCount App toolkit described below. Young people in the research teams will identify strategies and methods for engaging those young people from the community or broader target group whose voices are ‘seldom heard’. Co-creation is a continuous thread throughout the project. In the early months of the implementation period (from February 2022) the R-YCS as integral members of local research teams, will be centrally involved in deciding the case topic, what data should be collected, and how. In this way, YCSs will share their lived experience of social exclusion and inclusion and will co-design data collection tools to collect data from other young people and stakeholders.

Youths will participate as YCS in two ways: firstly, in the local cases young people from the target community or group together with young university students will participate as members of the research team (R-YCS) and be involved, as co-researchers, throughout the research process. A larger group of young people from the target communities or groups will be engaged at a lower level of participation as community youth citizen scientists (C-YCS). They will be asked to contribute information about their experiences and views of social inclusion both in dialogue forums or ‘listenings’ (see data collection chapter for more details), and through contributing data through the YouCount app via computer/tablet and/or smartphones. Each case team will establish local living labs (LLs) with multiple stakeholders in the wider community or targeted stakeholder organisations, which will use the data provided by the participating YCSs to co-create policymaking and innovations in terms of new ideas, products, and methods to create social change.

2.3 Multiple case study

The overall design of the empirical study of social inclusion (sub study 2) within YouCount is a multiple case study of Y-CSS. Adoption of such a design will allow for contextualised and holistic research and innovation by exploring a real-life, contemporary, multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (Creswell, 2013; Yin, 2013). Further, the advantage of a multiple case study at this scale is that the evidence created is more comprehensive and reliable, leading to the creation of more convincing theories that are grounded in numerous pieces of empirical evidence (Baxter & Jack, 2008; Eisenhardt, 1989). This multiple case study will thus provide detailed and dynamic information about the multifactorial and interactive drivers of social inclusion in a variety of national and cultural contexts. The multiple case study aims to produce new knowledge of social inclusion and innovations by addressing the theoretical and empirical research questions outlined previously (see chapter 1), and considers the extent and how, young people’s experiences of social inclusion, the opportunities they have, and the innovations needed to increase their inclusion, are gendered. Figure 2 below provides an overview of the multiple case study design in the YouCount project. Social inclusion is conceptualised as social participation, social or community belonging and connectedness and citizenship rights and responsibilities.

MULTIPLE CASE STUDY

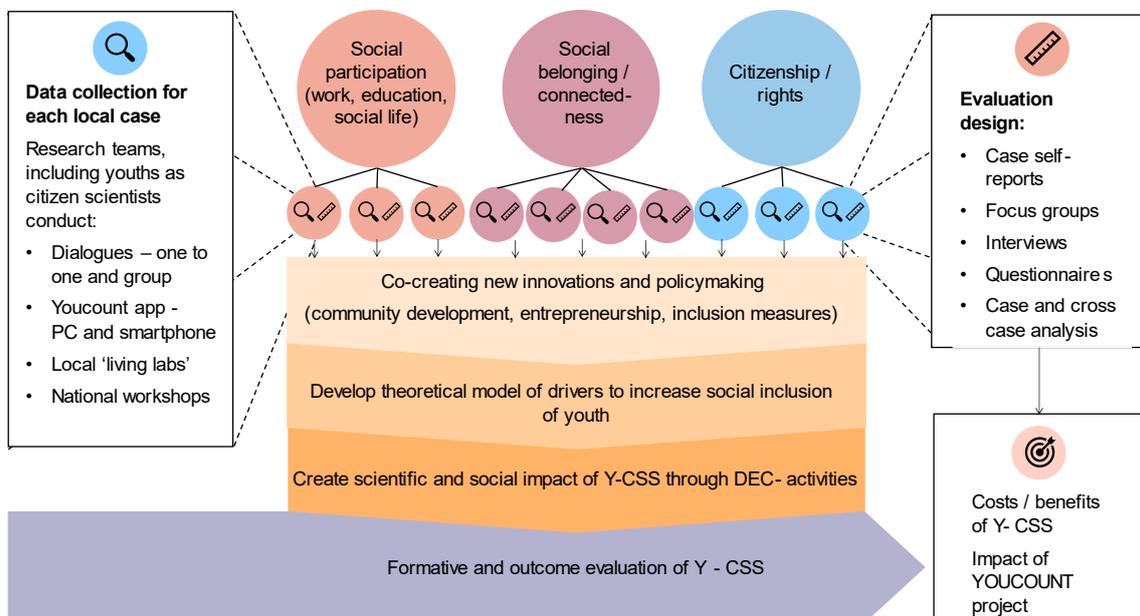


Figure 2: Multiple case study including 10 co-creative Y-CSS cases focusing on social inclusion of youth with disadvantages

2.3.1 Ten local cases of Y-CSS

The multiple case study comprises ten individual cases of Y-CSS located in nine countries across Europe that we consider highlight key social challenges within the three domains for social inclusion regarding youth (see appendix A for information on the cases). The choice of focus for each case has been based upon the scientific literature, European and national policy, local needs for knowledge, and the views of young people and youth organisations. A summary description of the cases is given below in Table 4 showing how they differ, are interrelated, and how they are complementary in respect of the type of youth group or geographical areas, social inclusion dimensions, and social inclusion topics. Collectively, they offer potential for comprehensive research regarding the positive drivers for social inclusion through cross-case analysis, and at the same time, of making a significant contribution to knowledge and innovations about issues regarding social inclusion for youth. In addition to specific innovations, all cases will develop knowledge of new means for including young people in research and innovation activities, and about how to increase young people’s sense of social recognition and empowerment at an individual level.

The project will include young people from a wide age range: about 13 to 30 years old at the time of recruitment, though most will be 16 years or older. The project will focus on youth in general but will address the circumstances of youths who are most at risk of marginalisation in terms of poverty, migration, disability, low education, unemployment, and disenfranchisement; some cases will include young people from deprived or disadvantaged areas.

Table 4: Ten cases of Youth Citizen Social Science in YouCount

Country	Type of youth group/geographical area	Brief description of local case topic	Social inclusion dimension
Norway	Urban	Drivers for social inclusion through youth employability and social entrepreneurship in the city	Participation
Spain	Migrants	Which are the inclusion factors for young migrants in our society?	Citizenship

Hungary (A)	Hearing impaired young people	What are the challenges and enablers in becoming autonomous adults?	Participation
Hungary (B)	Rural	Constraints and possibilities for sustainable agriculture techniques and gaining better access to quality education	Community belonging
Italy	Urban	How to promote a more aware togetherness between young migrants and local young citizens	Community belonging
UK	Urban	What influences whether young people feel they belong in their communities?	Community belonging
Lithuania	Rural	What influences whether young people feel they belong to community?	Community belonging
Sweden	Youth Council	Can engagement in a youth city council lead to other forms of social inclusion?	Participation
Austria	Migrants	Which civic engagement opportunities do young migrants have and which opportunities are missing?	Citizenship
Denmark	Urban	How the experiences of youths in South Harbor with sustainability and climate change create empowerment and social inclusion?	Citizenship

2.4 ICT tools for inclusive science practices

An important innovative sub-objective for the YouCount project is to develop better ICT tools for data collection in Y-CSS. The benefits and potential of CS have often been linked to the potential of obtaining new knowledge through new digital opportunities for data collection involving citizens (e.g. Corties & Fielding, 2016). On the one hand, digital tools offer new possibilities for the social sciences, yet on the other, this may be more difficult to design and use due to the complexity of recording social observations and various ethical issues, not least when it comes to studies of vulnerable populations. Recent projects with youths and older people using ‘walking’ methods to record visual data on geocatching apps to gather better knowledge in planning of youths- or age-friendly societies, show promise and are increasingly being used by government institutions in Scandinavian countries (Tolstad et al., 2017; Vestby et al, 2020). Sweden and Austria also have positive experiences using such digital tools in CS with youth and refugees (Heiss & Matthes, 2016; Kullenberg et al, 2018). The use of digital tools might be particularly relevant for young people who are used to ICT and social media, and therefore, may be a way of making social science accessible to young people.

At the same, using such tools might potentially exclude certain youth groups with less skills and/of access to digital devices. Several scholars have also raised concerns about whether this emphasis on digitalised tools will contribute to increasing the social exclusion of vulnerable citizens in science, enforcing the problem of a ‘digital gap’, and have therefore called out for more inclusive kinds of ICT tools (e.g. Liebenberg et al, 2017). YouCount will address these challenges by developing more knowledge of suitable ICT tools and how to use ICT tools in data collection with youths with disadvantages, and from multicultural backgrounds, ensuring sufficient preparation, monitoring and follow-up of the youth are considered (Cooper et al, 2010). This methodological innovation is done in close collaboration with the partner SPOTTERON as a central SME in the European CS setting that has extensive expertise in creating custom online solutions for science and CS applications, as well as innovations to create advanced solutions for science communication and interactive CS Apps (<https://spotteron.net/>).

This aligns with principles of universal design and can thereby also contribute to the UN-SDG of creating more inclusive societies for disadvantaged youths. The YouCount App Toolkit is thus an innovation process for developing suitable ICT tools for CSS and more inclusive science practices. However, it is important to note that the App only constitutes one of several research tools in the YouCount multiple case study and evaluation study.

2.5 Focus on Gender

As outlined earlier, while the YouCount project is sensitive to the multiple factorial and intersectional dimensions that might influence social inclusion, gender is a key focus. This aims to question, and to avoid (unconscious) bias and discrimination regarding gender norms and stereotypes. YouCount is dedicated to contributing to the UN's Sustainable Development Goals 3, 5, 8 and 10. Two of these - Goals 5 and 10 - concern gender equality and reduced inequalities, respectively. To identify possible (gender-related) biases and discrimination, analysis will be conducted at various levels of the project, aligning with the RRI guidelines. In this way, gender-specific and gender-related challenges can be counteracted and measures for ensuring equality can be adapted according to the findings of the gender analysis. Until now, only a small number of CS papers have discussed gender equality. Those that have performed gender analyses have mostly focused on the motivation of CS to work according to gender. The YouCount project will thus contribute new knowledge both to social inclusion and CS from a gender perspective.

In strand 1, the YouCount project will develop knowledge of gender-specific needs and challenges among youths to create equal opportunities for social inclusion, incorporating this analysis within proposals for social innovation and new policy. This includes research questions with respect to how gender might influence the views and experiences with social inclusion, critical issues, and opportunities for social inclusion in respect to social participation, employment, social belonging, and citizenship. Moreover, the local cases will set out to identify possible targeted innovations and policymaking according to their views and needs for support as part of the social innovation sub study. Due to the heterogeneity of the cases in the multiple case study and the need for developing a clearer perspective on gender issues and social inclusion, this part of the project will adopt an open, exploratory approach to gender related dimensions and issues.

3. Data Collection Methods

3.1 Multiple methods

YouCount aims to generate new knowledge about social inclusion and innovations to improve the lives of young people across Europe who face exclusions. Given the multifactorial understanding of ‘social inclusion’ and inspired by previous successful designs of co-creative CSS in local community planning (Richardson, 2017), data collection will be a continuous process consisting of several interrelated and partly overlapping elements to build a richer understanding of social inclusion dimensions from young people’s perspectives, and how new means and policymaking can increase the social inclusion of youth. The complexity of the data collection process is captured in Figure 3 below. While the overall design of the project allows for a high degree of flexibility in the methods local cases of Y-CSS will use, they have certain steps of data collection and methods in common. Naturally, local teams will deploy additional methods to ensure we engage diverse youth groups in the best possible way, and we consider these at the end of this chapter.

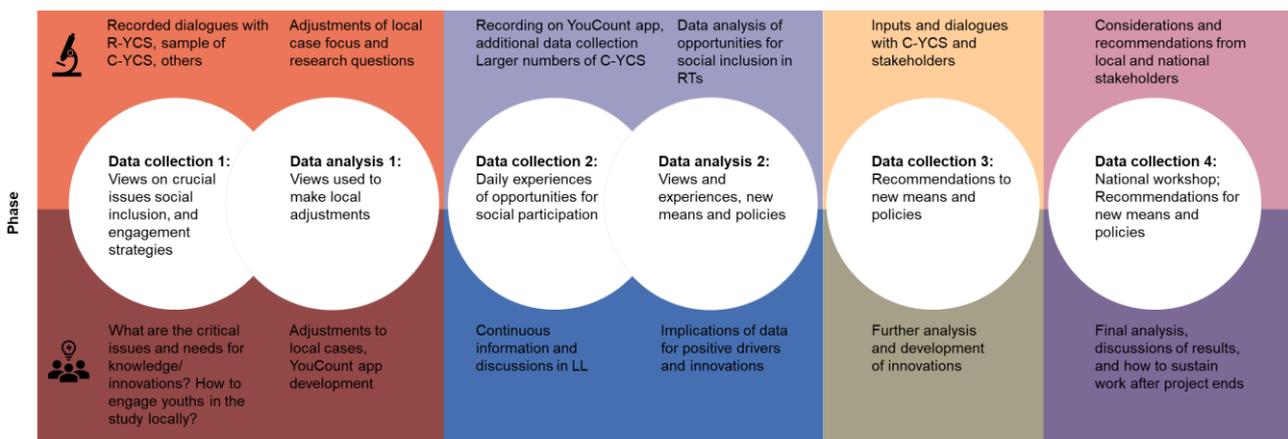


Figure 3: Data collection process in YouCount to better understand social inclusion and social innovations needed

In short, the data collection process in the empirical study will be continuous, implemented in a stepped way. The process starts with the youth in the research teams (R-YCS), expanding to involve samples of youth from the wider community or target group (C-YCS) relevant to the case, and lastly, widening out to local and national stakeholders. Step 1 in Spring 2022 sets out to explore young people’s views and experiences of social inclusion starting with collecting data with the R-YCS and members of LLs; step 2 expands this exploration of youth views of social inclusion from May 2022 to include small samples (up to 15) of C-YCS from the various urban and rural areas or target groups; in step 3 we aim to collect both quantitative and qualitative data on social inclusion experiences of larger samples of C-YCS using the YouCount app in autumn 2022/Spring

2023; and the focus of step 4 in the final part of implementation is the development of ideas about social innovation and co-dissemination with R-YCS and other stakeholders in the LLs, culminating in one national workshop in each country. A fuller description of the continuous data collection and the steps outlined above is given below. Furthermore, since the empirical study began in 2021 with each case team conducting a state-of-the-art literature review this will be described briefly.

3.2 State-of-the-art literature reviews

At the start of implementing the multiple case study, Task 2.1 in WP 2 required that all partners start by conducting a review of the social science literature on social inclusion and relevant projects about the substantive topic or focus of the case. Besides good practice in research, there were several reasons to review the social science literature for each case. This includes establishing what is known from past research about the local challenges/issues in relation to the social inclusion topic and youth group that each case will focus on; increasing the relevance of, and helping to develop the aims and research questions in each case; preventing duplication and ‘reinvention of the wheel’; identifying what has been found helpful to increase inclusion (social drivers) for the specific case topic; identifying gaps in the knowledge base, including who (e.g. adults or young people) has generated knowledge so far; and further examining the social innovation and policymaking focus in relation to the case topics.

Reviews were undertaken by each case team between June – September 2021 and were distinct from but inform the literature review of positive drivers for social inclusion conducted by UNINA to support theoretical development in WP 3. Local reviews focused on the relevance of existing literature to youth, the extent to which it reveals young people’s lived experiences of social inclusion and what is helpful. Guidance for scoping the review was produced to support local case teams and to establish consistency with how we approached this task. It was agreed to adopt a qualitative, exploratory, narrative style of review to summarise and critique the literature on our key topics, and to synthesize key themes and conclusions. General guideline to conduct the narrative review were provided advising local case teams about identifying the research area, defining inclusion and exclusion criteria, conducting searches and selecting studies that met inclusion criteria, reviewing and documenting results including writing up the reviews. Partners presented their preliminary findings from the literature reviews to the Consortium meeting in September 2021.

Key insights and themes from the literature have been summarised by case team and will be shared with the R-YCS at an early stage, possibly during training, to provide young people with current knowledge from the social science and to ask if they agree with the themes identified from the published literature and/or if something is missing in their opinion. In this way, we touch upon

a key aspect of CS, which is to increase science literacy in the lay population by including them in research processes, thus informing and empowering youth to participate in research as ‘real’ co-scientists. This can be a valuable exercise and an early way of gathering information about young people’s opinions. Discussing themes from the social inclusion literature with R-YCS will provide an opportunity for learning about the topic and increasing social science literacy that can be discussed with youth throughout the research process, for example, during data analysis and presenting case research findings.

3.3 ‘Dialogue forums’

In the first phase of data collection (incorporating steps 1 and 2), which runs from February to May 2022, all local case teams will engage meaningfully with young people from their geographical or target populations to better understand the chosen topic of social inclusion from young people’s perspectives and experience, using what emerges to further define the case topic and research questions in each case. This will involve both young people who are part of local research teams (R-YCS) and samples of those from the wider community or target group of young people (C-YCS). They will achieve this using a range of what are being referred to as ‘dialogue forums’. Step 4, which is concerned with co-creating ideas for social innovation also deploys dialogue forums in ways that are appropriate to the youth population and wider stakeholders.

Dialogue forums are conversations or discussions between two or more people about an issue or to address a problem/challenge and together identify proposals to resolve it

Essentially, we interpret dialogue forums as spaces and places we create for conversations to take place between different parties that are led by the research team. When reaching out to wider groups of young people, these dialogues will be led as much as possible by young researchers (R-YCS) in each case. While academic researchers will invariably facilitate these conversations at the start, the whole team including R-YCS should be involved in planning and preparing how the dialogue forums will be run and will take on more responsibility for facilitation as the local research develops. Furthermore, the R-YCS should be encouraged to shape and influence the form that dialogue forums take in the local case: that is, deciding what they are, and how they will be implemented to encourage authentic dialogue with young people in the case.

In order to gather rich, indepth information about social inclusion experiences from young people’s perspectives, the dialogue forums will take different forms according to what suits the local case. This will range from holding one-to-one interviews, group interviews involving several YCS, focus group discussions as well as more naturalistic or ethnographic methods. Dialogue forums as ways of involving and engaging young people might start small with one or two events and grow bigger, for example, a series of forums may be planned with R-YCS then with specific

samples of C-YCS. Such an emergent design is commonplace in participatory projects and is a key part of YouCount's approach.

Young researchers may identify different and more successful ways to start conversations or dialogues about social inclusion with other young people. For example, it might be more illuminating to use photovoice, film, crafts, or other creative methods. It will be important for local case teams to be open to using a variety of methods and to determine what is effective. These dialogues will be recorded as appropriate and transcribed (if relevant), and/or fieldnotes taken by local case researchers including R-YCS, who will analyse what key themes emerge and use these to further refine and develop the case topic and research questions in the case. This may also provide additional information that informs development of the YouCount app.

Qualitative data will be collected about young people's views and experiences of three key aspects:

- **The critical issues for social inclusion**
- **Opportunities for social inclusion in their daily lives**
- **Means and policies that would increase young people's inclusion.**

The purpose of dialogue forums during steps 1, 2 and 3 is to collect data that identifies critical issues and opportunities for social inclusion in young people's daily lives, while step 4 is a further opportunity combined with the LLs to develop ideas for innovations to improve social inclusion. The final dialogue will involve young people alongside relevant local and national stakeholders in a national forum event. Naturally, specific topics for exploration will have to be adjusted to the focus or topic of the individual case (for example, as the case abstracts show in Appendix A, one case looks at the Circular Economy and the potential for social inclusion, another at the inclusion of young migrants in the economy, others at aspects of improving community belonging in rural or urban settings).

3.3.1 Dialogues with young researchers

Dependent upon local approaches and ethical approvals, research teams may have begun collecting data about social inclusion with young people during the recruitment process. In several cases, dialogue forums set up once young people have been recruited to the team will be the first stage of working co-creatively with young people. Each case team will begin by engaging those young people recruited to the research team (R-YCS, plus young students) about their ideas and understanding of 'social inclusion', inclusion challenges as they see them and what facilitates/ or drives inclusion. At least one event with R-YCS will be undertaken in each local case for Step 1, but

in most there will be a series of dialogues using different methods to gather more comprehensive data on social inclusion. Local case teams will use the findings to help formulate and/or refine the research questions and topic focus of the case from young peoples' perspectives. During Step 4, R-YCS will lead a second series of dialogue forums reflecting on the various findings from both qualitative and quantitative data collection from the local case, including findings from the YouCount App, to develop ideas for social innovation or improvements that can be taken forward in the LLs and presented at the national forum event.

3.3.2 Discussing themes from literature reviews

Initial research questions have been proposed and refined by the state-of-the-art literature reviews, and this process continues in the local cases with presenting findings from the literature to young people. All case teams will present to R-YCS including young students, the themes, and challenges to social inclusion found from their state-of-the-art literature review. This will likely be during early training sessions, but the best time to share these findings with young people will be determined locally. Teams will aim to use appropriate, clear and jargon free ways of communicating these findings regarding the key themes, indicators, drivers of inclusion and challenges identified from the published literature and to consider the communication needs of the young people they are working with. This might involve short presentations followed by an open discussion of, for example:

- **Young people's views and understanding of the themes presented from the published literature**
- **Whether the picture painted about participation/community belonging/citizenship resonates with young people's experiences and views**
- **Where this seems different, what do young people think is missing from this picture?**
- **Research methods used to explore social inclusion with young people and if these have been co-creative or innovative**
- **What are the implications from the discussion for the case research focus?**
- **Based on young people's observations and comments, what new research questions arise?**

The main rationale for holding these discussions is to ensure that the research we conduct builds on the existing knowledge base and identified gaps in the literature and research approaches identified by young people.

3.3.3 Dialogues with community youth

At step 2 during March to May 2022, each case broadens out its engagement with youth by collecting data about the critical issues and opportunities for social inclusion from the samples of up to 15 young people from the target group or local area (C-YCS). Again, these dialogues will use a mix of methods to explore young people's and to a limited extent, other stakeholders' ideas and understanding of 'social inclusion', the challenges as they see them and any ideas about what facilitates/ drives inclusion. Such dialogues will be facilitated by members of local research teams, including the R-YCS. A further round of dialogue forums or series of events will take place during Step 4 of the data collection process from autumn 2022 to early 2023 that will concentrate on developing ideas for improving social inclusion. How these overlap with, or are the same as discussions in the LLs is not clear at this stage and will need further discussion.

The purpose is to continue to gather comprehensive data on the critical issues related to social inclusion and suggestions for successful engagement strategies and innovations to address all three empirical research questions stated in the introductory chapter. At various stages in step 2 and 4, local teams may consider using additional flexible methods adjusted to the most vulnerable youths if it is discovered that they find it harder to participate in traditional or standardised research methods. For example, offering more naturalistic opportunities for conversations with youth such as using mobile methods. For those who are not native speakers (e.g. refugees), one to one interviews may be offered involving R-YCSs who can serve as interpreters/translators when necessary. Collecting the views of other key stakeholders in the local case may also be appropriate and relevant to the case topic.

3.4 *YouCount App Toolkit*

As the major focus of step 3 in the data collection process, the YouCount app working group in close cooperation with SPOTTERON aims to develop, pilot, use and evaluate an application for smartphones and computer (PC) (downloaded in the browser) together with the R-YCS and local stakeholders in the multiple case study. This work has been ongoing since June 2021 and the App is scheduled to be launched in June 2022. We will come back to the details on the design process later.

The name of the App is the 'YouCount App Toolkit' as it consists of three Apps (Android, IOS, Web-App) plus Data Administration. The YouCount App will include the common features of the SPOTTERON CS platform, and thereby the following data collection opportunities:

- GIS data (place based – interactive map)
- Quantitative (spots, numbers, categories - statistics)
- Qualitative (text in various form)
- Images (e.g., pictures)

This can be used to research 'immediate':

- Subjective meaning and experiences in the 'inside' world
- Observations of the 'outside' social world
- Actions (own /others, e.g., participation in activities)
- Interactions (e.g., comments/reactions to each other/networking)

There are three main benefits of the YouCount App in data collection and analysis of social inclusion drivers: 1) as a data collection tool; 2) to recruit and engage young people, helping to keep in contact with YCS by sending links to surveys and messages; and 3) as a community resource / or information sharing tool on local opportunities (meeting places, support). It can also be a way of keeping contact and registering data without meeting physically in case of a new lockdown due to the Covid19 pandemic.

As a data collection tool there are several advantages to using the App:

Immediate data: The App provides data "on the go" in daily life. It also provides mapping of "what youths do" not retrospective accounts. This can contribute to reduce the potential discrepancy of what people actually do versus what they say they do.

Repeated data (longitudinal): The App can be used repeatedly by the same youths to register observations from the same places several times. For example, the feeling of belonging/inclusion in a place may vary according to many changeable factors. We are therefore able to record more nuanced experiences over longer timespans.

Interactive data: The App provide opportunities for new knowledge through its interactive function where it is possible to study communication between YCS in the same local community or between communities in different countries, and between YCS and the professional researchers and more.

The App will give the opportunity to capture meaningful moments for young people in terms of which places they spend time, what activities they do, with whom they spend time, and what these places, people and activities mean to them. Further, the App may capture when they feel

that they belong and take part in society and the local community, and what makes them feel supported, strengthened, and having a voice? In short, capturing young people's daily social life, lived experiences of inclusion and exclusion and their opportunity structures in 'real time'.

What kind of topics and questions are crucial in the YouCount App:

- **Where are you? (Physical and virtual places)**
- **What do you do? (Activities, social participation)**
- **Who do you meet? (Social networks & social capital)**
- **How do you feel in this place? (At home, Safe, Included, Part of the community – belonging, social participation, citizenship, social cohesion)**

While the App has the potential as a tool capturing 'immediate' and 'on the go' data, the retrospective and reflective data will be collected by other methods like individual and focus group interviews, in the LLs and even through surveys. The various methods will, however, be combined in practice and analysis processes. The data from the App may serve as a point of departure for the conversations, discussions and reflections made in the dialogue forums and LLs. Presentations of findings from the data collected by the App – for example, mappings of which places young people spend time in their community, how they feel there and how they experience belonging, inclusion, safety, and support in these places – will be used as a source and starting point for these dialogues.

We will also explore if using the App may be a good way for increasing young people's awareness regarding issues of social inclusion in their daily life. As they bring their mobile phones with them all day and are asked to share observations and thoughts along the way, using the App may contribute to a process of maturing related to the main dimensions of social inclusion as they are constantly reminded about these issues. Some of these growing awareness and reflections may be added directly in the App, other may be expressed through the different dialogical methods in the project. Summing up, in addition to collect data which may be presented and used as a starting point for dialogical methods, the App may also be a way of preparing the youths for expressing their feelings and reflections by raising their awareness of the subject in 'live' settings.

At this stage, we consider that the YouCount App Toolkit might contribute to research on social inclusion and societal outcomes of Y-CSS in three ways:

- *Local case studies* (place-based): increased knowledge of youths' own perspectives and as a tool for local innovation and youth-involved planning/policymaking.

- *Large scale studies (cross-case)*: mapping social inclusion opportunities through many YCS in the European setting (N= approximately 900). If successful, this will represent a solid contribution to the research on youth social inclusion and identification of positive drivers.
- *Evaluation of Y-CSS and surveys integrated in the App* (place and cross-case) in three ways: a) directly in open text fields in the App, b) interactively when researchers comment and ask follow-up questions in the App and c) by push messages introducing evaluation surveys and other surveys going more in depth on specific dimensions.

These aims can be combined in different ways. The App may also be used for different purposes in several phases of the project and adapted to each case. One important aim for the YouCount App is thus to keep it so simple and flexible that it can be used for various purposes and be suitable for cross-case analysis as well as case specific topics and local use.

3.4.1 App design and timeframes

The concrete content and final version of the YouCount App Toolkit is still under development. In the autumn of 2021, the YouCount App working group had several digital meetings organizing the design process. The working group consists of one or two representatives from each case and SPOTTERON. Early recruited young researchers (R-YCS) were included in various ways: attending digital meetings in the working group and local workshops in several case countries. A central part of the design process has been to operationalize the main concepts and research questions for the App format. Additionally, an important issue has been to explore the existing basic functions and features of the SPOTTERON Citizen Science platform and to suggest new ones.

Throughout the first year of YouCount there has been a continues tension between how far the professional researchers may plan and organizing activities while at the same time give space for the young researchers to shape the project at a later stage. Much of the planning needed to start before all R-YCS were recruited. To ensure a real co-creative process for the App involving the young researchers we decided to make a prototype of the App to be tested, changed, and further developed by the R-YCS in all 10 cases as soon these were in place. Currently, the working group has translated the content of the App into all the nine languages and the App is put into production by SPOTTERON.

In the next step, the R-YCS will participate in developing and testing the App and assist the local youths in using the App. This also includes considering the level of local adaption of the App for each case. After the piloting period the final version will be produced and released. The R-YCS will then recruit approximately 10 new youths each to download and use the App. During the data collection period the young researchers will assist the C-YCS in using the App. The professional

researchers, the local App administrator and R-YCS will assist in monitoring the data supplied by the App and participate in data analysis and the further research process.

Figure 3 below provides an estimated time schedule for the App development and data collection. In summary:

- Phase 1: First App Prototype registration / piloting, R-YCSS (March 2022)
- Phase 2: First intensive data collection, final App-version, YCSS (June 2022)
- Phase 3: Second intensive data collection, YCSS (Oct – Nov 2022)
- Phase 4: Third intensive data collection, YCSS (Jan – Feb 2023)

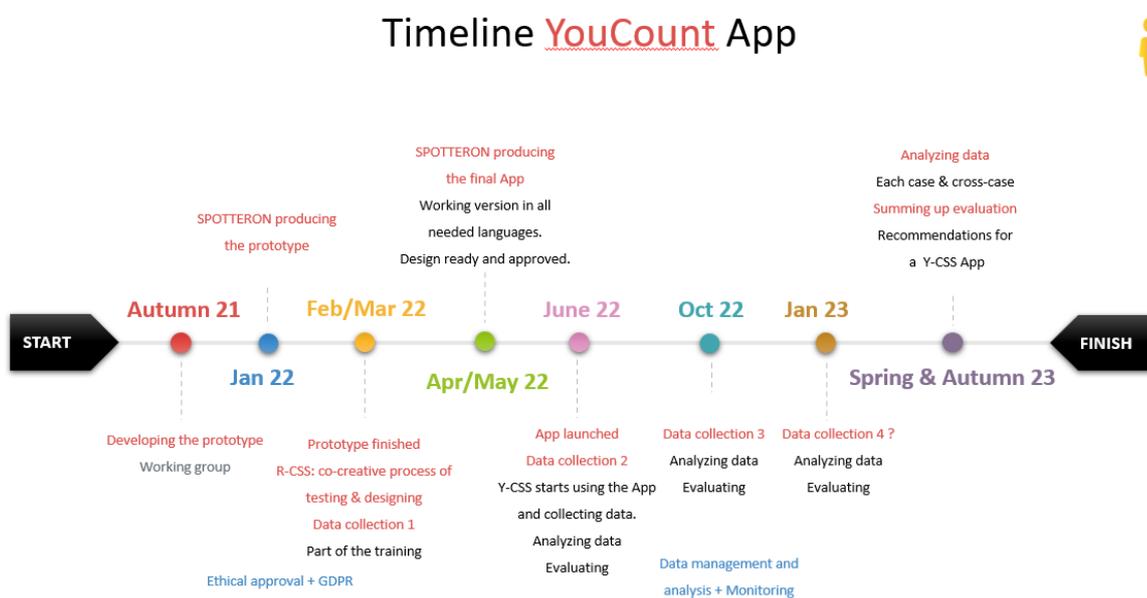


Figure 4: Timeline YouCount App

3.5 Additional methods

As explained above, the choice of a multiple case study design was to allow for in-depth data collection involving multiple sources of information providing detailed and dynamic information about the multifactorial and interactive drivers of social inclusion. Analysis of the data generated from the dialogue forums with R-YCS and C-YCS, as well as from discussions in the research teams and LLs will shape subsequent stages of data collection. It is, therefore, not possible at the time of writing this Report to provide a definitive list of additional data collection methods suffice it to say that each case has preliminary plans for additional data collection but will refine their topic with young people and consequently decide on which methods are appropriate to answering their

research questions. Further, the need for additional large-scale data about specific social inclusion indicators (e.g. civic engagement, sense of community, social capital, sense of responsible togetherness) may arise to be able to compare YCS's views and experiences in a European setting, that is, to conduct cross-case comparisons and to have more data enriching the model on the positive drivers of social inclusion.

Additional methods may include small scale surveys exploring social networks, creative methods including photovoice or 'Spotting' developed by the OsloMet team. Spot method is a simple drawing tool for creating dialogue and building relationships between participants and also contributes to an 'equalizer effect' between adults and youth researchers and other participants (Tolstad et al, 2017). This method can also be adapted for other functions, such as mapping places in the specific neighbourhood that young people see as 'good' and 'bad', tracking and evaluating where and when people feel good in the project. Photovoice and other visual methods may be used especially as these may be more effective in engaging young people from the target groups. The UCLan team for example, plan to combine Photovoice to explore community belonging with 'Social Dreaming' or 'Visual Matrix' techniques, which use visual and word prompts and associations to uncover deeper ideas about phenomena (Karolia & Manley, 2020). Further, processes of engagement and co-creation with R-YCS in the local case teams will present ongoing opportunities to collect data on social inclusion. Others will use more ethnographic approaches such as participant observation, discussion circles (including focus groups), photo collection (through SPOTTERON) and elicitation, participatory video. The UNINA team plan to organise several World Cafè events (Brown, 2002; Brown & Isaacs, 2005; Schieffer et al., 2005) in meaningful places of the city to produce 'authentic and collaborative conversations about real-life topics that matter to all participants' (Gatti & Procentese, 2021, p. 3).

3.6 Gender data

Data on gender specifically will be collected across the project in the dialogue forums, the YouCount App, and will be part of participant observations in the case implementation. Gender data will also be collected within the evaluation sub study (interviews, focus groups and pre-post survey) (Juricek et al., 2021). While not being proscriptive about the questions that will be asked, all local cases are being asked to consider the following gender dimensions:

- **How gender influences youths' views and experiences with social inclusion, and with exclusion/inclusion challenges;**
- **How gender influences the opportunities and roles for social participation and social belonging open to young people;**

- **The extent to which there is a need for gender related solutions/innovations and what these might be.**

Table 5 summarises our developing approach to the what, how and when we will collect gender-related data. At the time of writing, this aspect of the data collection design was ongoing and is subject to further development across the multiple case study.

Table 5: What, how and when gender-related data collection in YouCount

What to collect?	How to collect?	When to collect?
Gender-related experiences about Citizen Science processes (in the groups of R-YCSs)	Questions in the focus group grids and self-reports (from the evaluation study) and stimulus questions for R-YCSs' fieldnotes	<ul style="list-style-type: none"> • First evaluation focus group: March 2022 • Second evaluation focus group: September 2022 • Third evaluation focus group: February 2023 • R-YCSs' fieldnotes during the whole implementation of the local case
Gender-related experiences about social inclusion processes during the implementation of local cases	Questions in the focus group grids and self-reports (from the evaluation study) and stimulus questions for R-YCSs' fieldnotes	<ul style="list-style-type: none"> • First evaluation focus group: March 2022 • Second evaluation focus group: September 2022 • Third evaluation focus group: February 2023 • R-YCSs' fieldnotes during the whole implementation of the local case
Gender differences in social inclusion experiences	The gender of the users of YouCount App may be detected when they create their profile and used to explore gender-based differences	<ul style="list-style-type: none"> • During the App study (from April 2022)

Each case team will be asked to provide a summary (in English) of gender-related issues that have emerged from the case research from their fieldnotes and other records such as notes of meetings. Second, more gender-related issues will be gathered by including specific questions about gender in the focus groups conducted as part of the evaluation sub study. All sources of data will be collated for the cross-case gender analyses. Further, gender comparisons will be possible by relying on the data about social inclusion gathered through YouCount App and any social inclusion related surveys.

3.7 Social innovation process data

An approach to data collection and analysis common across the cases will be introduced to address the needs of WP 3 and specifically Task 3.3 on cross-case analysis on local innovations and social change and on the innovative potential of citizen social science (CSS). While the details of this remain to be agreed with the consortium, a qualitative ethnographic approach is proposed. At this stage, a brief sketch of the proposed ethnographic approach is given, bearing in mind that this will subsequently be developed in collaboration with all partners. Templates for data collection with guidance will be produced to ensure the necessary data is collected for later cross-case analyses.

Adopting an ethnographic or emic approach, in other words, ‘collecting whatever data are available to throw light on the issues’ (Hammersely & Atkinson, 1983: 2) will facilitate the collection of rich, detailed data on the social innovation processes, including the experience with the LLs. Understanding from the inside what is happening in a specific cultural context builds upon observing how people interact with each other and with their environment so naturally occurring human action is captured through reflexive processes. Involving the R-YCS in this process brings a further interpretative perspective, offering valuable insights about innovation processes from youth. Participant observation, field notes, and naturalistic (informal) interviews (individual and group) will be the primary means of data collection about social innovation processes. In addition, case team researchers will be invited to record (online and offline) their analytical reflections (based on their theoretical sensitivity) and self-reflective insights in research diaries. In this way, case researchers will capture their reflections and interpretations of the observed data, noting any thoughts, ideas, concepts, theories, questions, and concerns.

4 Data Analysis Strategy

4.1 General outline

This deliverable comes at an early stage of the empirical project and our plans for data analysis, particularly for the cross-case analyses, need further development and refinement. Consequently, this Report offers a general outline of our analytic strategy and intentions to conduct cross case analyses. Given the high degree of flexibility within YouCount regarding data collection methods, different forms of both qualitative (e.g. photographs, drawings, transcripts, fieldnotes), and quantitative (e.g. surveys, questionnaires, standard measures) data will be generated that will be analysed by the case teams. As a general approach, we will conduct thematic content analysis to identify emergent themes in relation to the aims and research questions for the empirical study (see introductory chapter). This will be achieved through:

1. Immersion in all types of data to get an overview, and identifying early emergent themes;
2. Systematic in-depth analysis using qualitative data analysis software (e.g. NVivo, or Atlas.ti) to achieve a more systematic and robust coding and categorisation of the data.

(Silverman, 2020)

Other kinds of empirical analytic approaches (e.g. statistical analysis, social network analysis) will be considered by case partners as appropriate where these methods have particular relevance to the type of data collected. The YouCount App toolkit can be used as a tool for generating both qualitative and quantitative data collection in terms of statistics or qualitative ('thicker descriptions') analysis of posts/textual comments or illustrations, or by being combined with dialogue forums, workshops or providing data for LL innovation work. These data may be used in further dialogues about social inclusion. The interactive aspects of the YouCount App might also allow for research on interactional or network analysis between the young citizen scientists in and across countries or between youths and other stakeholders. R-YCS will provide first level interpretations through commenting and reflecting on their own and their peers' experiences on the interactive YouCount App.

The data analysis process will include at least the following steps:

- 1) Research teams including the R-YCS will analyse the qualitative and quantitative data that has been collected in their case, including data from the YouCount App.
- 2) Local case teams produce data summaries that are de-identified/anonymised, identifying key findings or insights from their case.
- 3) Written case reports in English will be compiled using a report template that will be designed to link the findings from each case to the study's overall aims and research questions as well as case specific focus.

The ambition of YouCount is to involve YCSs in the data analysis processes as much as possible, contributing their perspectives and interpretations as ‘experts by experience’ and, increasing their knowledge and experience of the scientific research process. In the local teams, R-YCS may, for example, work in separate groups with peers or together with academic researchers to conduct analysis. The exact process will be determined by the local case teams. External validation of findings will be secured through presentations to other young people and stakeholders in the LL and national forums.

4.2 *Cross case analyses*

The intention of the YouCount project is to undertake cross-case analyses of the opportunities for social inclusion, theoretical analyses of social inclusion drivers and barriers, of social innovation and gender to translate findings into and innovation/policies recommendations, and for dissemination. The empirical findings will be used to develop new theories of social inclusion drivers and innovations/policies through theoretical analysis based on reviews of the scientific literature. The single-case and cross-case analysis conducted in WP 3 will make use of several theoretical perspectives on social inclusion, depending on the specific focus on, for example, individual, reciprocal, sociocultural, and structural drivers to social inclusion, type of innovation (social innovation or policymaking), or youth group under scrutiny. The R-YCSs will be included in the writing-up process and dissemination from local to European settings. Options for presenting the data in imaginative ways, for example, using drama or visual methods in addition to written reports will be explored with YCSs (WP 5).

4.2.1 Social inclusion opportunities including positive drivers

A cross-case analysis of social inclusion opportunities will be undertaken and will include identifying what are the factors that support or are positive drivers for social inclusion in terms of participation, community belonging and citizenship. This requires further specification and discussion with the YouCount partners in WP 2 and WP3 during 2022. Analytical methods such as Framework Analysis (Ritchie & Spencer 1994) will be considered. Framework Analysis is used widely across different disciplines and proponents of the approach highlight its ability to offer systematic structure to manage, analyse, and identify common themes within large volumes of data, whilst also being sufficiently flexible to move in multiple directions between and across cases and codes to identify emerging themes as part of an iterative process (Hackett & Strickland 2018). A data analysis template will be developed to guide how the case teams record and report upon their data to ensure consistency and a common approach across the multiple case study.

Case study teams will conduct appropriate analyses of social inclusion data to identify social inclusion opportunities and the drivers of social inclusion found by their case dependent upon the kind of data they have collected and the topic focus of the case and will provide a written report for WP2 and WP3 leads to use for the cross-case analyses. Findings will be explored under the three domains of social inclusion and holistically, and a typology of positive drivers for the social inclusion of youth will be developed under WP 3. A theoretical model for social inclusion including gender will be created and disseminated to create a social and scientific impact (e.g. inputs to policy briefs, scientific publications).

4.2.2 Gender

To identify possible (gender-related) biases and discrimination, a gender analysis will be conducted on various levels of the project, aligning with the RRI guidelines. In this way, gender-specific and gender-related challenges can be counteracted and measures for ensuring equality can be adapted according to the findings of the gender analysis. Ultimately, it seeks to empower participants and create a discrimination-free, inclusive environment for all stakeholders. It is important to also mention that every discussion of gender contains a value judgement about what gender means and in which ways people's gender identity and expression are validated. When we speak about gender, we refer to the social identity a person learns or chooses to embody.

Until now, only a small number of citizen science papers have discussed gender equality. Those that have performed gender analyses have mostly focused on the motivation of citizen scientists to work according to gender. In the following, a framework for the gender analysis in YouCount is proposed. This framework is based on findings from previous gender analyses which will be summarized and discussed. In creating the framework, some categories have been generalized, adapted and expanded.

Data from R-YCS's fieldnotes and evaluation focus group will be analyzed using thematic analysis including 1) immersion in the data, reading data transcripts, summaries, or notes to get an overview and identify emergent themes and findings; 2) systematic in-depth analysis using qualitative data analysis software such as Atlas.ti. Moreover, since gender represents a factor influencing individuals' motivations as to the involvement and participation in their community of belonging yet results about this are still inconsistent (Asingizwe et al., 2020; Lakomý et al., 2020; Tiago et al., 2017; Tinati et al., 2016), multivariate analyses will be run using the data gathered through the YouCount app and other social inclusion related surveys.

4.2.3 Innovation, social change and CSS

Based on the literature review presented in the conceptual framework of D1.2 a template for analysis of social innovation was developed. Three main perspectives on social innovation were distinguished: process, impact, and technology. The analysis will, therefore, consider how social and power relations are reconfigured in the social innovation processes, identify the social changes created and social outcomes measured, and seek to understand how social-material relations are mediated through technology. These three analytical perspectives will guide our theoretical sensitivity in observing, recording, and analysing innovations processes unfolding in the YouCount cases. Below, a detailed template is presented (in the form of a table) that intends to operationalise the analytical perspectives to give guidance to YouCount case researchers on constructing their case-based narratives of social innovation.

Table 6: Operationalising the analytical perspectives for the cross-case analysis of social innovation

	Process	Impact	Technology
Activities	<p><i>AP: Doings – timeline</i></p> <p>Describe through which activities and events the process unfolded</p>	<p><i>AI: Practice</i></p> <p>Describe what has been changed</p>	<p><i>AT: Engagements</i></p> <p>Describe what technologies were used and how</p>
Knowledge	<p><i>KP: Learning interactions</i></p> <p>Describe what events and encounters served participants’ learning</p>	<p><i>KI: Capabilities</i></p> <p>Describe what kind of new capabilities, knowledge, skills, etc. were developed or emerged</p>	<p><i>KT: Interactions and Skills</i></p> <p>Describe what knowledge, skills, etc. were developed or emerged related to technologies applied</p>
Organising and Governance	<p><i>OP: Decision-making</i></p> <p>Describe the organisational processes relevant, incl. power dynamics</p>	<p><i>OI: Dis/empowerment</i></p> <p>Describe what has been changed regarding the empowerment and disempowerment of Y-CS (individual and group level)</p>	<p><i>OT: Influence</i></p> <p>Describe what influence technologies have exerted</p>

Framing	<i>FP: Sensemaking</i> Describe the dynamics of meaning-making	<i>FI: Story</i> Describe an impact narrative	<i>FT: Interpretation</i> Describe how technologies were framed and how technologies changed meanings
Policy	<i>PP: Policy actors</i> If relevant, describe the role and activities policy actors have played	<i>PI: Policymaking</i> If relevant, describe the policy change or influence on policy that happened	<i>PT: Policy-tech. nexus</i> If relevant, describe the role, influence, etc. of technologies applied to policies
Gender	<i>GP: Gender dynamics</i> Describe the unfolding gender relations (im/balance across actions)	<i>GI: Gender mainstreaming</i> Describe what has changed regarding gender relations and dynamics	<i>GT: Gendered application</i> Describe how the usage of technology is gendered
Other *			

* Other relevant categories of analysis that emerge and crystallise in a specific local case research process.

Finally, all local case research teams will deliver a narrative on their experience related to social innovation and the experience of the LL based on the template/guide. These narratives will be subjected to comparison and summary for the overall report on ‘CSS as social innovation’ as enacted and interpreted by the YouCount case studies.

Summary

This D1.3 Framework for data collection and analysis is rooted in Work Package (WP) 1 and is an integrated framework for data collection and analysis in WP 2 (social inclusion study) and WP 3 (social innovation and gender studies). It addresses several tasks in WP 2 and WP 3 including plans for cross-case analyses of social inclusion opportunities, drivers of social inclusion, gender and social innovation for change. The primary focus of this framework is the social inclusion sub study, touching briefly upon the social innovation and gender sub-studies.

YouCount is a complex, inter-country project that requires coordination of research tasks in and across many local cases (10) in nine countries across Europe and the UK, throughout the project to secure scientific quality. There is a constant balancing of the need for structured and consistent data collection and analysis to support cross-case analyses, with the project's ambition to work co-creatively with youth who have experienced various disadvantages and to be innovative and learn from conducting youth citizen social science. To develop new knowledge of youth's views and experiences of social inclusion across multiple countries, and to identify the positive 'drivers' of social inclusion we have adopted a convergent parallel design, combining qualitative and quantitative approaches. The YouCount methodological design for the social inclusion sub study incorporates a co-creative and participatory approach, a multiple case study involving 10 different cases of youth citizen social science and aims to develop ICT tools for inclusive science practices.

Given the multifactorial understanding of 'social inclusion' and inspired by previous successful designs of co-creative CSS, data collection will be a continuous process consisting of several interrelated and partly overlapping elements to build a richer understanding of social inclusion dimensions from young people's perspectives, and how new means and policymaking can increase the social inclusion of youth. We began in 2021 with a state-of-the art literature review for each case to establish what is currently known about social inclusion particularly from youth perspectives. Four main steps define our data collection process: 1) exploration of young researchers' views and experiences of social inclusion; 2) exploration of the views of wider groups of youth; 3) collecting quantitative and qualitative data on social inclusion experiences of a large sample of youth using the YouCount App; 4) developing ideas about social innovation and co-dissemination with youth and other stakeholders, culminating in a national multi-stakeholder workshop in each country.

This deliverable comes at an early stage of the empirical project and our plans for data analysis, particularly for the cross-case analyses, need further development and refinement. Consequently, this Report offers a general outline of our analytic strategy and intentions to conduct cross case analyses. Our intention is to undertake various cross-case analyses of the opportunities for social inclusion, theoretical analyses of social inclusion drivers and barriers, of social innovation and gender to translate findings into innovation/policies recommendations, and for dissemination.

The main target group for this deliverable is the YouCount consortium partners themselves as this document collates the plans and descriptions of the common methodological approach in the local cases as well as highlighting variations across the cases. It serves as a reference document for all YouCount team members including individuals joining the project at a later stage. As flexibility is at the heart of the YouCount approach, this is a 'living' document, offering an initial starting point that will be further amended to reflect empirical findings and practical experience at the end of the study.

References

- Abebe, D.S. & Hyggen, C. (2019). Moderators of unemployment and wage scarring during the transition to young adulthood: evidence from Norway. Hvinden, B., O'Reilly, J., Schoyen, M.A., & Hyggen, C. (Eds.). *Negotiating Early Job Insecurity Well-being, Scarring and Resilience of European Youth*. 6. s. 115-137. Edward Elgar Publishing. DOI:<https://doi.org/10.4337/9781788118798.00013>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press
- Brown, J. (2002). *A Resource Guide for Hosting Conversations that Matter at the World Café*. Burnsville: Whole Systems Associates.
- Brown, J., & Isaacs, D. (2005). *The World Café: Shaping our Futures through Conversations That Matter*. San Francisco, CA: Berrett-Koehler Publishers
- Butkevičienė, E., Pučėtaitė, R. Budrytė, P., Vaičiūnienė, J., Norvoll, R., Canto, P., Lorenz U., Juricek, S., Freiling, I., Matthes, J., Jørgensen, M. S., Pataki, G., Czeglédi, A., Gatti, F., Procentese, F. (2021). D1.2. *Report on the conceptual, innovative, evaluation and ethical framework for youth citizen social science*. DOI:10.5281/zenodo.5810259
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-556.
- Cooper, S., Treuille, A., Barbero, J., Leaver-Fay, A., Tuite, K., Khatib, F. & Popović, Z. (2010). The challenge of designing scientific discovery games. In *Proceedings of the Fifth international Conference on the Foundations of Digital Games*, 40-47.
- Corti, L., & Fielding, N. (2016). Opportunities from the digital revolution. *SAGE Open*, 6(4). DOI:10.1177/2158244016678912
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Eisenhardt, K. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532-550.
- Frøyland, Kjetil (2020). Arbeidsinkludering av utsett ungdom - kva slags utfordring er det? (Job inclusion of vulnerable youth - what kind of Challenge is it?). *Tidsskrift for velferdsforskning*, 23(3), 187-200. <https://doi.org/10.18261/issn.0809-2052-2020-03-03>

Gatti, F., & Procentese, F. (2021). Local Community Experience as an Anchor Sustaining Reorientation Processes during COVID-19 Pandemic. *Sustainability*, 13(8), 4385.
<https://doi.org/10.3390/su13084385>

Giarè, F., Ricciardi, G., & Borsotto, P. (2020). Migrants workers and processes of social inclusion in Italy: The possibilities offered by social farming. *Sustainability*, 12(10), 3991.
<https://doi.org/10.3390/su12103991>

Hackett, A. Strickland, K. (2018) Using the framework approach to analyse qualitative data: a worked example. *Nurse Researcher*. Accessed: 24/02/22.
https://www.researchgate.net/publication/327648334_Using_the_framework_approach_to_analyse_qualitative_data_a_worked_example

Hammersley, M., & Atkinson, P. (1983). *Ethnography: Principles in practice*. London: Tavistock

Heiss, R., & Matthes J. (2016). Mobilizing for some. The effects of politicians' participatory Facebook posts on young people's political efficacy. *Journal of Media Psychology*, 28(3), 123-135.

Hyggen, C., Kolouh-Söderlund, L., Olsen, T., Tägtström, J. (2018). Young People at Risk. School Dropout and Labour Market Exclusion in the Nordic Countries. Halvorsen, Rune; Hvinden, Bjørn (Eds.). *Youth, Diversity and employment: Comparative perspectives on Labour Market Policies*. Chapter 2. s. 32-56. Edward Elgar Publishing.

Juricek, S., Freiling, I., Matthes, J., & Lorenz, U (2021) *Co-Evaluation of Citizen Science: A Framework Proposed by YouCount*.

Karlsen, J., & Miren, L. (2014). *Territorial Development and Action Research: Innovation through Dialogue*. Farnham: Gower

Karolia, I., & Manley, J. (2020) British Muslim women – dreaming identities – insights from social dreaming. *Critical and Radical Social Work*. Vol xx, No xx, 1-17.

Kullenberg C, Rohden F, Björkvall A, Brounéus F, Avellan-Hultman A, Järlehed J, et al. (2018). What are analog bulletin boards used for today? Analysing media uses, intermediality and technology affordances in Swedish bulletin board messages using a citizen science approach. *PLoS ONE* 13(8): e0202077.

Liebenberg, L., Stevenson, J., Brahman, N., Benadie, K., Minye, J., & Langwane, H. K. (2017). Smartphone Icon User Interface design for non-literate trackers and its implications for an inclusive citizen science. *Biological Conservation*, 208, 155-162.

Moyano, M., Lobato, R. M., Ventsislavova, P., & Trujillo, H. M. (2020). Social inclusion level of Spanish and foreign adolescents: Proposal for an evaluation instrument. *Current Psychology*, 1-14. <https://doi.org/10.1007/s12144-020-01201-5>

Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). London: SAGE.

Pirani, E. (2013). Evaluating contemporary social exclusion in European hierarchical latent class approach. *Quality & Quantity*, 47, 923–941. <https://doi.org/10.1007/s11135-011-9574-2>.

Prosser, S. (2022). *Youth Social Entrepreneurship in Norway. A review.*

Rich, K. A., Misener, L., & Dubeau, D. (2015). “Community cup, we are a big family”: Examining social inclusion and acculturation of newcomers to Canada through a participatory sport event. *Social inclusion*, 3(3), 129-141. <https://doi.org/10.17645/si.v3i3.141>

Richardson, L. (2017). *Citizen social science and policymaking. Methods that matter: Social science and evidence-based policymaking.* Bristol, UK: The Policy Press.

Ridley, J., Norvoll, R. (2022). *D2.1: Establish collaboration with ethical board and secure formal approvals on local levels.*

Ritchie, J. Spencer, L. (1994) Qualitative data analysis for applied policy research. In: Bryman A, Burgess RG, eds. *Analyzing qualitative data.* Routledge, London. pp. 173–94

Schieffer, A., Isaacs, D., & Gyllenpalm, B. (2004). The world café: Part 1. *World Bus. Acad.* 2004, 18, 1–9.

Silverman, D. (2020) *Interpreting Qualitative Data. 6th Edition.* Sage Publishing.

Strähle, M., Urban, C., Anastasakis, M., Kikis-Papadakis, K., Calvera Isabal, M., Santos, P., Fabra, P., Lampi, E., Lämsä, J., Hämäläinen, R., Lorke, J., De-Groot, R., Golumbic, Y., Drachman, R., Hoppe, U., Malzahn, N., Manske, S. (2020) *Framework Conceptual Model D1.1: Expanding our knowledge on Citizen Science through analytics and analysis.*

Tolstad, I., Hagen, A. L., & Andersen, B. (2017). The amplifier effect: Youth co-creating urban spaces of belonging through art, architecture and anthropology. In S. Bastien, & H. Holmarsdottir (Eds.). *Youth as architects of change: Global efforts to advance youth-driven innovation for social change.* (pp. 215-242). London: Palgrave Macmillan.

Vestby, G. M., Norvoll, R., Brattbakk, I., & Breistrand, H. (2020). *Walking with seniors and other kinds of participatory methods to create age-friendly communities. Experiences, advices and recommendations.* NIBR –report 2020:4. Oslo: OsloMet

Yang, Z., Wang, Y., & Liu, Z. (2019). Improving socially inclusive development in fast urbanized area: Investigate livelihoods of immigrants and non-immigrants in Nansha Special Economic Zone in China. *Habitat international*, 86, 10-18. <https://doi.org/10.1016/j.habitatint.2019.02.005>

Yin, R. K. (2013). *Case study research: Design and methods (5th ed.)*. Thousand Oaks, CA: Sage.

Appendices

Table 7: Appendixes

APPENDIX	SUBJECT	PAGE
Appendix A	Local Case Abstracts	46

Appendix A: Local Case Abstracts

Case 1: Norway, Oslo Met - Empowering local youth in their quest for social inclusion through employment and social entrepreneurship in Oslo: social participation in Norway

The project will gather and analyse data about existing (or lacking) job opportunities for youth in the urban setting of Gamle Oslo District, initiatives to increase these opportunities, and the extent to which these local initiatives are succeeding. In the Norwegian context, there are many peer-reviewed studies on risk factors for unemployment and social exclusion among young people as well as on work inclusion initiatives for vulnerable youths (Frøyland 2020, Abebe & Hyggen, 2019, Hyggen et al, 2018), but rather few which involve the voices and experiences of the youths themselves. Furthermore, very little peer-reviewed research has been done on social entrepreneurship among youths within the Norwegian context and the small body of existing academic literature on the topic is mostly connected to school and education (Prosser, 2022). Key researchers and practitioners in the field of social entrepreneurship in Norway respond with tips to international literature, grey literature, or names of additional practitioners. Key Research Questions:

- How is the experience of social inclusion among young people in Gamle Oslo District connected to employability and social entrepreneurship?
- How are opportunities for work and social enterprise located within the community of Gamle Oslo District?
- What are the challenges when it comes to social inclusion for youth and young adults in the larger society of Norway?

These research questions are connected to social participation through the dimensions of competencies, access to social and professional networks, mentorship, feeling of empowerment, social belonging, experience of support and multiple/compound identities.

We will organize dialogue forums and living lab sessions, facilitated by the young co-researchers, as well as a national workshop. The data gathering will consist of participant observation, fieldnotes describing informal conversations, debriefs and logging with the young co-researchers. They will be involved in the development and testing of the YouCount app as part of their training. They will also co-create surveys if necessary and collect data through walkalongs with other youths. The research team will document the training and data collection process using participant observation, photo/video elicitation and debriefs/fieldnotes, as well as analyzing the material collected through the YouCount app.

The young researchers will engage local stakeholders from both the private and public sector in creative idea development to further develop local job opportunities for youth. The local

Intercultural Museum (IKM) will serve as a living lab, making it a hub for all the project activities. The project aims to understand, provide, and disseminate knowledge and data on the drivers of social inclusion for youth through job opportunities and local social entrepreneurial initiatives in Gamle Oslo District. The innovations will be developed in collaboration with the young researchers and the local stakeholders. The case study will contribute to an identified knowledge gap and might inspire policymakers in the future.

Case 2: Spain – Orkestra - Inclusion factors for young unaccompanied migrants in the Basque Country: Spain, Social participation (and beyond)

The presence of young unaccompanied migrants has greatly increased in the Basque Country in recent years. Their situation makes them particularly vulnerable and in need of specific policies to facilitate social inclusión.

Young migrants that reach the Basque Country as minors are catered for through the child protection system but are left out in a situation of helplessness when they reach adulthood (DeSol, 2017), becoming migrants in an illegal administrative situation, with the State and the Administrations demanding an infinity of requirements in order to be full-fledged citizens that are often incompatible and inconsistent with their situation (Martín, 2019). This situation causes negative consequences on several aspects of their lives (Epelde, 2017; Lopez et al., 2013), such as: living with the concern of receiving attacks due to the racist and xenophobic drift that society has taken, promoted by certain sectors of the right and extreme right wings; having poor social relationships; experiencing high levels of stress caused by their coming of age; living the beginning of “adult life” as a traumatic situation due to their irregular administrative situation and encounters with the police.

Key Research Question - What are the inclusion factors for young unaccompanied migrants in the Basque Country? The question has not been further refined because it serves as the overarching question that is being explored with the group.

The target group are young unaccompanied migrants. The stakeholders involved in the living lab are non-for-profit organisations that work with the youngsters (Loiola Etxea, Zabalduz) and policymakers (Provincial Council, Delegate from the national government). The main research method will be the qualitative analysis of the materials collected in the minutes of the focus group sessions with RYCS, that will combine training and discussions, as well as data collected through the app. It is also envisaged that the RYCS will collect further data through a survey and/or interviews that will be developed by the research team and RYCS during the sessions.

YCS are contacted and recruited through gatekeepers (Loiola Etxea, Zabalduz) and through a process of engagement by members of the research team (bilateral encounters with them,

participation in activities the youngsters undertake with the organisations, visits). Some kind of change in the policies of the provincial government with respect to this group that takes into account their views and that also helps to change the way the society sees them.

Case3: Hungary (Case A), SSRG - Hard of hearing youth, Szeged: Social participation

Hard of hearing and deaf young people is a marginalized social group facing many challenges in terms of inequality in education and employment opportunities among others. Emancipatory and participatory approaches and a more detailed picture on hard of hearing youth well-being is needed to increase social inclusion.

We aim to investigate and articulate how these youths evaluate their own subjective well-being, what challenges they perceive (e.g. employment, housing) and what resources are available for them when leaving the school (as a protected environment) behind. The research process can help to connect urban social actors (companies, social services, schools, civil society organizations) and the youth in fostering collaborations and increasing social participation in the city.

We will work in a collaborative research setting with hard of hearing young people (15-23 yrs) in Szeged, Hungary. Social participation is also targeted by connecting main employers and decision makers of Szeged with the target group in the living lab. Qualitative, quantitative and participatory methods will be used based on the co-created research design.

YSCs are being involved through university centres, hard of hearing school teachers, NGOs via direct contact (snow ball). Research outcomes provide new insights on how HH youths perceive their social environments designed for the hearing majority and what are the intervention points to increase social inclusion in the city.

Case 4: Hungary (Case B), Parforum/ Association for Siklósbodony -Reappropriating social innovation with rural young people: Social participation/ sense of belonging

During the last three decades Siklósbodony, a small village of 120 inhabitants in Southern Hungary, has lost almost all its public institutions (the kindergarten, the local store, post office). Job opportunities are scarce, access to quality education is very limited. The case study seeks to develop methodological tools for a participatory understanding of how the transfer of innovative knowledge about (1) sustainable agriculture and (2) inclusion drivers in education is possible from one community to another with special respect to the local appropriation process.

Local literature on social exclusion of and within rural spaces also covers issues of ethnicity and discrimination, but the literature on the exclusion of rural youth is more limited. Drivers for social

inclusion of rural Roma (and non-Roma) youth in small scale settlements is missing in scholarly discourse, and policy discourse tend to adopt an individualizing focus about the drivers for inclusion. The research questions of this case study is twofold:

1. It intends to identify collective learning opportunities in isolated rural localities
2. We will also try to develop a participatory understanding of how networks of social innovations can be more inclusive (regarding the needs of rural/Roma youth).

The core research team will consist of local young people committed to collect and generate new knowledge about (1) sustainable agriculture and (2) the inclusion-exclusion dynamics in K12 education. A network of experts and innovators around the Hungarian Permaculture Association (for topic No.1) and ELTE Media Studies Department (for topic No.2) will contribute to this process by providing learning opportunities, weak social ties to further expertise, and new techniques for reflecting and communicating experiences in the local public sphere. Research methods will be mostly qualitative: discussion circles (including focus groups), photo collection (through SPOTTERON) and elicitation, participatory video (including interview exercises).

Building on the previous experiences with a series of local community art activities young people will be invited to take part in study trips and a new series of participatory video workshops. Findings about the methodology of collective learning that generates social impact in and around marginal rural spaces may have an additional impact on national level networks of social innovation about how to become more inclusive regarding rural Roma youngsters.

Case 5: Italy – UNINA - Making cultures meet and match to build community: Valuing social places and gatherings to foster social exchanges and relationships

The aim of the present case study is to foster the social cohesion in Neapolitan urban community by providing local and immigrant citizens with further opportunities for socialization, discussion, and exchanges of beliefs and viewpoints – indeed, in Naples, foreign residents are mainly located in certain areas of the city, with processes of ghettoization and self-ghettoization.

In recent literature, social inclusion is described as a two-way process where migrants and the established community actively communicate with and adapt to each other (Phillips, 2010; Pienimäki, 2020; Sampedro & Camarero, 2018). In light of this, intentional interactions and positive relationships among peers may represent critical elements, as they may offer opportunities to meet and match, exchange viewpoints and beliefs, support reciprocal acknowledgment, and unhinge prejudices across social groups (Chen & Wang, 2015; Littman, 2021).

The aim of this research is to promote more aware styles of living together within urban communities, in order to foster local connectedness and social cohesion.

The target group is composed by local and migrant citizens aged between 16 and 30. The stakeholders to be involved in the LL are referents of local associations and Institutions, as well as other citizens actively involved in fostering social inclusion processes in Naples in several ways. A participatory research method will be adopted – e.g., by organizing several World Cafè (Brown, 2002; Brown & Isaacs, 2005; Schieffer et al., 2005) meetings in meaningful places of the city, in order to produce “authentic and collaborative conversations about real-life topics that matter to all participants” (Gatti & Procentese, 2021, p. 3).

YCS will be involved through local associations, educational services, and by relying on the local social network. We will endeavor to establish a mixed group of local and migrant citizens who may periodically meet to keep this process of reciprocal knowledge and acknowledgment alive even after the end of our project (hopefully).

Case 6: UK – University of Central Lancashire – Young people’s connectedness and sense of belonging in Preston

There is a dearth of research about young people’s own perspectives on connectedness and sense of belonging, or enablers and barriers to these; research tends to focus on individual characteristics and change, rather than community capabilities and potential for change. Furthermore, young people’s perspectives or ideas for solutions are not routinely considered in UK policy and practice involving matters that affect their lives. Thus, the case will explore young people’s view and ideas through the following key questions:

- What does it mean to belong?
- What are the enablers and barriers to a sense of belonging?
- How does living in Preston affect this sense of belonging?
- What innovative methods help researchers and communities to understand young people’s social inclusion and potentially bring about change?

A literature review considered the meaning, enablers, barriers and spatial influences on young people’s sense of community belonging; these emerging themes will prompt dialogue through the arts-based methods:

- Connections – what groups or communities do young people feel they belong within and why?
- Place – where do young people feel they belong and why?
- Relationships – what are these like when young people have a sense of belonging?

- Activities – what sorts of activities do people do together where they feel a sense of belonging, who and what is involved?

The target group is young people aged 14-19 (school year 10 upwards) in the disadvantaged and diverse communities of East Preston, in northern England. Eight young co-researchers will be supported by social work, film and youth work students, and the university researchers, to explore the research questions and express their own views and ideas. As they do this, they will also learn about participatory research methods, co-creating ways to include the wider cohort of up to 100 further participants from the local community, who will in turn work with them on arts-based activities or using YouCount app to share their perspectives. They will form a living lab that includes community groups, workers, and local decision-makers, who we hope will eventually join a young people led cooperative for action research for change, providing a legacy for the project. Research methods will be arts-based and participatory, for example, using collage, textiles, and photography to build safe spaces through which young people can express and share their views and ideas, through more than words. Each two hour session will include time to reflect and put forward ideas for the project and to suggest ways to connect with further participants and decision makers.

The project aims to develop knowledge about young people's perspectives on connectedness and social belonging and in doing so improve intergenerational understanding in order to promote a supportive climate for youth driven solutions in Preston. The innovative approach has potential for lasting impact through the creation of an intergenerational cooperative, where young people form the majority membership and local decision-makers agree to consider young people's research as expert opinion in matters affecting their lives.

Case 7: Lithuania, KTU - Co-creating a Sense of Belonging and Connectedness in a Rural Region: Sense of belonging and connectedness

As a post-soviet society Lithuania faces low participation in community activities, which accounts for low participation of youth in economic, political and social activities of the society. The particular region in focus is noted for low employment opportunities, which accounts for youth emigration (inside the country and abroad).

Very little peer-reviewed literature is available on the topic of social belonging and connectedness in Lithuania. The existing literature mostly focusses on students' sense of school belonging. There are more published articles on social inclusion in Lithuania. They focus on social inclusion and education, e-inclusion, etc. Key research question - How do citizen science activities contribute to constructing a sense of social belonging and connectedness?

Data collection methods: interviews with the youth, focus group discussions with the stakeholders in the living lab, images and comments with the YouCount app, surveys for evaluating the change

Data analysis methods: interviews and focus groups – content and thematic analysis; images and comments – narrative analysis, surveys – statistical data analysis (descriptive, correlations and regression; depending on the sample methods for comparing different social groups (parametric/non-parametric data analysis methods) will be decided

YCS will be involved via high schools and youth organizations residing in different places of Panevezys district municipality/ rural area.

Empowering youth through research activities and strengthening their self-confidence by engaging them into research and their own community activities, changing their attitudes (through change of aptitudes) to quality living in a rural area.

Case 8: Sweden - Social inclusion through civic engagement in a municipality youth council: citizenship and rights

Engagement in the Botkyrka Youth Council (BYC) is regarded by present and former delegates as an important factor for several dimensions of social inclusion; however, they also perceive obstacles and misconceptions in the community preventing young people from getting civically engaged.

There are few studies on the mechanisms and processes that bring young people into community involvement; most investigations are based on focus group interviews that are interpreted from an adult's perspective. Another gap is that the research does not show what young people's everyday life looks like – In order to comprehend an individual's social engagement, it is important to understand the social, economic and cultural context. Key research questions:

- In what ways does engagement in the BYC foster social inclusion?
- What are the main drivers for enabling more young people to engage in the youth council?

Co-creative workshops with the R-YCSS during spring and autumn of 2021 have led to another focal point being added to the investigations: Can the YouCount app be used as a novel way for BYC to engage local youth in policymaking?

The R-YCSS consist of eight current members of the BYC. C-YCSS will include youth living in Botkyrka; living lab stakeholders will include the Botkyrka municipality office, former members of the youth council, local business representatives. A mixed methods approach will be used, consisting of focus groups (and possibly individual interviews) and data collection via the YouCount app.

Focus groups and/or individual interviews with former BYC members, policy makers and local business representatives will be conducted by R-YCSS; the YouCount app will be used by C-YCSS to

collect data on general drivers for social inclusion (for cross-country analyses) – and on local issues defined by the BYC.

The nature of the social innovation will ultimately need to be determined by the results from above our investigations, and from the ongoing dialogue with living lab stakeholders. However, one social innovation could possibly be the YouCount app, as a new way for the Youth Council to interact directly with the youth community in Botkyrka. If we already knew what kind of social innovation we wanted to develop – without having consulted the young people in the community, or even having investigated our research questions – this would not imply much of a co-creative approach to the whole enterprise.

Case 9: Austria – University of Vienna: Fostering social inclusion: Existing and needed participation opportunities for young migrants and refugees in Austria: Citizenship and rights

Within the last years, a large number of young refugees and migrants came to Austria to build a safe and successful life—and to become part of the Austrian society. When young refugees and migrants arrive, however, they do not have the same rights as Austrian citizens. Without a legal basis like voting rights that can make young refugees' and migrants' voices heard, they need different opportunities for engaging in society. We therefore examine the following key research questions:

- Which civic engagement opportunities do young refugees and migrants have?
- Which opportunities are missing for young refugees and migrants to meaningfully participate?

We will work with newly arrived young refugees (age 18–29 years), specifically with the largest groups in Austria (from Syria, Afghanistan, and Nigeria), and in living labs also with local and national policy makers in Vienna, and non-governmental organizations (NGOs). Young citizen scientists in the research team will participate in workshops and discuss findings with the research team for identifying new and better policymaking. Young citizen scientists that are not in the research team will collect participation opportunities and obstacles using an app developed by SPOTTERON during a citizen science week.

The insights generated on participation opportunities and obstacles for young refugees and migrants ought to contribute to youth-focused policymaking that fosters social inclusion, specifically related to citizenship and rights of this group.

Case 10: Denmark – Aalborg University: Co-designing inclusive and youth friendly societies though civic engagement in local Circular economy activities: Citizenship & rights

The case study investigates if youths' challenges towards sustainability and climate change can be transformed towards action-oriented work, creating empowerment, citizenship, and positive drivers for social inclusion in their local community.

A design framework of Citizen Social Science, Co-design, and ANT (Actor-Network Theory) is applied, investigating the conditions for the youth in South Harbor and what is needed to empower them to act in their local community through Circular Economy activities. The overall research question is: How can youth in South Harbor experienced challenges within sustainability and climate change create empowerment and social inclusion?

We believe that engaging youth to co-develop activities around their problems and experiences with sustainability and climate crises will create empowerment, citizenship, and political self-esteem to impact society.

The case study's target group is young people living in South Harbor or connected to the area aged 14-25 years. The living lab approach will create an explorative design research process. The idea is that the YCS are trained and engaged in developing and facilitating living labs in different social local settings including Rubinen & SFC (youth clubs), Hafnir-Hallen (sports arena), Huset 2450 (youth culture house), Sydhavns theater (theatre/ organization), Sydhavns Kompaniet, Det Gamle Posthus (socio-economic organization), Sydhavns Repair café (voluntary organization).

The social settings are chosen as places where the youth stay in their free time. This decision will hopefully engage other young people to participate. We will work with the research methods; workshops, design games, social media, Walk and talks, semi-structured interviews, fieldwork, prototyping, collective experiments, etc.

We are involving the R-YCS' by collaborating with the local high school (Det Åbne Gymnasie) through Nature geography classes. The idea is to apply an action-oriented approach to teaching citizenship and community engagement. As a part of the classes, the students will investigate and develop innovations for other youth to test and reflect upon in various places in South Harbour concerning challenges youth experiences concerning sustainability or Climate change. As a part of the teaching, research training will be performed. The results will hopefully be showcased by the youth at different events during the next year: Sydhavns Festival (a youth event in June), Sydhavns Folkemøde (local democracy event in September).

The innovations are tested and further developed within different living labs by and with the youth, so it is difficult to say what the outcome will be. But hopefully, the case study will create a more substantial relationship/citizenship with one's local area and raise political self-esteem to take local action. Climate change, active participation, and inclusion will hopefully create a new form of citizenship, where the citizen role changes from the passive consumer to an active citizen.

Converting own and others' practices in a positive direction could create empowerment by taking control over one's resource consumption and helping oneself and others.



YouCount

Youth Citizen Science

PARTNERS:

