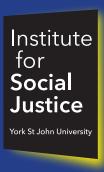


Changemakers

A Guide for Empowering Students as Researchers



Est. 1841 YORK ST JOHN UNIVERSITY



Contents

| Intro | oduction | 3 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Wł | ho are Changemakers? | 4 |
| Wł | hy Changemakers? | 5 |
| Us | sing this Guide | 6 |
| Na | avigating this Guide | 7 |
| Facil | itators' Notes | 8 |
| 1. | Identifying a Social Problem | 9 |
| 2. | Researching What is Already Known | 10 |
| 3. | Writing a Research Question | 11 |
| 4. | Generating Data | 12 |
| 5. | Ethics | 14 |
| 6. | Surveys | 15 |
| 7. | Interviews | 16 |
| 8. | Observations | 17 |
| 9. | Creative Methods | 18 |
| 10 | . Analysing Data | 20 |
| 11. | Key Findings and Key Actions | 21 |
| 12 | . Evaluating the Impact of Your Actions | 23 |
| 13. | . Sharing Your Project | 25 |
| 14. | . Reflecting Upon Your Changemaker Journey | 26 |
| Work | ksheets | 27 |
| Wo | orksheet 1: Identifying a Social Problem | 28 |
| Wo | orksheet 2: Searching For What Is Already Known | 29 |
| Wo | orksheet 3: Writing Good Research Questions | 30 |
| Wo | orksheet 4: Choosing Your Research Method | 31 |
| Wo | orksheet 5: Your Participants' Rights in Research | 34 |
| 14/2 | | |
| VVC | orksheet 6: Writing Surveys | |
| | orksheet 6: Writing Surveys orksheet 7: Writing an Interview Schedule | 36 |
| Wo | | 36 38 |
| Wo | orksheet 7: Writing an Interview Schedule | 36 38 40 |
| Wo Wo | orksheet 7: Writing an Interview Schedule orksheet 8: Writing an Observation Sheet | 36 38 40 42 |
| Wo Wo Wo | orksheet 7: Writing an Interview Schedule orksheet 8: Writing an Observation Sheet orksheet 9: Using a Creative Method | 36 40 42 |
| Wo Wo Wo Wo | orksheet 7: Writing an Interview Scheduleorksheet 8: Writing an Observation Sheetorksheet 9: Using a Creative Methodorksheet 10: Analysing Data | 36 40 42 44 |
| Wo Wo Wo Wo | orksheet 7: Writing an Interview Schedule | |
| Wo Wo Wo Wo Wo | orksheet 7: Writing an Interview Schedule | |
| Wo Wo Wo Wo Wo | orksheet 7: Writing an Interview Schedule | |
| Wa Wa Wa Wa Wa Wa | orksheet 7: Writing an Interview Schedule | |
| Wo Wo Wo Wo Wo Furth | orksheet 7: Writing an Interview Schedule | 36 38 40 42 47 49 51 53 53 |

Introduction



Who are Changemakers?

Changemakers are young people who undertake collaborative research that leads to positive change within their schools and local communities.

Changemakers' research projects are driven by what concerns them most - the problems that confront them in their everyday lives.

Changemakers are encouraged to link their projects to the United Nation's Sustainable Development Goals, giving them global relevance.

The research that Changemakers do has real **impact** on real people.

Changemakers help **transform** the lives of others and their communities.

This type of research, which is Changemaker-driven and community-facing, is more widely referred to as **Youth** Participatory Action Research: or YPAR for short.

Why Changemakers?

The Organisation for Economic Cooperation and Development (OECD) identify that education is too focussed on knowledge outcomes and does not provide young people with the skills they need for the workplace (OECD 2022, 2020, 2017, 2014).

By 2030, the OECD want schools across the world to provide young people with a Learning Compass to help them transform communities for the better.

The Learning Compass cycle aligns with the principles of YPAR as:

- Changemakers plan for research;
- Changemakers undertake projects;
- And Changemakers evaluate the impact of their projects to plan for further action.

A key outcome of YPAR underpinning the Learning Compass is agency.

Agency is defined as the ability to take action. Changemakers develop agency through the YPAR cycle. As they work with others, they develop co-agency too.

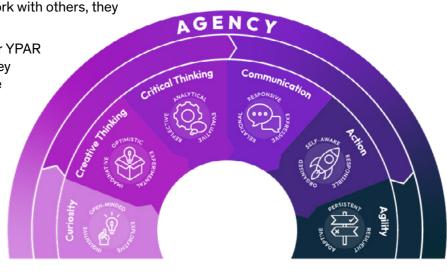
Future Anything support teachers to deliver YPAR in schools in Australia. They emphasise 6 key capabilities that young people demonstrate when they have agency: curiosity, creative thinking, critical thinking, communication, action, and agility.

As the OECD identify, agency is also central for promoting young people's positive mental health. Having agency means young people come to feel that their actions matter and that they belong in their school and communities. This is because student-led community projects like YPAR develop student voice (Dobson and Dobson 2021).

Changemakers also develop what the OECD refer to as 'transformational competencies'. The transformational competencies developed through YPAR include: independent learning; metacognition; collaborative learning; problemsolving; critical thinking; and the fostering of motivation and engagement (Dobson, 2023).

Significantly, YPAR can be used in schools in areas of disadvantage to close the gap between disadvantaged students and their peers (Dobson,

The development of transformational competencies means that Changemakers are democratic citizens. Changemakers embody the 20 Democratic Competences outlined in the Council of Europe's (2018) reference framework.



- Valuing human dignity and huma
- Valuing cultural diversity
- Valuing democracy, justice, fairness equality and the rule of law

Attitudes

- · Openness to cultural otherness and other beliefs, world views and practices
- · Respect
- · Responsibility Self-efficacy
- Tolerance of ambiguity

Competence

- Autonomous learning skills
 Analytical and critical thinking skills
- · Skills of listening and obser
- · Flexibility and adaptability . Linguistic, communicative and plurilingual skills
- Cooperation skills
- Skills

- of the self
- Knowledge and critical understanding of language and communication Knowledge and critical understanding of
- the world: politics, law, human rights, culture, cultures, religions, history, medi

Knowledge and critical understanding

Using this Guide

This guide draws upon our own research into how to build young people's capacity to undertake collaborative research (Green, Dobson and Haines Lyon, 2025; Clare, Haines Lyon, Holmes and Dobson, 2025; Haines Lyon *et al.*, 2024).

The Guide is designed for use with **young people aged 11-18.** In school contexts, it can be used by teachers with their Key Stage 3 or Key Stage 4 classes, typically over the course of **one school term**. Equally, it could be used independently by Key Stage 5 students as part of an **enrichment programme** offer. Finally, the Guide could be used with **Youth Groups** in Community Centre settings.

We recommend challenging young people by using this Guide from the **start of secondary school** as it is important to start developing students' transformational competencies from as early an age as possible. Being a Changemaker helps students in their future studies, especially when they undertake independent projects (e.g. the International Baccalaureate Middle Years Programme or the Extended Project Qualification).

Changemaker projects are always group projects. We advise that Changemakers work in **groups of 4-6** so that tasks can be delegated amongst Changemakers as their projects develop.

Because YPAR involves Changemakers taking action in their local communities, there is the opportunity for Changemakers to meet the **Gatsby Benchmarks**, especially Benchmarks 3, 4, 5 and 7.

Given the outcomes identified above, using this Guide is a perfect way of making a significant contribution to students' **Personal Development** and providing evidence to **Ofsted**. It could be used in **Tutor Time**, **Personal Development Time**, **PSHE**, **Citizenship**, or as part of an **enrichment** programme.

The Research Activities in the Guide are predominantly **oracy-based.** In each Research Phase, Changemakers develop their **speaking and listening skills** by discussing and debating their ideas, exploring the meaning of their data, and presenting to others.

The Guide, therefore, deliberately facilities and amplifies **student voice**. It could also be used effectively with the **School Council**.

Finally, the Guide can be used to support your school's **extra-curricular** offer. The skills and competencies developed by Changemakers, for example, fulfil the Skills requirement for the **Duke of Edinburgh's Award**. The Guide would also support extra-curricular clubs like an **Enterprise Club**.

Navigating this Guide

This guide has 14 Research Activities.

Each Research Activity has Facilitators' Notes and a photocopiable Worksheet.

We advise that Changemakers work in groups of 4-6.

The Research Activities are sequential and, in line with the principles of YPAR, are structured into 6 Research Phases:

- 1. Identifying a social problem
- 2. Collecting data about the problem
- 3. Analysing data
- 4. Taking action
- 5. Evaluating action
- 6. Sharing project

As YPAR promotes independent learning skills, each Worksheet includes a Reflection Question.

Research Phase 2 offers choice to Changemakers. This means that Changemakers are likely to engage in one or two of Research Activities 6, 7, 8 and 9, depending upon their group's project design.

In the Facilitators' Notes, Research Activities adopt the format outlined below:

Overview

This a short introduction to the Research Activity covered in this Research Phase. The Overview will help you understand the nature and purpose of the Research Activity, and how to approach the Research Activity with your Changemakers.

You will need

This section provides a checklist of physical resources you will need for this Research Activity.

The main resource you will need for each Research Activity is copies of the corresponding Worksheet.

Learning steps

This section provides you with a suggested sequence of activities to work through with your Changemakers.

The text in italics is scripted so that you can read this out to the Changemakers.

Case study

This section draws upon our own work with Changemakers to exemplify each Research Activity for you and your Changemakers.

The Facilitators' Notes are supported by photocopiable Worksheets for Changemakers.

Facilitators' Notes



1. Identifying a Social Problem

Overview

The first Research Activity is designed to help Changemakers identify a social problem for their group to investigate. It is vital that the problem is something the Changemakers feel passionate about and motivated to change. In this Research Activity, Changemakers will be encouraged to link their problem to the Sustainable Development Goals, developing a wider understanding of the problem and how the problem affects people across the globe.

You will need

1. 'Worksheet 1: Identifying a Social Problem.'

Learning steps

- 1. Ask Changemakers to work in groups no larger than 6.
- 2. Explain their roles as Changemakers. Be as motivational as possible!

As Changemakers you will spend the term planning, undertaking and sharing a group research project. Your research project will be based on an issue that affects you - a real problem that needs solving.

The problem you choose needs to relate to either people in our school, the wider community, or a mixture of the two. Your research project is special because it will help you solve the problem and change people's lives for the better. That is why you are called Changemakers.

- 3. Hand out Worksheet 1 and ask groups to work through Tasks 1, 2 & 3.
- 4. Ask groups to share their chosen problem with other groups. They should explain how this problem affects people and what their research might do to help solve the problem.
- 5. Based on their problem, ask each group of Changemakers to decide on a group name.
- 6. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

In the first Research Activity of the NextGenLeaders programme, Changemakers worked together to decide on a social problem that their group could investigate. The activity was designed to help them choose a topic they felt genuinely passionate about and motivated to change. This process involved providing them with key information about a range of global challenges and their connections to the United Nations Sustainable Development Goals (SDGs). Students discussed the topics, helping each other to gain a deeper understanding of the global implications of the issues they were exploring. This broadened their perspective and helped them to see how interconnected these challenges are.

One group chose to focus on the issue of plastic pollution, which they found relevant and urgent. They researched online and found out about the devastating impact of plastic waste on marine life, ecosystems, and communities and they linked this issue to SDG 14, "Life Below Water," which focuses on the sustainable use of oceans. They also linked this to SDG 12, "Responsible Consumption and Production," highlighting the unsustainable use of plastic at a local community level.

This research activity was student-led, meaning the Changemakers took full responsibility for choosing the issue they wanted to tackle. This helped them feel more motivated to take action. After reflecting on their research, the group decided to focus on raising awareness about plastic waste and exploring solutions, such as promoting reusable materials in their school and wider community.

2. Researching What is Already Known

Overview

The purpose of this second Research Activity is for Changemakers to find out what is already known about their chosen problem by undertaking secondary research. Finding out what is already known is a vital step in research. It will enable Changemakers to understand more about the nature of their chosen problem as well as the solutions other people have already discovered. Building knowledge in this way will inform and shape Changemakers' projects, ensuring they are as impactful as possible.

You will need

- 1. Access to the internet.
- 2. 'Worksheet 2: Searching For What Is Already Known'.

Learning steps

1. Explain the purpose of today's activity, which is to find out what is already known about their chosen problem. Explain why this is important.

Researchers often begin the research process by identifying a problem, just like you have done.

As a first step to identifying a solution, they will search the internet to find out what is already known about the nature of their problem and solutions that other people have already discovered. This is called 'secondary research'.

Today, you will undertake secondary research by finding 3 useful pieces of information online.

- 2. Hand out and talk through 'Worksheet 2: Searching For What Is Already Known'.
- 3. Ask Changemakers to use the worksheet to complete Task 1.
- 4. When Changemakers have identified 3 useful pieces of information, ask them to work through Task 2.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

A group of Changemakers on the NextGenLeaders programme identified a problem: the neurodivergent community did not feel safe in busy, public places. They wanted to change this by introducing sensory friendly environments in pop concert arenas.

Their first step was to find out what was already known about creating sensory friendly environments in busy places. They devised keyword search terms - Sensory-friendly environments; Urban areas; Autism; Neurodivergence; Neurotypical environments – and used these to search for information online.

The information they found gave them some good examples of how urban spaces were adapted to become sensory friendly environments. They also found that some cities in Scandinavia deliberately planned sensory-friendly environments before building took place! This information gave them lots of ideas about potential solutions to their problem, which they later shared with the management of First Direct Arena in Leeds, who were keen to create their own sensory-friendly space.

3. Writing a Research Question

Overview

Having a good research question is vital for a good research project. A good research question should be specific to the problem under investigation. It should also be shaped by secondary research. This will ensure that Changemakers are not repeating a research question that has already been answered by other researchers.

You will need

1. 'Worksheet 3: Writing A Good Research Question'

Learning steps

1. Recap on sessions 1 and 2.

As Changemakers, you identified a social problem that is important to you. You developed your understanding of this problem by linking it to the United Nations' Sustainable Development Goals. You then undertook secondary research to find out what is already known about your problem and what solutions other people have come up with.

2. Explain the purpose of today's activity, which is to write a good research question for their projects. Explain why this is important.

Having identified a problem, researchers will use their secondary research to write a research question to drive their projects forward.

Their research question is important as it is framed by what is already known to state clearly the nature of the problem under investigation. Today, you will write a good research question for your project.

- 3. Hand out and talk through 'Worksheet 3: Writing A Good Research Question'.
- 4. Ask Changemakers to complete Task 1.
- 5. You will need to provide the answers:

RQ3, RQ4 and RQ6 are Good Research Questions (RQs). This is because they focus on tackling real problems in real contexts (e.g. the school, the community). They are, therefore, specific about the problem, the location of the problem, and the people involved. They are also open questions, which do not invite Yes or No answers, and allow for complex exploration of the problems.

RQ1, RQ2 and RQ5, on the other hand, are not related to real contexts. They are very broad questions, which would be difficult to answer.

RQ1 and RQ5 are also closed questions, which invite Yes or No answers. These are Bad RQs for a Changemaker project, as they oversimplify the problems.

- 6. Ask Changemakers to complete Tasks 2 & 3.
- 7. Ask each group to share their research question with the rest of the class. They should justify why they think their question is a good research question.
- 8. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

A research team of secondary school students and a university student were exploring research questions together. They realised that often, when people think of a problem, they like to rush to find a solution! This can make thinking about research questions tricky, but also important, as it involves stepping back to think about what more needs to be understood first.

To practise developing research questions, the team thought through an example together. You can try with your students, too. The team imagined a school where students were getting distracted a lot in lessons. This imaginary school wanted to find a solution quickly, and thought that students must be getting distracted because of their phones. So, they decided to ban phones from the school. However, students were still getting really distracted!

The team took a step back from this example to think through how research could help here, and what a good research question might look like. They thought that it would be helpful for this school to speak with students and find out more about *why* they were getting distracted in lessons, before finding solutions. They mind-mapped example research questions together, such as: 'What factors are contributing to students becoming more distracted in lessons?'; and 'How can the school support students to be able to focus more in lessons?' Working through this example helped the team to understand why research questions – and hearing different perspectives through research – are important. This helped them to design their own research project.

4. Generating Data

Overview

Now that each Changemaker group has written down their research question, their next task is to decide how to answer that question through generating and then analysing data. By data, we mean information or knowledge about the research topic. In this Research Activity, Changemakers will think about the different research methods available to them. They will consider which research methods are the best fit for their research question, the needs of their participants, and the strengths of their research team.

You will need

1. 'Worksheet 4: Choosing Your Research Method'.

Learning steps

1. Recap on session 3.

As Changemakers, you all now have a research question that builds on what is already known about the problem you have identified. Answering your research question will empower your group to take action to address the problem.

2. Explain the purpose of today's activity, which is to explore different ways of answering their research question.

There are different ways of answering your research question by involving real people as participants in your project. First, you must decide which people you want to involve in your research project. Then you must decide which research method or methods you will use with your participants to answer your research question.

Typical research methods include surveys, interviews and observations, but you might also want to consider more creative methods like creative writing or the visual arts.

In deciding which research method to use, you should consider three factors:

- which method best suits your strengths as a research team;
- which method meets the needs of your participants;
- and, crucially, which method will enable you to answer your research question.
- 3. Hand out and talk through 'Worksheet 4: Choosing Your Research Method'.
- 4. Ask Changemakers to complete Tasks 1, 2 & 3.
- 5. Ask Changemakers to present and justify their chosen research method to other Changemakers. In justifying their research method, encourage Changemakers to explain: how their chosen method enables them to answer their research question; why it is a suitable method for their participants; and how the method aligns with the strengths of their team.
- 6. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

Two research teams of KS3 students and a university research assistant were considering the most effective ways to collect information/data for their NextGenLeaders projects. The students initially identified 'surveys' and the 'internet' as potential methods to generate information. The student researchers and the research assistant then discussed why these research methods may or may not be appropriate for their bespoke projects. These dialogues revealed that the initial ideas were informed by students' previous exposure to 'research' within school and in broader society.

The research assistant encouraged the students to think about their individual and group strengths as researchers, what types of information they were hoping to generate, and what types of research methods would be most accessible and practical for their target sample. Reflecting on their individual and group strengths, the student researchers decided that more creative and co-constructive methods may be better suited to their skillsets, including storyboarding, unstructured interviews, focus groups, and artefact creation. These methods were understood by the student researchers to maximise their artistic and creative skills, allowing them to produce new data that would provide useful insights, whilst also making the most of their talents and passions.

After identifying these data collection methods, the student researchers considered the appropriateness of such approaches for their target sample, in this case primary school children. The researchers understood that these methods would allow younger children to articulate and reflect upon their thoughts and experiences in a child-friendly manner, engaging them in the research process more actively than completing a paper-based questionnaire. Finally, the researchers shared that they would feel better equipped to analyse visual and audio data, rather than numerical/statistical data produced via surveys or collected from online sources.

5. Ethics

Overview

Changemakers are now almost ready to start generating data to answer their research question. Before they do so, it is important that they think about the rights of their participants and ensure their participants do not come to any harm from being involved in the project. To think about participants in this way is to think about the ethics of research. In this Research Activity, Changemakers will develop their understanding of research ethics and identify what measures they will take with their participants to ensure their research is ethical.

You will need

1. 'Worksheet 5: Your Participants' Rights in Research'.

Learning steps

1. Recap on session 4.

You have decided who will be your participants and what research method or methods you will use with your participants to answer your research question. Before you design your research method and use it with participants to generate data, you need ensure that you understand the rights of your participants in research and that they will not come to any harm by participating in your research.

2. Explain the purpose of today's activity, which is to identify the procedures they will take with their participants to ensure their research is ethical.

As Changemakers, you must ensure that your participants' rights are respected and that they do not come to harm through participating in your research. Thinking about participants' rights in research is often referred to as 'research ethics'.

Today, you will explore research ethics in relation to your project and your participants so that you can design and put in place procedures to ensure your research is ethical.

- 3. Hand out and talk through 'Worksheet 5: Your Participants' Rights in Research'.
- 4. Ask Changemakers to complete Tasks 1, 2 & 3.
- 5. Ask Changemakers to share their Ethical Procedures Document with the other Changemakers. Give Changemakers the opportunity to revise their Ethical Procedures Document based on ideas from other Changemakers.
- 6. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

When conducting research about their school toilets, a group of young researchers in years 8 and 9 began their research project by exploring their rights within the research. As an exercise to explore this, we used large chalk crayons and held our session on the school playground so that we could draw around each other. The young researchers then used the 'Your Rights in Research' worksheet (Worksheet 5) to think about the rights that were most important to them as researchers but also to the would-be participants involved in the research.

By drawing human figures on the ground, the young researchers were able to attach rights to chalk 'people' and talk through the relevance of ethical practice and how they would enact this. The young researchers particularly spoke about non-discrimination and shared amongst the group how they would work to create a research space that valued diversity and listened to individual choices and opinions. Using the Rights in Research worksheet encouraged the young researchers to think about ethical practice within their own research and also to consider their own values and principles and how to enact these.

6. Surveys

Overview

This Research Activity is designed for use with Changemakers who are using surveys with their participants. The purpose of the Research Activity is to guide Changemakers to design a survey that will help them to answer their research question.

You will need

- 1. 2 highlighters.
- 2. 'Worksheet 6: Writing Surveys'.

Learning steps

1. Recap on the sessions so far.

You have identified a problem, found out what is already known about this problem, and used this to write a research question.

You have thought about how to collect data and who to collect it from and you have decided to use surveys to answer your research question.

2. Explain the purpose of today's activity, which is to design a survey that is ethically informed to use with participants to answer the research questions.

Today your group will design a survey to give to your participants. The survey must be ethically informed and, if you have different participant groups, you may wish to design slightly different survey questions for each group.

- 3. Hand out and talk through 'Worksheet 6: Writing Surveys'.
- 4. Ask Changemakers to complete Tasks 1-4.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

Within a primary school research project, young researchers shared a desire to gather lots of views from peers that could be easily quantified and shared. They found the best way to do this was through surveys that included Likert scales. We trialled this within the session, with large A3 sheets of paper laid on the floor ranging from 'strongly disagree' to 'strongly agree', and shared some 'silly' statements such as 'Margarita pizza is the best kind of pizza'. Trialling their survey in person gave the young researchers a chance to see how people responded in vastly different ways and it was also a chance to trial writing questions and statements for their own research project. Using Likert scales meant that young researchers could ask their whole class in a break period, therefore including a vast range of respondents. The young researchers liked how they could give exact figures (e.g. '30% of respondents think...') when sharing their research with school staff.

Including some more open-ended questions after each Likert scale helped the young researchers gather further information to understand responses to the closed statements or questions.

7. Interviews

Overview

This Research Activity is designed for use with Changemakers who are interviewing their participants. The purpose of the Research Activity is to develop Changemakers' understanding of different types of interviews and help them to design an interview schedule to answer their research question.

You will need

1. 'Worksheet 7: Writing an Interview Schedule'.

Learning steps

1. Recap on the sessions so far.

You have identified a problem, found out what is already known about this problem, and used this to write a research question.

You have thought about how to collect data and who to collect it from and you have decided to use interviews to answer your research question.

2. Explain the purpose of today's activity, which is to design an interview schedule that is ethically informed to use with participants to answer the research questions.

Today your group will design an interview schedule to use with your participants. An interview schedule is a list of structured questions you will ask your participants.

It is important that your questions and your approach to interviewing are ethically informed. If you have different participant groups, you may wish to design a slightly different interview questions for each group.

- 3. Hand out and talk through 'Worksheet 7: Writing an Interview Schedule'.
- 4. Ask Changemakers to complete Tasks 1-4.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

A research team of sixth-form students and a university student were preparing for a group interview with year 7s and 8s in their school

Firstly, they practised interviewing each other, with an activity called *back-to-back interviews*. The team picked a random topic, like 'favourite songs', and planned some *open* questions like 'tell me about your favourite songs', and *closed* questions, like 'Do you like pop music?' They arranged their chairs so that they were sat back-to-back in pairs, and took two minutes to interview each other. This helped them to understand what it's like to interview and be interviewed.

Then, they thought about what questions they'd like to ask in their group interview, and in what order. They chose their most important questions, and possible follow-up questions if there was time. They decided to invite students to draw or write their answers, if they preferred this to speaking. They also planned an ice-breaker activity.

Next, they thought about *ethical* considerations. For example, they discussed: how to create a comfortable environment; who they would need to talk to in school if a student became upset, or shared something they were worried about; and which questions might feel too sensitive for years 7 and 8 to answer in front of sixth-formers.

Before the group interview, they planned who would ask which questions, who would take notes, and who would keep time.

They enjoyed the group interview. The team reflected that the ice-breaker worked really well, and they'd recommend that teams practise beforehand if possible.

8. Observations

Overview

This Research Activity is designed for use with Changemakers who are planning to observe their participants. The purpose of the Research Activity is to develop Changemakers' understanding of different approaches to observations and help them to design an ethically informed observation sheet to answer their research question.

You will need

1. 'Worksheet 8: Writing an Observation Sheet'.

Learning steps

1. Recap on the sessions so far.

You have identified a problem, found out what is already known about this problem, and used this to write a research question.

You have thought about how to collect data and who to collect it from and you have decided to use observations to answer your research question.

2. Explain the purpose of today's activity, which is to design an observation sheet that is ethically informed to use with participants to answer the research questions.

Today your group will design an observation sheet to use with your participants. An observation sheet helps structure your observations of your participants, guiding you in terms of what to look for and in terms of what you make notes about.

It is important that your participants are aware that they are being observed and why they are being observed, so you will need to ensure your use of this method is ethically informed.

- 3. Hand out and talk through 'Worksheet 8: Writing an Observation Sheet'.
- 4. Ask Changemakers to complete Tasks 1-4.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

A group of Changemakers in a secondary school identified a problem in their local community: cars were driving too fast in the roads immediately surrounding their school, putting children in danger. They decided to investigate this problem by carrying out observations of cars in the streets surrounding their school.

They discussed how they would collect their data and decided they would take a structured approach, recording how many cars drove down the road outside their school at busy times, and how many of these cars were speeding.

Having collected this data, they reflected that whilst some cars were clearly speeding, with others it was less clear. They refined their observation sheet to categorise the estimated speed of the cars: 'Safe and legal' (20 mph); 'Dangerous and over the speed limit' (20-30 mph); 'Very dangerous and well over the speed limit' (30-40 mph); 'Extremely dangerous' (40+ mph). Rather than estimating car speeds, they secured funding to buy a machine to measure speeds.

The results of their observations were worrying: over 20% of the cars on the road outside their school broke the speed limit at busy times of day. Armed with this information, they wrote to their local MP, who helped influence the council's decision to put speed cameras on the road outside their school.

9. Creative Methods

Overview

This Research Activity is designed for use with Changemakers who are planning to use creative research methods with their participants. The purpose of the Research Activity is to allow Changemakers to explore and design the use of a creative method. Creative methods can be split into three domains: writing, visual and performance. Quite often creative methods will be used as part of a more traditional method, like interviewing or observing, but equally creative methods can be used on their own. Creative methods can be particularly inclusive with younger participants and they can help create a safe space for exploring potentially sensitive problems.

You will need

1. 'Worksheet 9: Using a Creative Method'

Learning steps

1. Recap on the sessions so far.

You have identified a problem, found out what is already known about this problem, and used this to write a research question.

You have thought about how to collect data and who to collect it from and you have decided to use a creative method to answer your research question.

2. Explain the purpose of today's activity, which is to develop and design a creative method that is ethically informed to use with participants to answer the research questions.

Today your group will develop and design a creative method to use with your participants. Creative methods fall into three categories: creative writing; the visual arts (i.e. painting, drawing, sculpture); and performance (i.e. drama). Creative methods are inclusive and work well with child participants. In terms of ethics, creative methods can help to create a safe space for participants to express themselves and explore potentially sensitive problems.

- 3. Hand out and talk through 'Worksheet 9: Using a Creative Method'.
- 4. Ask Changemakers to complete Tasks 1-4.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

I worked with Year 8 Changemakers in a secondary school to help them research into their experiences of the NextGenLeaders YPAR programme. I was particularly interested in doing this as most research into YPAR programmes is undertaken by adults rather than young people.

One group of Changemakers decided to use creative, visual methods to capture Changemakers' experiences of NextGenLeaders. They decided to they wanted Changemaker participants to explore both how they had changed through the NextGenLeaders programme and what difference they felt their projects had made.

To do this, they set about creating a sheet for participants, which included information about the project and instructions. The design of the sheet was ingenious, directing participants to undertake 2 illustrations and write a caption to explain their illustrations. They also provided participants with a key to indicate how colours and lines could be used to capture how participants felt.

Project Information

This project aims to find out about Changemakers and how they feel about being a Changemaker.

The drawings you do will be used for a presentation at York St John University and a blog for the NextGenLeaders website.

You can be anonymous and you don't have to use your name if you don't want to.

Your Task

- 1. Draw 2 pieces of art that capture how being a Changemaker has changed you and how you made a difference to the community/school.
- 2. Use the key to help you with your drawing (optional).
- 3. Write a caption to explain each drawing.

| Drawing 1: How you've change | d | Drawing 2: How you've made a | difference |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | |
| Caption | Sharp lines to represent not much change Wavy lines to show more change Darker colours to show not being open to changes Brighter colours to show opening your eyes and knowing how to change | Caption | Sharp lines to represent not much change Wavy lines to show more change Darker colours to show not being open to changes Brighter colours to show opening your eyes and knowing how to change |

The resulting illustrations were amazing and sophisticated! They captured the emotional journeys and personal growth of the Changemakers in ways that writing and speaking alone could not.

10. Analysing Data

Overview

This Research Activity is for use with all Changemakers and has two purposes. The first purpose is to develop Changemakers' understanding of three different approaches to analysing data: descriptive; thematic; and narrative. The second purpose of this Research Activity is to empower Changemakers to select and apply their chosen approach or approaches to their data.

You will need

- 1. Data collected by the Changemakers.
- 2. 'Worksheet 10: Analysing Data'.

Learning steps

- 1. Recap on the sessions so far.
 - You have identified a problem, found out what is already known about this problem, and used this to write a research question.
 - You have then identified participants and collected data from your participants to help you answer your research question.
- 2. Explain the purpose of today's activity, which is to select either one or more approaches to data analysis so that Changemakers can analyse their data to answer their research question.
 - Today your group will decide how to make sense of your data. You will be introduced to three key approaches to analysing data: descriptive analysis; thematic analysis; and narrative analysis. Once you have chosen the approach or approaches that are best for your group, you will analyse your data.
- 3. Hand out and talk through 'Worksheet 10: Analysing Data'.
- 4. Ask Changemakers to complete Tasks 1-3.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

In one UK primary school, young researchers, aged 8-11, shared their experiences of using the toilets in their school. Whilst these experiences were being shared, one of the young researchers listened carefully to what was being said and wrote down key words that they were hearing on a piece of paper.

As words and ideas repeated themselves, the young researcher began to identify similarities in the experiences of their peers and began to relate these to their own experience of the toilets in their school. The young researcher grouped these similarities into themes, which they then carefully structured, and then shaped in the form a poem.

The poem was a combination of the young researcher's own experiences, which they had shared and discussed in an earlier session, and new data shared by peers when the young researchers were collecting data. The combination of all this lived experience into one poem then guided the final informative video that was created by the group at the end of the project. One young researcher read the poem aloud at a university conference and the poem was a great addition to the research findings.

By capturing the key themes in this creative way, the young researchers could effectively communicate their experiences and help bring about changes to toilet use in school.

11. Key Findings and Key Actions

Overview

This Research Activity is for use with all Changemakers and has three purposes. The first purpose is to help Changemakers to use their analysis of the data to identify their key findings in relation to their research question. The second purpose is to help Changemakers use their findings to identify the actions they will take to address the problem they identified. The third purpose is to help Changemakers identify and contact potential partners who will enable their projects to be as impactful as possible.

You will need

- 1. Analysis of data.
- 2. 'Worksheet 11: Identifying Key Findings and Key Actions'.

Learning steps

- 1. Recap on the sessions so far.
 - You have identified a problem, found out what is already known about this problem, and used this to write a research question.
 - You then identified participants, collected data from your participants, and analysed this data to help you answer your research question.
- 2. Explain the purpose of today's activity, which is for Changemakers to use their analysis of their data to identify their key findings, the key actions they will take, and partners they can contact for help.
 - Today you will use your analysis of the data to identify your key findings. These key findings will enable you to answer your research question.
 - Once you have identified your key findings, you will create a plan of action, where you will identify key actions your group will take, and partners you will contact to solve the problem you identified.
- 3. Hand out and talk through 'Worksheet 11: Identifying Key Findings and Key Actions'.
- 4. Ask Changemakers to complete Tasks 1-4.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

A group of Changemakers focused their project on the issue of knife crime and safety in Sheffield, particularly in the local community around their school. After researching online to find out more about crime rates in Sheffield and the broader Yorkshire area, they discovered some alarming statistics: Sheffield was the most dangerous city in South Yorkshire; and 50% of the homicide inquiries in Yorkshire in 2023 were fatal stabbings. With this in mind, they focussed their primary research on perceptions of safety among young people.

The Changemakers created a survey to find out when, where, and why people felt unsafe. They collected responses from other students and, where they could, people from the local community. They also collected data on gender, age, and location so that they could segment it later. Here's what they found:

- 77% of children felt unsafe when a large group was outside their house.
- 62% felt unsafe on public transport.
- 75% of children felt unsafe walking in the evening.
- 53% felt safe walking during the day.
- 89% felt safe in their local shops.

The team quickly realised that while some areas of the community were seen as safe, others—especially public transport and areas in the evening—were not. They also noted that local shops were places where people felt secure, which led them to think about how they could use this information to make a real difference.

Using these findings, the Changemakers knew that they could take action. They decided to focus their efforts on local shops, thinking that if the shops were places where people felt safe, they could leverage that trust to promote safety and wellbeing in their community. The group decided to create a campaign where local shops could become safe havens for young people. By working with shop owners, the team aimed to provide spaces where young people could go if they felt unsafe.

For their project to have a real impact, the Changemakers knew they needed to bring others on board. Using the data they had gathered, they identified potential partners who could help spread the word and get involved in the campaign. They reached out to local businesses, the police, and community groups, building connections that would help make the campaign more effective.

This activity helped the Changemakers understand the importance of using data to guide their decisions and actions. It showed them that research isn't just about gathering facts—it's about using this information to make decisions that lead to real change. With a clear plan in place, they were ready to take the next steps in their campaign, using their research to reach out to partners and start making a real difference in the community.

12. Evaluating the Impact of Your Actions

Overview

This Research Activity is for use with Changemakers before and after they undertake actions to solve their problem. The purpose of this Research Activity is threefold: to help Changemakers plan how they will evaluate the impact of their actions; to help them draw upon their understanding of research methods to design evaluation methods; and to draw upon their understanding of data analysis to evaluate the impact of their actions.

You will need

- 1. 'Worksheet 12: Evaluating the Impact of Your Actions'.
- 2. Worksheets 4, 5, 6, 7 & 8 (Changemakers may ask for these depending on which evaluation methods they choose to use).
- 3. Worksheet 10 (Changemakers may need reminding of data analysis when it comes to evaluating their impact).

Learning steps

- 1. Recap on the sessions so far.
 - You have identified a problem, found out what is already known about this problem, and used this to write a research question. You then collected data, analysed this data, and identified key findings and key actions to take.
- 2. Explain the purpose of today's activity, which is for Changemakers to plan how they will evaluate their actions to solve the problem they initially identified.
 - Today you will draw upon your existing knowledge of research methods to decide how you will evaluate the actions you plan to take to solve the problem you identified. You will then create data collection methods to enable you to evaluate the impact of your actions.
- 3. Hand out and talk through 'Worksheet 12: Evaluating the Impact of Your Actions'.
- 4. Ask Changemakers to complete Tasks 1, 2 & 3.
- 5. Once Changemakers have completed their actions (this may take a couple of days or weeks!), ask them to complete Task 4.
- 6. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

Changemakers focused on the issue of period poverty in Halifax, aiming to tackle the lack of access to sanitary products among vulnerable individuals, particularly those experiencing homelessness. The team conducted secondary research, looking at global data and studies that revealed the scale of period poverty, strengthening their resolve to create a solution for action in their own community. The Changemakers surveyed local high schools and a sixth form to assess access to period products in their community. They found:

- 12% of students didn't have access to period products when they needed them.
- 69% only had access to disposable products.
- 8% had no one to talk to about their periods.
- 34% were unaware of the environmental impact of sanitary products.
- 34% used makeshift products like toilet paper.
- 7% had missed a day of education because of their period.

Based on the data collected from their survey, Changemakers took action by creating a project where they made packs containing reusable sanitary products and hygiene wipes. These packs were designed to address the immediate needs of individuals experiencing homelessness in their local community. The packs were made from recycled materials and included hygiene items that could be reused. The project aimed to reduce the environmental impact of disposable products while addressing the practical needs of the community.

The team evaluated their impact by interviewing a range of stakeholders. Whilst they had been successful in their project, the interviews helped them identify how they could do more to address the needs of those that they wanted to support.

Based on their evaluation, for the second year of their project they made two key changes. Firstly, they expanded their partnerships to help drive their mission forward, seeking out additional support through new partners and media channels. This strategy allowed them to spread their message further and ensure their project has a larger reach. Secondly, in response to language barriers faced by recipients, the team created picture-based information packs to be included with the sanitary product packs. This approach ensured that the packs were accessible to a wider range of people, regardless of language proficiency or literacy levels.

Looking ahead, the team's long-term vision is to make period products free for all who need them by advocating policy changes. By engaging with local MPs, the team is taking important steps toward their ultimate goal, making a lasting impact in the community.

13. Sharing Your Project

Overview

Now that Changemakers have completed their projects, it's important that they share what they have achieved with as many people as possible. Sharing their projects will enable Changemakers to have a wider impact as other people learn about what they have done. This Research Activity, therefore, has two purposes. The first purpose is to encourage Changemakers to identify different audiences with whom they can share their projects. The second purpose is to encourage Changemakers to think about the best way to present their research to impact their chosen audiences.

You will need

- 1. All the data and information collected by Changemakers during their projects.
- 2. 'Worksheet 13: Sharing your project'.

Learning steps

1. Recap on the sessions so far.

You have identified and researched a problem that matters to you and you have used your research to implement key actions. These actions are now complete and you have evaluated their impact.

2. Explain the purpose of today's activity, which is for Changemakers to decide who they want to share their projects with and how best to share this.

For your projects to inspire, persuade and impact as many people as possible, it is important that you share what you have done. Today, you will decide who you want to share the story of your projects with and how you will do this sharing. This could include producing a written report, a blog, or a story to share via social media.

- 3. Hand out and talk through 'Worksheet 13: Sharing your project'.
- 4. Ask Changemakers to complete Tasks 1, 2 & 3.
- 5. Ask Changemakers to reflect upon this Research Activity by answering the Reflection question.

Case study

In one secondary school, a group of Changemakers decided to tackle the issue of hate crime in their local community. The Changemakers created a project that highlighted the positive impact of cultural diversity and worked to combat prejudices that often fuel hate crime. Their initiative involved using social media to spread their message, engaging with local communities, and fostering conversations around understanding and tolerance.

Throughout the course of the project, the Changemakers realised that sharing their work with a wider audience had the potential to create lasting change. They recognised that by sharing their research and findings, they could influence attitudes and inspire others to engage in conversations about cultural education and the fight against hate crime. The Changemakers explored different ways of sharing their findings, including:

- Social media campaigns: the students created posts that shared their research findings, using Instagram, Twitter, Facebook, and TikTok to reach a broader audience, including peers and local community members.
- School presentations: the Changemakers organised presentations within their school, as well as local primary schools, where they shared insights from their research and showcased their findings, addressing the importance of cultural education in combating hate crime.
- Written reports: in addition to social media, the Changemakers documented their journey and key findings in reports that were published in the school newsletter to increase awareness.

Following their successful project, the Changemakers are now planning further outreach work, aiming to expand the campaign and involve more schools and community groups. They are also looking into how their social media platforms can continue to be used to educate and raise awareness about the importance of cultural education in tackling hate crime.

14. Reflecting Upon Your Changemaker Journey

Overview

This final Research Activity encourages Changemakers to reflect upon their research project as a whole to identify how they have changed and what they have gained throughout their Changemaker journeys. Reflecting in this way is an important part of personal development and developing self-confidence; it also helps young people to identify targets for future learning and development.

You will need

1. 'Worksheet 14: Reflecting upon your Changemaker Journey'.

Learning steps

1. Recap on the sessions so far.

You have now completed your projects and you have shared your findings with different audiences. Your projects have been amazing and they have impacted positively on different people in different ways.

2. Explain the purpose of today's activity, which is for Changemakers to reflect upon their own learning and development throughout the course of their projects.

As well as impacting positively on other people, your projects have almost certainly impacted positively upon yourselves. Whether you realise it or not, you will have gained so much from undertaking research that has a real impact on real people.

In today's session, you are going to reflect upon your learning and development to identify how you have changed. You will then use this reflection to identify your targets for your future learning and development.

- 3. Hand out and talk through 'Worksheet 14: Reflecting upon your Changemaker Journey'.
- 4. Ask Changemakers to complete Tasks 1 & 2.
- 5. Ask each Changemaker group to make a presentation to the rest of the class about what they have gained from their Changemaker journeys.

Case study

The Changemakers that were tackling hate crime in their local community reflected that being engaged in their project had several positive outcomes. First and foremost, the experience helped to build their confidence, as they were required to share their research with wider audiences, including school staff and local community members. They learned how to convey complex issues in a clear, engaging, and accessible way, whether through social media posts, school presentations, or their written reports.

Throughout their project, the Changemakers also boosted their teamwork skills, as they collaborated, problem-solved, delegated and navigated differences of opinion to undertake their project. In the latter stages of their project, this involved strategising the best ways to reach different audiences. This experience showed them the value of collaboration in achieving impactful change, as each team member brought their own unique strengths to the project, from coming up with solutions, to designing data collection tools, to organising presentations.

The Changemakers' research project, and the act of sharing, helped the team grow their research skills further, as they reflected on how the data they had collected was not only used for action but also shared in a way that could inspire change.

Finally, as we have found with other Changemaker groups, the Changemakers reflected how being a Changemaker had changed them as people. They felt they better understood other people and their problems and they were far more empathetic than they used to be. They also felt more confident in themselves to make a difference and affect positive change.

Worksheets



Worksheet 1: Identifying a Social Problem

Task 1: Identifying problems that are important to you

- 1. Discuss and then write down a list of 'problems' you have encountered in your local communities and/or school.
- 2. As a group, discuss these problems and then use numbers to rank them in terms of importance (1 = most important).
- 3. Use your ranking to agree on 3 problems you could research as Changemakers.

Task 2: Link your problems to The Sustainable Development Goals

1. The Sustainable Development Goals (SDGs) are the targets that the United Nations want to achieve by 2030 to ensure peace and prosperity on our planet. Read them below.



- 2. See if you can link your 3 problems to the SDGs. Each problem may be linked to more than one SDG.
- 3. If you were able to link your problem to one or more SDGs, this shows that it is a problem that affects people across the globe as well as people in your local community and/or school. It also indicates that this is a problem that is worth researching.
- 4. Based on the SDGs, discuss whether to change your ranking of your top 3 problems.

Task 3: Choosing your problem

- Now agree the problem your group would like to research.
- Develop a justification for your choice of problem, which you will share with other Changemakers. You should include:
 - what the problem is;
 - who the problem affects;
 - why the problem is significant;
 - how your research could help tackle the problem.

Reflection

• How have the Sustainable Development Goals developed your understanding of the problem you identified?

Worksheet 2: Searching For What is Already Known

Researchers often begin the research process by identifying a problem, just like you have done. As a first step to identifying a solution, they will search the internet to find out what is already known about the nature of their problem and solutions that other people have already come up with. This is called 'secondary research'.

Today, you will undertake secondary research and find 3 useful pieces of information online.

Task 1: Searching for Information

- 1. In one, short sentence, write down the problem you are investigating.
- 2. Now discuss and write down up to 5 keywords that relate to this problem. These will be your search terms. For example, one group of Changemakers were looking at safe environments for the autistic community in busy, public spaces. They devised the following search terms: Sensory friendly environments; Urban areas; Autism; Neurodivergence; Neurotypical environments.
- 3. Before you enter your search terms into a search engine, decide which of the Boolean operators you will use between your keywords AND, OR, NOT.
 - Boolean operators are words used between search terms to either expand or narrow down search results to find the most relevant information. The main Boolean operators are AND, OR, and NOT. For example, if you want to have lots of results, you will use the Boolean operator OR between your keywords: Sensory friendly environments OR Urban areas OR Autism OR Neurodivergence OR Neurotypical environments.
 - But if you want fewer results, you will use the Boolean operator AND instead: Sensory friendly environments AND Urban areas AND Autism AND Neurodivergence AND Neurotypical environments.
- 4. Have a look at your Results and see if any of the information looks relevant. If some information looks relevant, see if it uses different keywords you could use in your search terms. If you find new keywords, try another search using these terms.
- 5. You might also want to try a search engine that will just return research papers, e.g. Google Scholar.
- 6. Have a look at your Results and evaluate whether the information is reliable.

 For example, what sort of website did you find the information on? Is it an official newspaper? Is it a research paper? Is it someone's personal website? Are other websites reporting similar findings?
- 7. Now select 3 pieces of information that you think are most relevant to your research.

Task 2: Summarising and Evaluating Information

For each of your 3 pieces of information, write down the following:

- 1. The title of the text, the author or authors, the webpage.
- 2. The type of text. Is it a newspaper article? A research paper? An organisation's website? An opinion piece?
- 3. List up to 5 key points made in the text. What does the text say about the problem? What solutions does the text put forward?
- 4. Evaluate the validity of the text. Do you agree with what the text is saying? Why? Why not? Is the text based on someone's opinion, fact, research, or a mixture of these?

Reflection

How has your secondary research developed your understanding of the problem you have identified?

Worksheet 3: Writing Good Research Questions

In the past, Changemakers have explored the problem of vaping. Their projects have had two foci: tackling underage vaping; and recycling disposable vapes. These Changemakers undertook secondary research, finding medical evidence of the harm of vaping to young people's health as well as community-based strategies for encouraging the recycling of disposable vapes. They then used this secondary research to shape their research questions to drive their community-based projects forward.

Task 1: Good and Bad Research Questions

1. Below is a list of hypothetical research questions (RQs) used by Changemakers about tackling the problem of vaping. Your job is to discuss the questions in your Changemaker group and decide whether the RQs are Good or Bad. Remember, a Good RQ will really drive Changemakers' projects forward and will reflect the will to change their local community for the better.

RQ1: Is vaping bad for you?

RO2: What are the long-term health consequences of vaping?

RQ3: What strategies can we use in school to stop children from vaping?

RQ4: How can we tackle the problem of shops selling vapes to children who are underage?

RQ5: Is recycling good for the environment?

RQ6: How can we encourage our local community to recycle their vapes?

2. Once you have decided which RQs are Good and which RQs are Bad, justify your decision and then ask your teacher for the answers.

Task 2: Establishing Success Criteria for Good Research Questions

1. Based on Tasks 1 and 2, list 3 success criteria for writing a Good RQ.

Task 3: Writing a Good Research Question for Your Project

- Now use your success criteria to write a list of possible RQs for your project.
- 2. Share your RQs with your group and decide which RQ is best suited to drive your project forward.

Reflection

How would you explain to a new Changemaker how to write a good research question?

Worksheet 4: Choosing Your Research Method

Task 1: Your strengths as Changemakers

1. Make a list of the research strengths of all the members of your research team. Pay particular attention to your social, analytical and creative skills.

Task 2: Selecting your participants

- 1. Remind yourself of your research question by writing it down in the middle of a page.
- 2. Now create a mind map by writing down groups of people your research question affects, both directly and indirectly. Try to be as specific as possible.
 - For example, if your research question is about the problem of children vaping, the groups of people either directly or indirectly affected might be: secondary school children; secondary school teachers; parents or carers of secondary school children; MPs; shopkeepers; companies who produce vapes.
- 3. Rank your list of groups of people in terms of which groups you would most like to invite to be part of your research project. When doing your ranking, take into account two key factors:
 - a. which groups of people would be most helpful in terms of answering your research question;
 - b. which groups of people you will be able to access.

Task 3: Choosing your method or methods

1. Read the following information below about different research methods.

Surveys

Surveys (or questionnaires) can enable you to find out what a group of people think about a specific problem. Some surveys will use scales (e.g. '1 to 5') or closed questions (e.g. 'Agree or Disagree'), whilst others will use open questions (e.g. 'What do you think about..?'). Some surveys will use a mixture of open and closed questions.

Some advantages of surveys:

- They are quick and easy to use;
- They can enable you to generalise about the views of a group of people relating to a problem and enable you to compare the views of different groups of people.

Some disadvantages of surveys:

- It can be difficult to find volunteers to complete a survey;
- You need at least 30 respondents for your analysis of a survey to be valid;
- Whilst a survey will give you an overview of what a group of people think, it may not enable you to understand
 why they think as they do in any great depth.

Interviews

Interviews can enable you to understand both what people think about a particular problem and why they think as they do. Interviews can either be one-to-one or undertaken in small groups (sometimes called focus groups). They can be: structured, with the interviewer taking the lead by reading through a list of questions; semi-structured, with the interviewer using set questions and listening carefully to ask follow-up questions; or unstructured, in the form of a dialogue about the problem.

Some advantages of interviews:

- They can enable you to understand both what people think about a problem and why they think as they do;
- They are flexible and inclusive, with the researcher able to choose between group and individual interviews as well as structured, semi-structured and unstructured approaches.

Some disadvantages of interviews:

- They are more time-consuming than surveys and you will need to transcribe the interviews yourself or use software to do the transcription;
- You will generate a lot of data, which can be difficult to analyse;
- As the number of participants you interview will be relatively small, you will not be able to generalise your findings about a problem.

Observations

Whilst surveys and interviews can help you understand what people think, observations can help you to understand what they do (sometimes what people do is very different from what they think!). Like interviews, observations can be, structured, with the researcher looking for specific behaviours; semi-structured, with the researcher looking for specific behaviours but also open to noting down other behaviours; or unstructured, with the researcher noting down anything of interest.

Some advantages of observations:

- They can be naturalistic, enabling you to see what people actually do in a specific social context;
- They can, therefore, give you a deeper understanding of the nature of the problem you are researching.

Some disadvantages of observations:

- People can behave differently if they know they are being observed, so researchers need to think about how to prevent this;
- Observations are time-consuming and you might feel that you have not observed anything that is relevant to the problem you are researching;
- You will need to make observation notes, which can generate a lot of data that can be difficult to manage.

Creative methods

Creative methods, like asking your participants to write a creative response or draw a visual response to a question, can provide a different way of thinking about the problem you are investigating. Exploring the problem in a more fictional way can enable participants to feel safe and express how they really feel. This can enable researchers to really capture the impact of a problem and convey this effectively to a wider audience.

Some advantages of creative methods:

- They can be inclusive, allowing participants of all ages to engage and feel safe to express how they feel about a problem;
- They can capture the depth of feeling participants may have about a problem, which the researcher can harness to impact a wider audience.

Some disadvantages of creative methods:

- Some participants may feel reluctant to engage creatively and researchers will need to think carefully about how to empower participants and make them feel comfortable;
- Creative responses to problems can be difficult to analyse as they are open to different interpretations;
- Traditional researchers may look down on creative methods, claiming they are not valid and that the creative approach lacks rigour.
- 2. Now decide which method or methods your research team should use to answer your research question. In making your decision, you should think about three key factors:
 - **a. Your strengths as a research team.** It is important that you can undertake your research method confidently and competently. Does your chosen method reflect your research team's strengths?
 - **b. Your participants**. It is important that your participants can engage meaningfully with your chosen method. Is your chosen method suited to your participants? Will they understand what is happening and will they be able to engage? Is your method inclusive of your participants' needs?
 - c. Your research question. Crucially, your chosen method should enable you to generate data that will help you to answer your research question. Think about to what extent will your chosen method enable you to answer your research question. Might the use of two methods help you answer your research question more fully?

Reflection

 What factors were most important in helping you to decide which research methods to use in your research project?

Worksheet 5: Your Participants' Rights in Research

Task 1: Your Rights in Research

- 1. Read through the 'Your Rights in Research' worksheet below. As a group, rank the 9 Rights in Research from 1-9 to reflect which you think are most and least important.
- 2. Discuss your rankings in your Changemaker group and justify your decisions.



Task 2: Your Participants' Rights in Research

- 1. Remind yourself of your participant groups.
- 2. Rank the 9 Rights in Research for each of your participant groups. Are your rankings the same or have they changed? Discuss why.

3. For each participant group, create a mind map of 5 key procedures your Changemaker group will put in place to ensure your participants' rights in research are respected.

For example, if you think it is important that your participants are informed, you might write: 'Create a short information sheet for participants about the project and the method we will use'. If you think it is important that your participants have the right to participate in a way they understand, you might write: 'Give participants the choice to sign the information sheet in order to consent to participate'. Please note that this researcher paid people to take part for the 'Your Rights in Research' project. It's unlikely your group will be able to do this, so instead think about how you can make it feel worthwhile and enjoyable for people who take part. It could be an interesting discussion, an opportunity to talk about important issues, to connect with people from across the school...

Task 3: Creating ethics procedures and documents

1. Based on your mind map, create a list of up to 5 ethical procedures you will follow with your participants. These should be written down in chronological order.

For example, you might write:

- 1) Inform participants about the research project and how they will be involved;
- 2) Give them the opportunity to voluntarily agree to participate in the project;
- 3) Give them the opportunity to remain anonymous...

Please note that in the 'Your Rights in Research Sheet', it talks about choosing how you're identified. This includes choosing to be anonymous. Being anonymous means that when people take part in research, they can say whatever they want to say without their name being mentioned. However, sometimes people want to be named, which is why they can choose how to be identified.

Produce a supporting document to give to each of your participant groups. This document should be no more
than one side of A4 and you might need different versions of the document for different participant groups
(e.g. the language you would use for primary school aged children would be different from the language you
use with adults).

The document could:

- provide information about your research project;
- state how the participants will be involved;
- give participants the opportunity to sign the document to consent to participate;
- state that their contributions will be anonymised.

These sentence starters might help you to write your document:

- We are conducting a research project that explores... (describe your project and what will happen here you could add in the paragraphs that you will develop in subsequent worksheets about your methods)
- We are inviting ___ (group) to take part in ___ (activities) on ___ (date) at ___ (place)
- It is your choice whether or not you'd like to take part
- [describe their other rights, using the 'rights in research sheet']
- We are hoping to use our research to (purpose)
- If you'd like to take part, please sign...
- (Don't forget your names and school emails)
- 3. Produce a similar document to give to the gatekeeper. A gatekeeper is the person in charge of an organisation and it is important to have their informed consent before you start conducting research within an organisation.

For example, if you are looking to conduct research in a school, you need the permission of the Headteacher. You should provide the Headteacher with information about your research project, asking for their consent for you to undertake the research.

Reflection

How will you work together to respect everyone within the research and enact choices about involvement within the research?

Worksheet 6: Writing Surveys

Task 1: Recapping

- 1. Write down your research question.
- 2. Write down the different participant groups you want to survey to answer your question.
- 3. Discuss whether you need different surveys for different participant groups. Discuss why/ why not.
- 4. Discuss how you will ensure your surveys are ethical and respect the rights of your participants.

Task 2: Developing survey questions

- 5. Write down your research question and one of your participant groups in the centre of a piece of paper.
- 6. Now create a mind-map of questions you can ask that participant group to help you answer your main research question. Aim for at least 6 questions.

For example, if your research question is 'How can we educate children about the health dangers of vaping?' and the participant group is teachers, the questions you might ask teachers could include:

- 1) Do you think vaping is a problem amongst children?
- 2) Why do you think this?
- 3) What percentage of teenagers do you think vape?
- 4) What are the biggest problems with children vaping?
- 5) What are the health risks with children vaping?
- 6) Do you think children understand the health risks of vaping?
- 7) Why do you think this?
- 8) What role does school take in preventing children vaping?
- 9) What else could a school do to educate children about vaping?

Task 3: Closed and open questions

A closed question will require a predetermined response. An example of this is question 1 above which requires a YES, NO, MAYBE response from participants: Do you think vaping is a problem with children?

An open question, on the other hand, gives participants freedom to answer as they want. An example of this is question 4 above: What are the biggest problems with children vaping?

However, question 4 could be turned into a closed question by the researcher giving the participants limited options with which to answer. For example, 'Choose one of the following: Health; Sleep; Anti-social behaviour; Addiction; Sanctions in school; Money'. Giving limited options and using closed questions means the data you collect is easier to analyse. However, it also means you might not fully capture the thoughts of your participants.

- 1. Read through your questions and number them in the order you think they should appear in the survey. Make sure the order is logical.
- 2. Have a look at your mind-map and highlight closed questions in one colour and open questions in another colour.
- 3. For your closed questions, decide what options you want to give your participants.

For example, this could be YES/ NO, or AGREE/DISAGREE. Equally it could be a list of items, as in the example above. Finally it could a Likert scale of 1 to 5. An example of a Likert scale is where:

1 = Strongly Disagree and 5 = Strongly Agree, with 2 = Disagree, 3 = Neither Agree nor Disagree, and 4 = Agree.

Task 4: Producing your survey

- 1. Now write down your survey questions in order and review them by thinking about:
 - a. Are they logically ordered?
 - b. Is the survey too long?

Participants might not complete very long surveys. Try to limit yourselves to 10 questions.

- c. Are the questions clear enough for your participants?
- d. Will the responses to your questions be easy to analyse?

Here it should be noted that closed questions are easier to analyse. However, this does not mean that you should not ask open questions, as these can help you to understand why your participants think as they do.

2. Think about the opening of the survey and the ethics of informed consent. Write a short paragraph explaining why you are asking your participants to complete the survey and what their data will be used for.

For example: We would like you to complete this short survey, which is part of a wider project looking at how to educate children about vaping. Your responses will be collected anonymously and will help us to confront the problem of children vaping. Thank you.

3. Think about your opening questions. Do you want to add a short question to gather some information about the participants?

This could include: What is your current job? How long have you been doing this job?

- 4. Now complete your survey and try it out by piloting it with someone in your class. If they struggle with any aspect of the survey, ask them why and make revisions.
- 5. You are now ready to use your survey to collect data. If your survey will be sent to different participant groups, think about whether you need different versions for different groups.

Reflection

Now you have completed your survey, can you explain why your survey is good and how it will enable you to answer your research question?

Worksheet 7: Writing an Interview Schedule

Task 1: Recapping

- 1. Write down your research question.
- 2. Write down the different participant groups you want to interview to answer your question.
- 3. Discuss whether you need different interview schedules for different participant groups. Discuss why/ why not.
- 4. Discuss how you will ensure your approach to interviewing and your interview question will be ethical and respect the rights of your participants.

Task 2: Developing interview questions

- 1. Write down your research question and one of your participant groups in the centre of a piece of paper.
- 2. Now create a mind map of questions you can ask that participant group to help you answer your main research question. Aim for at least 6 questions.

For example, if your research question is 'How can we educate children about the health dangers of vaping?' and the participant group is teachers, the questions you might ask teachers could include:

- 1) Do you think vaping is a problem amongst children?
- 2) Why do you think this?
- 3) What percentage of teenagers do you think vape?
- 4) What are the biggest problems with children vaping?
- 5) What are the health risks with children vaping?
- 6) Do you think children understand the health risks of vaping?
- 7) Why do you think this?
- 8) What role does school take in preventing children vaping?
- 9) What else could a school do to educate children about vaping?

Task 3: Structuring your interview and selecting your interview approach

A **closed question** requires a predetermined response. An example of this is question 1 above which requires a YES, NO, MAYBE response from participants: Do you think vaping is a problem with children?

An **open question**, on the other hand, gives participants freedom to answer as they want. An example of this is question 4 above: What are the biggest problems with children vaping?

- 1. Read through your questions and number them in the order you think they should appear in your interview schedule. Make sure the order is logical.
- 2. Have a look at your mind-map and highlight closed questions in one colour and open questions in another colour.
- 3. Count them up. How many open questions do you have? How many closed questions do you have?

If you have more closed questions than open questions, your interview approach will be 'structured' and very similar to a survey. You are likely to go through your questions in order, without responding to what your participants say, and this will give you an overview of their thoughts and feelings about the problem.

If you have more open questions than closed questions, your interview approach will probably be 'semi structured'. Participants will respond to your open questions in different ways and you will be able to actively listen to their responses and have the flexibility to ask follow-up questions. A 'semi structured' interview is less like a survey and more like a dialogue. A 'semi structured' interview can help you to understand not only what people think but why people think as they do.

- 4. Think about your research question and your participants and decide whether you want your survey to be structured or semi-structured. Justify your decision for this and revise some of your questions if you feel they are either too open or too closed for the structure you have chosen.
- 5. Now think about your participants and whether you want to ask your questions to an individual participant or to a small group (typically 4-6 participants).

Individual interviews are easy to record, with one group member asking the questions and another acting as a note-taker. Individual interviews also give the participant time and space to explore their understanding of a problem. However, some participants may be shy and not say much.

Group interviews are difficult to note down, and some participants may dominate, with others finding it difficult to make their voices heard. However, other participants may prefer a group situation and feed off the ideas of

- others to participate more than they would in an individual interview.
- 7. Now decide how many interviews you will do.
- 8. Finally, decide whether you are going to record the interviews or make notes during interviews. If you are going to record the interviews, decide how you are going to transcribe them.

Task 4: Producing your interview schedule

1. Now write down your interview questions in order and review them by thinking about:

6. Decide whether to conduct individual or group interviews and justify your decision.

- a. Are they logically ordered?
- b. Are there too many questions?

 Your participants might be very busy and you should be able to tell them how long the interview is likely to last. Maybe limit yourselves to about 5 questions so that the interview is about 15 minutes long.
- c. Are the questions clear enough for your participants?
- d. Are your questions ethical? Could any of your questions upset your participants?
- 2. Think about the opening of the interview and the ethics of informed consent. Write a short paragraph explaining why you are asking your participants to be interviewed and how their data will be used.

For example: We would like you to take part in a 15 minute interview, which is part of a wider project looking at how to educate children about vaping. Your responses will be recorded and transcribed anonymously so that if we write about what you say, you will not be identifiable. Your participation is voluntary and you can withdraw your data after the interview, should you choose to do so. Thank you.

3. Think about your opening questions. Do you want to add a short question to gather some information about the participants?

This could include: What is your current job? How long have you been doing this job?

- 1. Now finish writing your interview schedule and try it out by piloting it with someone in your class. If they struggle with any of the questions, ask them why and make revisions.
- 2. You are ready to use your interview schedule to collect data. If your interview schedule will be used with different participant groups, think about whether you need different versions for different groups.

Reflection

 Now you have completed your interview schedule, what have you learnt about some of the key decisions that researchers will make when writing an interview schedule?

Worksheet 8: Writing an Observation Sheet

Task 1: Recapping

- 1. Write down your research question.
- 2. Write down the different participant groups you want to observe to answer your question.
- 3. Discuss whether you need different observation sheets for different participant groups. Will you be looking for different behaviours in different groups? Why or why not?
- 4. Discuss how you will ensure your observations are ethical and respect the rights of your participants.

Task 2: Developing observation categories

- Write down your research question and one of your participant groups in the centre of a piece of paper. Also
 write down the setting where you plan to observe your participants (please note that your participants must be
 aware that they are being observed).
- 2. Now create a mind-map of questions relating to behaviours that you might observe to answer your main research question. Aim for at least 5 questions.

For example, if you are researching the problem of children vaping, you might choose to observe pupils in a Personal Development lesson about vaping. Some of the questions you might ask yourself when observing the behaviours of the pupils in the lesson could include: How engaged are the pupils in the lesson? How many pupils answer the teacher's questions? Do the pupils discuss vaping seriously in their groups? What do pupils say about why children might vape? What do pupils think about the dangers of vaping? What did pupils learn during the lesson?

Task 3: Structuring your observation sheet and selecting your approach

1. Read through your questions and number them in the order you think they should appear on your observation sheet. The order might reflect the order in which you expect behaviours to occur; or it might be about putting similar behaviours next to each other.

For example, when observing a lesson about vaping, it is logical to put the questions about what the pupils say in the lesson next to each other as follows:

Do the pupils discuss vaping seriously in their groups?

What do pupils say about why children might vape?

What do pupils think about the dangers of vaping?

2. Have a look at your mind-map and highlight closed questions in one colour and open questions in another colour.

A **closed question** will require a predetermined response. An example of this is: 'How many pupils answer the teacher's questions?'

An **open question**, on the other hand, allows the observer more freedom to note down and interpret what is happening. An example is: 'What did pupils learn during the lesson?'

- 3. Count them up. How many open questions do you have? How many closed questions do you have?
 - If you have more closed questions than open questions, your observation approach will be 'structured' and quantifiable. You will probably be able to use your observation notes to describe in numbers how many pupils contributed to the lesson, how many were engaged, how many learnt something new about vaping etc. If you have more open questions than closed questions, your observation approach will probably be 'semi structured'. A 'semi structured' observation sheet might capture some behaviours you can quantify, but it will also capture other behaviours that you will need to describe using sentences. For example, in answer to the question 'What did pupils learn during the lesson?', you might write a range of responses: 'Pupils learnt about the effect that peer pressure can have on children vaping. They learnt how addictive vaping is...'
- 4. Think about your research question and your participants and decide whether you want your observation sheet to be structured or semi-structured. Justify your decision for this and revise some of your questions if you feel they are either too open or too closed for the structure you have chosen.

Task 4: Producing your observation sheet

- 1. Write down your survey questions in order and review them by thinking about:
 - a. Are they logically ordered?
 - b. Are there too many questions?
 - It is very difficult to observe lots of things at the same time. Try to limit yourself to 5 observation questions.
 - c. Are your questions relevant? Are you likely to be able to answer them through your observations?
 - d. Are your questions ethical? Could any of your observations upset your participants?
- 2. Think about the start of your observation and the ethics of informed consent. Write a short paragraph at the top of your observation sheet, which you can read to your participants to explain why you want to do the observation, what data you will collect, and how it will be used.
 - For example: We are conducting a project looking at how to educate children about vaping. We would like to observe this lesson so that we can understand and note down what you learn about vaping. You will not be named in this and your participation is voluntary. If you prefer not to be observed, please let us know and we will not make any notes about your participation in this lesson. Thank you.
- 3. Now write down your observation questions, leaving a sizeable gap between questions so that you can write down your observation notes. Where you have open questions, make sure you leave a bigger gap for your notes.
- 4. Finally, think about how many Changemakers will be doing the observing and how many participants you will observe. With closed questions, it may be possible, for example, for one Changemaker to observe a whole class of participants; with open questions, on the other hand, one Changemaker may only be able to observe a small group of participants.
- 5. You are now ready to use your observation sheet to collect data. If your observation sheet will be used with different participant groups, think about whether you need different versions for different groups.

Reflection

Now you have completed your observation sheet, what have you learnt about some of the key decisions that researchers will make when writing an observation sheet?

Worksheet 9: Using a Creative Method

Task 1: Recapping

- 1. Write down your research question.
- 2. Write down the different participant groups you want to engage with a creative method.

Task 2: Choosing your creative method

- 1. Decide which creative method or methods you would like to use to answer your research question with your participant group.
 - Creative methods are often used with younger participants as they are inclusive and fun. They can help to create a safe space for participants to express themselves and explore potentially sensitive problems.
 - Creative methods fall into 3 categories: writing; visual; and performance.

These 3 categories are listed below. They are illustrated using an example where children are participants exploring the problem of vaping.

- a. Creative writing. Children may not want to talk about the problem of vaping, especially if they have vaped themselves. To explore a question of 'Why do young people start vaping?', you could ask your participants to write a short scene from the point of view of someone who decides to vape for the first time. This scene might include what the vape looks like (i.e. how the product is marketed at children) and what peers say to encourage others to vape. Equally, if you were exploring the question of 'What are the health risks of vaping?', you could ask participants to write a diary entry from the point of view of the same character 20 years in the future. You could ask them to imagine the character has been vaping all this time and that the diary entry should capture what vaping has done to them.
- b. The visual arts. Some participants might prefer expressing their thoughts and feelings through drawing, painting, collage or sculpture. You could take the same questions above and ask your participants to explore these through one of these media. For example, to answer the question 'What are the health risks of vaping?', you might ask participants to paint a picture of a person who has been vaping for 20 years. Or, to answer the question 'Why do young people start vaping?', you could ask young people to create a collage.
- the drama lessons you have in school and some of the drama techniques you have learnt. You could easily use some of these techniques with your participants to explore your research question. For example, to answer the question 'What are the health risks of vaping?', you could put participants into pairs and ask one to pretend to be a health expert. The other participant could them hotseat them about the health risks of vaping. Or, to answer the question 'Why do young people start vaping?', you could put participants into groups of 4 and ask them to create three freeze frames to dramatise the moment when a child starts vaping. (N.B. unlike writing and visual methods, performance methods may require video recording or very good observational note taking!)
- 2. Justify why you have chosen this method or methods. In your justification, you should talk about:
- How it is suitable for your participant group;
- · How it is ethical;
- How it will help you explore your research question.

Task 3: Designing your creative method

- 1. Write down your research question and one of your participant groups in the centre of a piece of paper.
- 2. Now create a mind-map of questions you would like to explore through creative method(s) to answer your main research question. Aim for about 3 questions.
- 3. For example, if you are researching the problem of children vaping, the questions you could explore with children through creative methods might include: 'What are the health risks of vaping?', and 'Why do young people start vaping?'
- 4. Now look at the creative method(s) you decided to use in Task 2 and see if you think the questions on your mind-map can be explored through the creative method(s) you have decided to use. If they don't quite match, either change your questions or your creative methods.
- 5. Now copy a blank version of the table below. Complete the table for up to 3 creative methods. In the final column, you should identify if you will use this creative method as part of another method.

Examples have been given based on a research project about the problem of children vaping.

| Questions | Creative method | Description of method | Part of another method? |
|--------------------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| What are the health risks of vaping? | Performance: hotseating | Participants will work in pairs. One will be a doctor and the other will hotseat them by asking questions about the health risks of vaping. | No. |
| Why do young people start vaping? | Visual: collage | Individual activity. We will provide participants with images of vape products and young people and ask them to create a collage about why young people start vaping. We will encourage them to add words to their collages. | Yes. This activity is part of a group interview. |
| | | | |

Task 4: Using your Creative Method

- 1. Write out a paragraph to elicit the informed consent of your participants.
- 2. You should explain your project, what you want your participants to do, and why you want them to do this. You should also explain that their participation is voluntary and that they will remain anonymous when you write about what they did.
- 3. Pilot your creative method or methods, either with Changemakers in your group or other Changemakers in your class.

Reflection

What are the advantages of using creative methods over traditional methods with specific participant groups?

Worksheet 10: Analysing Data

Task 1: Recapping

1. Copy a blank version of the table below to provide an overview of the data your Changemaker group has collected.

Examples have been given based on a research project about the problem of children vaping.

N.B. If you are unsure about types of questions (open and closed questions), ask your teacher for Worksheet 6 and read Task 3.

| Participant group | Research methods used | Data collected | Type of questions used | Type of data collected | Approach to data analysis |
|----------------------|--------------------------|---------------------------|---------------------------|------------------------------|---------------------------|
| Children | Surveys | 30 completed surveys | Open and closed questions | Qualitative and quantitative | |
| Teachers | Interviews | 3 interview transcripts | Open questions | Qualitative | |
| Children | Creative writing | 6 creative writing pieces | Open questions | Qualitative | |

Have a look at the column 'Type of questions used'. If you have used open questions, you will have collected qualitative data; if you have used closed questions, you will have collected quantitative data.

Task 2: Choosing your approach to data analysis

1. Read the information below about the 3 main approaches to data analysis. Use this information to complete the final column in the table above by identifying your 'Approach to data analysis'.

Descriptive analysis

If you have used closed questions in your research methods, then you will have collected quantitative data. This could have been through survey questions, interview questions or observations. One of the ways in which you could analyse this quantitative data is through descriptive analysis: describing what your data tells you.

For example, 30 child participants were asked in a survey whether they agreed that vaping was a health risk. 25 responded 'Strongly Agree' that vaping was a health risk; 5 responded 'Agree' that vaping was a health risk. You can use your mathematical knowledge to describe this information as a percentage: 100% of children (30 out of 30) either Agreed or Strongly Agreed that vaping is a health risk; 83% of children (25 out of 30) Strongly Agreed that vaping is a health risk; 17% of children (5 out of 30) Agreed that vaping is a health risk.

You could then use your mathematical knowledge to present this data visually, perhaps as a bar chart or pie chart. This can help your readers by giving them a visual representation of your descriptive analysis of your data.

Thematic analysis

If you have used open questions in your research methods, then you will have collected some qualitative data. This could have been through survey questions, interview questions, observations or creative methods. One of the ways in which you could analyse this qualitative data is through thematic analysis: identifying and describing the key themes in your data.

For example, 3 teachers were interviewed about how best to prevent children from vaping. Whilst each participant said something slightly different, they all talked about the importance of educating children about the dangers of vaping in school. You also noticed that when the children were asked the same open question in the survey, many of them spoke about the importance of being educated about the dangers of vaping.

To do a thematic analysis, you should:

- Go through your notes or quotes and highlight some similar points in the data in different colours.
- Think about a way of describing these similar points. This will be the name for your theme.
- Go through your highlighting. How many themes do you have? You should aim for around 3-5 themes.
- Take a piece of paper and list the key quotes or notes under each theme heading.
- Think about if you need to change any of the names for the themes to best capture what people have said about your research topic.

The fact that you have different participants saying similar things gives a trustworthiness to your analysis. Trustworthiness means that your findings are based on your data and not just made up!

As in the example below, you should anonymise your participants by replacing their real names with a number (or a pseudonym).

Theme 1: The importance of education

'Personal development sessions should be used to explore the dangers of vaping with children' (Teacher 1)

'There needs to be more space in the curriculum to explore this important topic with children' (Teacher 3)

'I think we should talk about it more in tutor time' (Child A)

'Assemblies would be good' (Child D)

Narrative Analysis

If you have used creative methods or methods like interviews or observations that enable you to understand the thinking or behaviour of individual participants, then you could use narrative analysis to construct and present their stories about your group's chosen problem.

For example, you might have asked 6 children to write creative stories about why children vape. Although the stories are fictional, they are powerful; they used the lived experiences of children to capture many of the reasons why children start vaping.

You decide, therefore, to take the 3 most powerful stories and edit them down into 3 short narratives about vaping. Because you really want the stories to grab your reader, you give yourselves a limit of 250 words per story. Here is an example of the beginning of one of those stories, where all participants are anonymised.

I never really thought about vaping until one my friends started. She had this pink vape, pink and shiny, and it fitted perfectly in the palm of her hand. I don't know why, but I wanted to hold it and once it was there in my hand like a smooth pebble, my friend told me to 'Take a pull.' So I did...

Alternatively, you could take elements from each of the 6 stories to create a new story, which best captures what is happening in all of the stories.

NB: It should be pointed out that just because narrative analysis involves writing stories, it doesn't mean that the stories you construct must come from creative methods. You could easily, for example, write a story based on what you observe participants doing or based on what participants say in an interview.

Task 3: Analysing your data

- 1. Now start analysing your data. If you plan to analyse your data using different approaches, divide this up amongst your group. For example, one group might focus on quantitative data and descriptive analysis; another group might focus on qualitative data and thematic analysis.
- 2. Share your analysis of the data with your group. What have you found? What would you say are your key findings? To what extent does your analysis help you answer your research question?

Reflection

• What advice would you give to a new Changemaker about how to analyse data they have collected?

Worksheet 11: Identifying Key Findings and Key Actions

Task 1: Recapping

- 1. Remind yourself of the problem your group initially identified and the research question you came up with.
- 2. Now read through and talk about your analysis of the data. What does your analysis of the data tell you about the problem your group identified? How does your analysis of the data help you answer your research question?

Task 2: Identifying key findings

1. Read the table below, which uses the example of the problem of children vaping to identify key findings. The example identifies 5 key findings from a project where data was collected from children and adults and then analysed using different approaches.

| Problem | Research Question | Key Findings | Key Actions | Partners |
|-----------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------|----------|
| Children vaping | How can we tackle the problem of children vaping? | Children say they are attracted to vaping by the packaging, flavours and marketing | | |
| | | Children say that peer pressure is a key factor in their decision to vape | | |
| | | Children and adults identify how some shopkeepers sell vapes to children who are underage | | |
| | | Children and adults both feel that more should be done in school to address health issues relating to vaping | | |
| | | Children and adults agree that the government needs to regulate vaping | | |

- 2. Now copy out a blank version of the table and start filling it in by writing down the problem you identified and your research question.
- 3. Based on your discussion of your analysis of your data, complete column three of the table above by identifying no more than 5 Key Findings from your research project. Your Key Findings should consider all of the data you collected and analysed from different participant groups.

Task 3: Identifying Key Actions

1. For each of your Key Findings, discus the potential actions you could take.

For example, for the Key Finding 'Children and adults both feel that more should be done in school to address health issues relating to vaping', a key action could be to 'Produce information leaflets for schools about the dangers of vaping'. Or it could be, 'To run assemblies and Personal Development workshops in our school about the dangers of vaping'.

When thinking about your Key Actions, make sure the actions match the strengths of your Changemaker group. You should also make sure the actions are feasible by thinking about how long you have to work on the project, who would work on each action, and who might support you.

2. Based on your discussion, complete column 4 of the table, 'Key Actions'.

N.B. some of your Key Findings might share the same Key Action.

Task 4: Identifying Partners

 To make your project as impactful as possible, it is vital that you work with partners. These can include: teachers within your school; businesses in your local community; parents of the school; other students with specific skill sets; your local councillors or MPs; professionals working in your local communities; services in your local community.

For each Key Action you identified, discuss who you could partner with to undertake this action and ensure that change occurs.

For example, by addressing the Key Finding that 'Children and adults both feel that more should be done in school to address health issues relating to vaping' through the Key Action 'Produce information leaflets for schools about the dangers of vaping', you could partner with a graphic designer.

Or, 'To run assemblies and Personal Development workshops in our school about the dangers of vaping', you could partner with the teacher who leads Personal Development in your school.

- 2. Based on your discussion, complete column 5 of the table, 'Partners'.
- 3. Now decide how you will contact your listed Partners. This could be by email, by letter or through a discussion.
- 4. Write your contact letters or emails, or outline what you will say verbally.

In terms of content, make sure you:

- Introduce your Changemaker group;
- Explain the problem you are addressing, why you are addressing it, and how you are addressing it;
- Explain why you would like them to become a Partner;
- Explain what being a Partner will involve (i.e. how much time they will need to spend on your project and what you want them to do);
- Explain the difference that their participation as a Partner will make.

In terms of the way your write, make sure you:

- Address your partner formally, using their title (e.g. Mr/Mrs/Ms) and surname;
- · Use a formal style of writing, avoiding slang, and abbreviations;
- Sign off with 'Yours sincerely' (if you know their name) or 'Yours faithfully' if you do not.

Reflection

Thinking back on your whole research process, which steps have been particularly significant in helping you to identify the actions you will now take?

Worksheet 12: Evaluating the Impact of Your Actions

Task 1: Recapping

- 1. Think back to Worksheet 4 and make a list of the different types of research methods you were asked to choose from. If you can't remember, ask your teacher for a copy of Worksheet 4.
- 2. Discuss whether you could use any of these research methods to evaluate the actions your Changemaker group plans to take.

Task 2: Planning evaluation activities

 Read the table below, which has been completed using the example of the actions taken by a Changemaker group to tackle the problem of children vaping.

| Action | Partner involvement | Evaluation method |
|---------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Circulate leaflets to local secondary schools about the dangers of vaping | Graphic designer produced leaflets | Survey for students to complete through QR code on back of leaflet. The survey will focus on what they learnt from the leaflet and how it might inform their future behaviour. |
| Whole year group assemblies at our school | Head of Year to set up assemblies | Short interviews with students and teachers at the end of assembly. The interviews will focus on what they learnt from the leaflet and how it might inform their future behaviour. |
| Deliver Personal Development sessions in School | Personal Development teacher to set up sessions | Observations of student engagement. The observations will capture how students engage in the activities. |
| Poster campaign in local shops to warn against underage vaping | Shop owners to display posters | Verbal survey to be conducted with shoppers in shops when they see the posters. The verbal survey will ask shoppers how effective the poster is to dissuade young people from vaping. |

2. Now copy out a blank version of the table. Complete the table for your own actions and how you will evaluate them.

If you want to be reminded about different research methods, ask your teacher for Worksheets 6, 7 & 8.

Task 3: Creating evaluation methods

- 1. Read through the evaluation methods your group has decided to use to evaluate the impact of your actions.
- 2. Now negotiate who will create each method. The methods could include a survey, an interview schedule, or an observation sheet.
 - You can recap how to design these different methods by looking at the following worksheets: 'Worksheet 6: Surveys'; 'Worksheet 7: Interviews'; 'Worksheet 8: Observations'.
- 3. Make sure each evaluation method is ethical. This includes your participants knowing what data is being collected from them, why it is being collected, and how it will be used.
 - To recap on research ethics, ask your teacher for 'Worksheet 5: Ethics'.
- 4. Now pilot your evaluation methods with other Changemakers.
- 5. Once you are happy with your evaluation methods, use them to evaluate the impact of your actions.

Task 4: Evaluating the impact of your actions

- Once you have completed your actions and collected evaluation data, use 'Worksheet 10: Analysing Data'
 to decide how you will analyse this new data you have collected. The 3 main approaches you have been
 introduced to are: descriptive analysis; thematic analysis; and narrative analysis. Think about which of your
 actions were particularly impactful and how you know this.
- 2. Use your evaluation of your impact to identify future actions your group might take to continue to address the problem you identified.

Reflection

• Which aspects of your prior learning were you able to draw upon to plan, design and use your evaluation methods?

Worksheet 13: Sharing Your Project

Task 1: Remembering your Changemaker story

1. In your groups, discuss the different stages you have undertaken in your research project. Think back to the start. What problem did you identify? Why was this problem important to you? How did you find out more about this problem and potential solutions?

What did you do next?

Use your project Worksheets to help you to remember.

2. Now create a timeline of your project.

As an example, on the far left-hand side of the timeline, you could write *Identified Problem* and the date. On the far right-hand side of the timeline, you could write *Evaluated Impact* and the date.

Task 2: Identifying your audiences

- Think about your project, the problem you identified, and the different participant groups you worked with.
 Now write down a list of different audiences with whom you would like to share the story of your research
 project.
 - N.B. This will probably include your participants but may also include other groups.
- 2. Read the table below, which has been partially completed using the example of a project undertaken to tackle the problem of children vaping.

| Audience | Key information to share | How to share it |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Secondary school | Overview of our project | |
| children | Our impact | |
| | Key recommendations for children about peer pressure, resisting marketing, and health implications of vaping | |
| Secondary school | Overview of our project | |
| teachers | Our impact | |
| | Key recommendations for assemblies and Personal Development lessons | |
| Families | Overview of our project | |
| | Our impact | |
| | Key recommendations about the dangers of vaping and how home and school can support children | |

3. Copy a blank version of the table and use it to identify different audiences with whom to share your research story.

As a guide, limit yourself to no more than 3 audiences.

Task 3: Sharing your stories

- In your groups, discuss how best to share your stories with different audiences. Think about the kind
 of media that each audience might prefer. This could include written reports, newsletters, online blogs
 and video-based social media stories. Also think about the strengths, knowledge and skills held by your
 Changemaker group. This can help you to decide which media to use.
- 2. Now complete the third column of the table above.
- 3. Finally, delegate tasks within your group and then share your story with your different audiences.

You might like to use a version of the structure below for your research story:

- i. The problem
- ii. What we found out about the problem
- iii. Our research question
- iv. Our participants
- v. What we did with our participants
- vi. How we made sure our research was ethical
- vii. The data we collected
- viii. How we analysed our data
- ix. What we found out and what actions we decided to take
- x. The impact of our actions
- xi. Our recommendations to you
- xii. Our next steps
- 4. Now create different versions of your project story for your different audiences. Be mindful of the language that you use for your different audiences.
- 5. Show your content to other Changemakers, both in your group and in your class. Invite their feedback, by asking them:
 - 1. Is the story of the project clearly communicated?
 - 2. Is the language used appropriate for the audience?
 - 3. Is the impact of the project clear?
 - 4. Are recommendations made for the target audience? And, are the recommendations suited to the target audience?
- 6. Make any revisions based on the feedback you receive, before sharing your story with your different audiences.

Reflection

Have you communicated your project differently to different audiences? How is communication different? Why
is it different?

Worksheet 14: Reflecting upon your Changemaker Journey

Task 1: Remembering your Changemaker Journey

- 1. Remind yourselves of your Changemaker Journey. This has involved you:
 - Identifying a social problem
 - Generating data to explore the problem
 - Analysing data
 - · Taking action
 - Evaluating action
 - Sharing research

Task 2: Identifying how you have changed

- 1. Looking at the different stages of your journey, make a list of all skills, competencies and knowledge that you have developed along the way. Ask yourselves the questions: What have I learnt? How have I changed? How have I developed? What have I gained?
- 2. As Changemakers, you have engaged in a type of research sometimes referred to as Youth Participatory Action Research (YPAR for short).

Research into YPAR has shown that young people tend to develop skills, competencies and knowledge in 4 key domains:

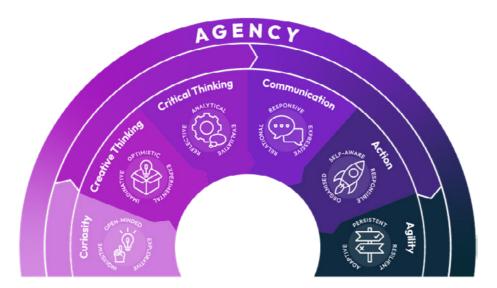
- Intrapersonal competency development: this means that young people who engage in YPAR develop the ability to become independent learners;
- Interpersonal competency development: this means that young people who engage in YPAR develop the ability to become collaborative learners;
- Cognitive competency development: this means that young people who engage in YPAR develop the ability to think differently, to problem-solve, to think critically about social issues;
- Affective skill development: this means that young people who engage in YPAR become become more empathetic to others, and more motivated and engaged in their studies.

Have a think about whether you have developed any of these competencies or skills. If you have, add them to your list.

3. Future Anything support teachers to delivering YPAR in schools in Australia. Future Anything have found that students develop 'agency' through engaging in YPAR.

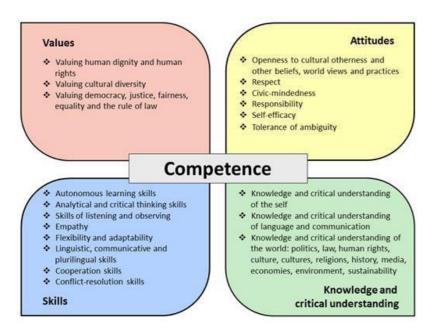
Agency is defined as the ability to take action.

Future Anything have also found that 6 key capabilities enable students to have agency: curiosity, creative thinking, critical thinking, communication, action, and agility.



Have a read of the Future Anything diagram. If agency, or any of their 6 capabilities are relevant, add them to your list.

4. As your research has impacted on your school and/or local community, you are likely to have developed Democratic Competences identified by the European Council.



Have a read of their diagram above and if any of the Democratic Competences are relevant, add them to your list.

5. Now copy the table below. In the left-hand column, list the ways in which you have changed or developed throughout your journey; in the right-hand column, give an example of how this change or development occurred.

| How I have developed | Example |
|----------------------|---------|
| | |
| | |
| | |
| | |
| | |

For example, in the left-hand column you could write 'I developed my collaborative learning skills'; in the right-hand column you could write 'This was developed through discussing ideas at each stage of the project in our Changemaker group. This involved listening to one other's ideas, taking them on board, and negotiating and agreeing our next steps.'

As another example, in the left-hand column you could write 'I developed my research skills'; in the right-hand column you could write 'These were developed through undertaking secondary research to shape our research question and then undertaking primary research to answer the question'.

Task 3: Identifying future targets

- 1. Share your tables amongst your Changemaker group.
- 2. Have a think about whether there are any skills or competencies you would like to work on in the future. Also think about whether there is more knowledge you would like to learn. Now set yourself up to 3 targets for your future development.

If you decide to continue with your Changemaker projects, it may be you can achieve these personal targets through your project. If not, it may be you can achieve these personal targets in other studies or extracurricular activities.

Either way, setting yourself targets for the future will make you an even more effective Changemaker!

Make sure you keep these tables safe along with a copy of your findings. This will support your future work and/or UCAS application, providing excellent evidence of the skills you have developed and what you've achieved. Remind your teacher to contact York St John University to ensure that you receive your certificate of achievement.

Further Information



Acknowledgements

The Guide is the result of a collaborative project between York St John University and NextGenLeaders.

Here is some information about the contributors:

- Tom Dobson Tom is Professor of Education at York St John University, with an interest in participatory research and creative writing.
- Charlotte Haines Lyon Charlotte is Associate Professor of Education at York St John University with an interest in participatory and democratic research.
- Becks Wheatley Becks is the Programme Manager for NextGenLeaders, specialising in youth participation projects, with a focus on community engagement and impact.
- Alice Little Alice is a PhD student at the Institute for Social Justice, York St John University. Working alongside children and young people, her research explores the creation of co-research spaces.
- Julia Dobson Julia is a PhD student at the Institute of Education, University College London. Her research explores care and collaborative research projects in schools.
- Matthew Green Matthew is a Lecturer in Education at York St John University with an interest language, discrimination and educational spaces.
- Isobel Clare Isobel is a Postdoctoral Researcher at the Institute for Social Justice, York St John University, with an interest in participatory, community-focused research.

The writing of this Guide would not have been possible without the thoughts and feedback of our expert Advisory Board. We would like to thank:

- Adam Gillett
- Madeleine Holt
- Paula Huuska
- Hilary Lowe

We would also like to thank Professor Matthew Reason and The Institute for Social Justice at York St John University for supporting this project.

Sources of Further Support

If you are interested in finding out more about how to run YPAR projects with young people in schools, the following websites will be helpful to you:

- NextGenLeaders: https://www.nextgenleaders.org.uk
- Future Anything: https://futureanything.com
- High Quality Project Based Learning: https://hqpbl.org

References

Council of Europe (2018). *Reference Framework of competences for democratic culture*. Available from: https://www.coe.int/en/web/reference-framework-of-competences-for-democratic-culture.

Dobson, T. (2023). Competency and affective skill outcomes for 11–19- year-olds through progressive and reconstructionist pedagogies: a systematic review. *Educational Review*, DOI:10.1080/00131911.2023.2222236.

Dobson, J., Dobson, T. (2021). Empowering Student Voice in a Secondary School: Character Education through Project-Based Learning with Students as Teachers. *Teacher Development*. 25(2), pp.103-119. https://doi.org/10.1080/13664530.2020.1865442.

Haines Lyon, C., Clare, I., Holmes, A., and Dobson, T. (2025). Navigating Co-creation in Participatory Ethnographic Youth Research: Flexibility, Intensity, and an Ethical Path Towards Meaningful Collaboration. In: *Sage Methods.* London: Sage.

Haines Lyon, C., Little, A., Dobson, E., Glover, O., Patterson, J., Telford, J., & Noret, N. (2024). Toilet talk: using a students as researchers approach to problematize and co-construct school toilet policy and practice. *Gender and Education*, 36(7), 801–816. https://doi.org/10.1080/09540253.2024.2389108.

Future Anything (2025). https://futureanything.com/.

Green, M., Dobson, T., and Haines Lyon, C. (2025). 'Student voice is not as important compared to teachers/adults': critical capacity building for co-curricular youth participatory action research. *Quality Education for All.* 10.1108/QEA-07-2024-0063.

OECD. (2022). *The OECD learning compass 2030*. Retrieved October 11, 2022, from https://www.oecd.org/education/2030-project/teaching-and-learning/learning/.

OECD (2020). PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?, PISA, OECD Publishing, Paris, https://doi.org/10.1787/d5f68679-en.

OECD (2017). PISA 2015 Results (Volume V): Collaborative Problem Solving, PISA, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264285521-en.

OECD (2014). PISA 2012 Results: Creative Problem Solving: Students' Skills in Tackling Real-Life Problems (Volume V), PISA, OECD publishing. http://dx.doi.org/10.1787/9789264208070-en.







