Research Skills

Introductory Skills for Social Researchers

Morgan Macdonald | Aung Zaw Myo

Teacher's Book

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(၂) Research Skills: Introductory Skills for Social Researchers, Teacher's Book

Teacher's Book Contents

Welcome to the *Research Skills* Teacher's Book

On these pages, you will find some basic information about how this book has been designed and the best ways to use it. You may want to read these notes before beginning to teach from the course.

About This Course

Research Skills is a basic introduction to the knowledge and skills necessary for social research. The book follows the four-step research process, which includes the following steps:

- Step 1: Develop research questions.
- Step 2: Find accurate information.
- Step 3: Analyse the information and conclude.
- Step 4: Share your findings.

The first two chapters introduce the research process, research questions and research approaches. Chapters 3-7 cover the ethics of research and four methods for data collection: surveys, interviews, focus groups and observations. Chapters 8 and 9 explore the basics of analysis of research data and the final step, the communication of research, is covered in chapter 10.

This course has exercises and activities to promote better research skills practice, and real life case studies of social research in Myanmar are woven throughout the book.

Aims of the Book

1. This course introduces adult learners to foundational knowledge for social research, with a greater emphasis on primary research.
2. It aims to demonstrate the research process and guide learners through their own research project. As students progress through the book, they should begin to get a greater understanding of how, for example, carefully developed data collection tools and procedures, make research accurate and credible.

3. It is designed to encourage students to think critically and to practise important skills that are useful for social researchers and students, and for adult learners generally.

Structure of the Book

The book is split into ten chapters and each chapter begins with chapter learning goals and a glossary of key terms.

Chapter Themes and Learning Goals

The major knowledge and skills goals of chapters are outlined at the beginning of each. You can discuss these with students before starting the chapter, ask students to reflect on them after each chapter or, ideally, do both. This will help students to monitor their own learning.

Glossary

At the back of the book, there is a Myanmar-English glossary of key technical vocabulary used in the text that students can refer back to. Glossarised words appear in **bold** in the text on their first use.

Structure of Chapters

Each chapter has several sections and subsections, with each focusing on a main topic. Each section contains a number of standard components for ease of teaching. They are Previews, Exercises, Activities, Discussions and Case Studies. Additionally there are Your Research Project Sections and, at the end of the book a Final Research Project.

Often, only one or two pages from the student's book (preview, content, exercise and activity, case study and discussion) will be sufficient for an hour-long lesson.

Teaching with This Book

When teaching using this book, make sure to read the text and do (or think through) the previews, exercises and activities yourself before presenting them in class. Doing these things first will increase your familiarity with the content and with giving instructions for the activities in the class. It will also help you be better prepared for any possible questions that students might have.

This teacher's book contains step by step instructions for teaching the content and, in many cases, answers or possible answers to many of the questions and additional background notes on some of the harder-to-understand concepts.

Where 'Answers' are provided in this teacher's book, there is usually an expected correct response, although exact wording might vary. If 'Possible Answers' are supplied, there is a range of correct responses, and the ones given are examples to guide the teacher.

Students' answers will vary if they are based on opinion or experience. Questions which are based on students' own experience or opinion do not usually have either answers or possible answers.

Using *Previews* in the Classroom

Previews introduce each section and subsection of a chapter. They are designed to activate students' prior knowledge and stimulate their interest in the topic.

You can use the previews to start a lesson. When introducing a new topic with a preview, you may want to get students to close their books in the preview so they do not just repeat the information that is already on the page.

Using *Exercises* in the Classroom

Exercises check students' understanding of the most important information as they work through each section of the book. Key knowledge goals are listed in the learning goals at the start of each chapter.

You may want to ask students to answer exercise questions immediately after reading the related text. You may also want to walk around the class observing students answering the questions, so that you have an idea of how much of the text they have understood.

You can vary how you manage exercises in classes. For example, you might allocate responsibility for answering different questions to different members of a group. Group members then discuss whether it is a correct answer. After groups have discussed the questions, elicit answers from different groups.

When students are answering exercise questions, encourage them to give brief answers in their own words, and discourage them from restating entire sentences directly from the text.

It is often easy to develop secondary questions from one exercise question which will help students engage with and think more deeply about the topic. You can plan some further questions in advance. If you do this, you can pass the secondary questions based on the original to another student, pair or group. For example, 'why?' or 'what is another example of…?'

Using *Activities* in the Classroom

Activities encourage the learning and application of useful social research skills. Key skills goals are listed in the learning goals at the start of each chapter.

Activities allow students to explore topics covered in chapters in more depth. They usually include some open questions to encourage thinking beyond what is directly presented in the text, and encourage students to think critically and creatively and to participate in group work.

Some activities will take longer than others. Thinking them through or doing them yourself in advance can be useful when planning your lesson.

Extra Activities

Additional activities can be found in some sections of this teacher's book. They allow you and your class to explore the topics to a greater depth. They can be used in a variety of ways.

Using *Discussions* in the Classroom

Discussions provide opportunities to reflect upon learning and discuss broader questions relating to the topics they have studied.

An important aspect of managing class or group discussions is to get students to think critically by providing reasons for why they support a particular claim or point of view. Class discussions have the potential to take a long time, so you may want to allocate a time limit, and bring the discussion to a conclusion when that is reached.

Using *Case Studies* in the Classroom

Case Studies relate to the main topic. They are examples of the topic in action, or of how the topic relates to Myanmar.

Case studies usually consist of one Myanmar-focused example of the topic and several questions. You can use these in classes if you have time, so that students can apply skills and concepts from the course to real-life situations.

Using *Your Research Projects* in the Classroom

Your Research Projects encourage students to apply skills from the section to their own research ideas.

Some students might choose a research project at the beginning of the course, and use that throughout this series of activities. Other student might use a different example of research for each Your Research Activity task. Either approach is fine.

Doing a *Final Research Project*

There is a Final Research Project at the end of the book.. This involves students applying tools and skills from throughout the course to a step by step research process.

Students might use the same research project as from the 16 'Your Research Project' activities, or choose a new one. If you like, you can use this as a final assessment for the course. In the teacher's book is a suggested grading rubric to help you if you wish to mark students' work upon completion.

Sources

We have compiled a list of the major sources that were used in the writing of this book. It appears on page 135 of the student's book.

■ Mote Oo Education staff run a book stall at the Media and Communication for Development Forum in 2019.


Get Ready
to Teach

CHAPTER 1: Introducing Research

1.1 What Is Research?

Note: Social science is often contrasted with natural science.

- Natural science deals with the physical world and how it works. It includes chemistry, biology and physics. Research in natural science uses observation and experiment (with an emphasis on repeating experiments) to understand how the world works. For example, through research using repeated experiments in biology, doctors can find medicines to effectively treat sickness such as malaria.
- Social science tries to understand human society and how it works. Social science topics include economics, politics, geography and sociology. This book focuses on social research – research about social science topics. Social researchers usually do not conduct experiments, but instead, use other methods, like surveys or interviews, etc., to collect information to interpret what is happening in society. In this book, the word 'research' refers specifically to social research.

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. – to find out more about the world around us
   – to develop new technologies, ideas or medicines to help people
   – to find out more about people's thoughts and ideas

ACTIVITY: Getting Information

- Students imagine that they are planning to set up weekend English classes for local children. They want make sure their classes meet the needs of their community.

1. Individually, they categorise each question.

Answers:

i. a, d
ii. b
iii. c

2. In pairs or groups, they list other questions for each category.

Possible answers:

i. – What subjects do other schools teach?
– What problems do other schools have?
– What resources do other schools have?

ii. – What English skills do local people use in their daily lives?
– Why do students want to learn English?
– What teaching styles work best with local students?

iii. – How much will it cost to set up?
– Should I charge fees or make it free?
– What buildings are available?
– What teachers are available?
– What are the available teachers' skills, and what training might they need?

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Answers:

1. True
2. False – social research focuses on people, organisations and society.
3. False – Researchers collect information that they analyse and draw conclusions from.
4. True

ACTIVITY: Useful Answers

- In pairs or groups, students list groups who might be interested in the results of each piece of research.

Possible answers:

1. car manufacturers and sellers, the Ministry of Transport
2. health experts, government, people in Yangon, environmentalists
3. teachers, principals, parents, the Ministry of Education, child welfare organisations

Note: 'Out-of-school children' refers to children who are of school age but not attending school, because their families can't afford to send them to school, because they have to work or because they don't have families, etc.

ACTIVITY: Topics and Questions

1. In groups or as a class, students brainstorm what research – data, statistics, reports, etc. – that they know about for each topic.
2. They list possible research questions for each topic.

Possible answers:

a.
- What are the major causes of road accidents?
- Where are the most dangerous places to drive?

b.
- What do people know about the causes of air pollution?
- Where is air pollution the biggest problem?

c.
- Why do children drop out of school?
- What impacts does leaving school have on employment opportunities?
- What is the best way to encourage children to stay in school?

1.2 The Research Process

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

- questions
- ideas
- problems
- solutions

ACTIVITY: Match the Photo to the Research Step

1. Students decide which picture (a-d) matches which step (1-4) of the research process. Some pictures may match more than one step
2. In pairs, they explain their answers.

Possible answers:

a. **Step 1**, with a group of people brainstorming a question.
- **Step 2**, with a researcher collecting data from a group of people..

b. **Step 4**, with a researcher sharing their findings.
- **Step 3**, with a researcher analysing data.

c. **Step 2**, with a researcher collecting data.

d. **Step 2**, with a researcher collecting data.
- **Step 3**, with a researcher analysing data.

CASE STUDY

- Students read the case study.

1. They identify each step in the research process.

Answers:

Step 1: Develop research questions: 'What are the spending habits of consumers in Myanmar?'

Step 2: Find accurate information: Research was conducted in three main cities: Yangon, Mandalay and Naypyitaw.

Step 3: Analyse the information and conclude: They identified types of goods that people bought, and their reasons for buying them (analyse). People in Myanmar are spending more money on personal products, such as dish washing soap, floor cleaner, fabric softener, hair conditioner and shower gel, which are not strictly necessary (conclude).

Step 4: Share your findings: The findings were released in a report.

2. They discuss the questions in groups.

Possible answers:

a.
- to help inform people that want to start a new business
- to help inform new research into consumer behaviour
- to help inform government on how to encourage new businesses
- to help inform businesses who sell (or want to sell) products in Myanmar about business opportunities in the country
- to advise the government about the changing spending habits of Myanmar people

Note: A research project may have one research question or more than one. The number of research questions will depend on what the researcher wants to find out through their research. In general, it is better to have fewer research questions than to have many. More than five research questions may make the research difficult to complete.

EXERCISE

- Students read the activities (a-d) from the research process.
- They decide which activity matches which step (1-4) in the research process.

Answers:

a. Step 4: Share your findings
b. Step 2: Find accurate information
c. Step 1: Develop research questions
d. Step 3: Analyse the information and conclude

ACTIVITY: Following the Research Process

- Students read the scenarios.
- In groups or as a class, they decide which scenario does not follow the research process, and why.

Answer:

2. 'Perceptions of China – National Study' does not follow the research process because it does not do Step 3 (Analyse the information and conclude).

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

2. You will not have any information (or any useful information) to analyse, so you will not be able to do the research properly.

3. You will have information but you will not have analysed or summarised it. It will not be very useful in helping people to understand more about what you are researching.

4. People won't know about your research and it won't improve understanding or have a positive impact.

1.3 Developing Research Questions

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

- Talk to people about what the most important issues are.
- Read books, websites and other information about your topic.
- Brainstorm possible questions.

ACTIVITY: Factors That Influence Your Research

1. In groups, students discuss how each factor could influence your choice of a research topic.

Possible answers:

Academic Area of Study

- If you have studied a topic a lot, then you know more about it and can research it more effectively.

Job

- You may be required by your work to do research on something specific.
- The organisation that you work for may focus on a specific issue.
- The job might give you knowledge, skills and experience about a topic.

Issues That Are Important in Your Community

- You are more likely to get support if you research issues that are important to your community.

Interests

- If you are interested in something, you are more motivated to do research on it.

Funding

- Funders might employ you to research a specific topic.
- If a topic is getting attention, it is easier to get money to support the research costs.

2. Groups add more factors to the list that might influence their choice of research topic.

Possible answers:

- what research has already been done
- how easy it is to do the research
- current events

EXERCISE

- Students put the topics in the funnel diagram, with the broadest at the top and the narrowest at the bottom.

Answers:

1. a
2. f
3. g
4. j
5. d
6. c
7. i
8. h
9. e
10. b

Extra Activity: Focused or Broad?

Students discuss whether they think it is better for beginner researchers to use very focused or broader research questions.

EXERCISE

- Students choose the best answer to each question.

Answers:

1. c
2. c
3. d

Your Research Project: Research Topic

Note: This is the first of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

These tasks are spread throughout the book to encourage students to apply new knowledge and skills to a possible research project of their own.

Use these tasks to guide students through the process of designing and implementing a research project.

- Students think of a research topic that they are interested in.

1. They consider what background research they might do to find out more on this topic.
2. They narrow the topic down, until they have a manageable, realistic research topic.

- Check that their research topics are not too broad or vague.

3. In pairs, they discuss the background research and narrowing process that they might use to identify a research topic.

EXERCISE

- Students read the lists of research questions and decide which list is easier to research.

Answer:

List 2, because the research questions are narrower.

EXERCISE

- Students decide whether each research question is clear or unclear, and why.

Answers:

1. Unclear – 'people' is too broad, and what is meant by 'a natural disaster like Cyclone Nargis' is confusing – does this only mean a cyclone? What about floods or earthquakes?
2. Clear
3. Clear
4. Unclear – 'problems' could mean many things including discrimination or difficulty with language. 'Minorities' could mean ethnic groups, religious groups, LGBT people, the elderly, disabled people, etc.

EXERCISE

- Students rank the questions in order from the broadest to the most focused.

Answers:

5, 2, 4, 1, 3

ACTIVITY: Focus and Rewrite

1. Individually, students rewrite the research question so that it is clear, focused and researchable.

- Whatever the answer is, it should have a specific location, a defined group who have an opinion about the skills for youth, and a specific group or age range within youth. The type of skills could also be more specific, for example work skills, academic skills, communication skills, etc.

2. In pairs or groups, they compare questions and decide on the best one.
3. As class, decide on the ideal wording for the research question.

Possible answers:

- What do Lashio high school teachers think are the most important skills for youth to have?
- What do township administrators in Sagaing Region consider the most important skills for school leavers to have?
- What skills do public health officials in Myeik think important for 11th standard students to develop?

ACTIVITY: Evaluating Research Questions

Note: In a smaller class, you might like to reduce the number of topics, or allow students to choose one topic each.

1. In groups of four-six, students divide the list of topics, giving each topic to a group member or pair.
- Students write research questions for their topics.
2. Groups edit each research question to make it clear, focused and researchable.
- They write a list of their final research questions on flipchart paper, or write the questions separately on small pieces of paper.
- They stick their questions on the wall.
3. Students go around the room looking at other groups' research questions.
- They write suggestions to improve each question beside the questions.
- Groups read the feedback on their questions.

CASE STUDY

- Students read the case study.

1. They briefly summarise the research.

Possible answer:

To research the impact of social media on academic performance. The research collected data using a survey tool and the analysis was done with SPSS software.

2. They answer the questions.

Possible answers:

a. – It was an important and useful topic for students at his university.
– Students at his university are easy to access.
– It was possible with the time and resources available to him.

b. – He made sure participants understood what the research was about.
– All participants willingly agreed to be involved.

c. – Using SPSS, because it is a complex computer program.
– Persuading people to participate in his research if they are busy.
– Making sure participants understood the research.

Your Research Project: Clear, Focused and Researchable?

Note: This is the second of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students evaluate their research question and decide whether it is clear, focused and researchable. They make any necessary changes.
2. In pairs, they check each others' research questions and give feedback on how they could be more clear, focused and researchable.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. – It is focused.
– It is useful for people/communities.
– It is possible to do the research to answer it.
– It has not been researched before.
2. – Yes, that will make it easier to do the research.
– No, you will learn new things by researching something you are not already interested in.

1.4 The Characteristics of a Good Researcher

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

1. – patient
   – well-organised
   – hardworking
2. – organising skills
   – interpersonal skills
   – writing skills
   – confidence
   – teamworking skills

EXERCISE

- Students match each scenario to the characteristics of good researchers (curious, analytical and systematic) from the previous text.

Answers:

1. Curious
2. Systematic
3. Analytical

EXERCISE

- Students read the profiles of the researchers, and answer the questions about each.

Answers:

1. a. the gender gap in mobile phone use in Myanmar
b. Myanmar colonial history
c. the impacts of Cyclone Nargis

2. a. – learning new things
b. – finding answers to important historical questions
– discovering new historical sources
c. – speaking to people to get a direct understanding of a situation

3. a. knowledgeable, open-minded, motivated
b. curious, open-minded, honest, has no biases
c. able to analyse a situation from different perspectives, unbiased, adaptable

ACTIVITY: Self-Reflection

1. Individually, students identify which of the researcher characteristics that have been discussed in 1.4 they feel that they have.
2. Students identify which researcher characteristics they need to improve.
3. In pairs, they compare their strengths and weaknesses as researchers.

ACTIVITY: Positives and Negatives of Research

1. Individually or in pairs, students decide whether each statement (in the yellow box) is talking about a positive or a negative of research.

Answers:

a. positive
b. negative
c. positive
d. negative
e. negative
f. positive
g. negative
h. positive
i. negative
j. positive

2. Students read the researchers' comments (i-x in the grey box) and match the comments with the positives and negatives. Comments can match to more than one positive or negative.

Possible answers:

i. a, j
ii. a, f, j
iii. d, e
iv. c, e, g
v. c
vi. d, e
vii. f
viii. a, c, h
ix. b, e
x. i

Note: Research cannot predict with certainty what will happen in the future. However, research done in the present can show us what is likely to happen in the future, even if it cannot provide an answer about what will certainly happen.

3. In groups, students discuss whether they agree or not with comments i-x.
4. Groups list more positives and negatives of doing research.

Possible answers:

Positives:
- Research can help solve problems.
- Research can educate people.

Negatives:
- Research can take a long time.
- Research can annoy people.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:
- So that the results of your research are accurate and reliable.
- So that other people can follow your research process and get similar results.

CHAPTER 2: Research Approaches

2.1 Primary and Secondary Research

Note: Here are some links to organisations that do primary research in Myanmar:

https://emref.org/en

https://asiafoundation.org/where-we-work/myanmar/

https://www.burnet.edu.au/countries/2_myanmar_burma

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. – research on social media
   – research on other countries or global issues
   – research about events in the distant past
2. – research about people's opinions and behaviours
   – research about communities and their issues

EXERCISE

- Students answer the questions.

Possible answers:

1. Someone has already collected the data so the researcher doesn't have to spend time or money collecting data themselves.
2. Other research that has already been done about the topic you plan to research.
3. Secondary research is sometimes called desk research because it is done from places like libraries, museums, the home or an office, often at a desk.

EXERCISE

- Students decide whether each scenario is an example of primary or secondary research.

Answers:

1. Primary
2. Secondary
3. Secondary
4. Primary
5. Primary
6. Primary
7. Secondary
8. Primary (Note: In this example, although the prisoners have written the poetry, it has not been previously collected or analysed, therefore the research counts as primary research.)

ACTIVITY: Primary and Secondary Research

- Students read the scenarios.

1. Individually or in pairs, they identify the primary and secondary research in each scenario.

Possible answers:

a.

Primary:
- talking with teachers
- talking with local employment agencies
- talking with NGOs

Secondary:
- school alumni records
- NGO report on rural unemployment

b.

Primary:
- interview with families
- interview with elderly people
- interviews with patients and staff in care homes

Secondary:
- NGO reports on laws in Myanmar
- previous governments' health policies
- survey data about the health problems of people in Myanmar

2. In pairs or groups, they list additional possible primary and secondary research that could be done for each scenario.

Possible answers:

a.

Primary:
- Talk with students and community leaders.

Secondary:
- Read NGO/government reports about employment in Mon state.
- Read government records on dropout rates.

b.

Primary:
- Do interviews with community leaders and local NGOs and CSOs.

Secondary:
- Read books or articles about community-based approaches to healthcare in other areas/ countries.

Your Research Project: Primary and Secondary Research

Note: This is the third of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students make lists of:
   - primary research that they might need to do to answer the question;
   - secondary research that they might need to do to answer the question.
2. In pairs, they compare and discuss their lists.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. When researching something that is a current event and affects people in your community. You can speak with those people. For example to research the effects of a new development project like a road or factory, to research people's living conditions, to get opinions or experiences about events in the community or to get opinions about access to health or education.
2.
   - When the events you are researching happened a long time ago and have already been researched and written about before.
   - When there are no people you can speak to who experienced the events.
   - If the events in your community involve government, NGOs, businesses, etc., and there is useful and reliable secondary information available, like online reports.

2.2 Quantitative Research

Note: Quantitative methods are often used in large research projects. If students undertake quantitative research they should aim to collect numerical data (such as from surveys) limit their bias (objectivity), conduct all parts of the research process consistently (reliability), and aim to create tools (such as surveys) that accurately measure what they are researching (validity). However, the results of the small research projects they do in this introductory course are unlikely to apply (be generalisable) to larger populations.

For more information about quantitative research see:

https://www.skillsyouneed.com/learn/quantitative-and-qualitative.html

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

1. Quantitative data is numbers, including measurements. Qualitative data is mostly words that describe things.
2. They show different approaches to doing research. Some research questions need to be answered with numbers, counting and measuring (quantitative research). Others need words (qualitative research) because words can give you details that numbers cannot, and may describe situations better.

EXERCISE

- Students match each scenario to one of the characteristics of quantitative research – *numerical data*, *generalisability* and *objectivity*.

Answers:

1. Objectivity
2. Numerical data
3. Generalisability

Note: For more information about reliability and validity see:

https://socialresearchmethods.net/kb/relandval.php

ACTIVITY: Reliable and Valid?

1. Individually or in pairs, students read the scenario and decide whether it is reliable or not.

Answer:

Not reliable, because the researcher is asking questions in a different way to different groups.

2. Students list possible ways to make the scenario more reliable.

Possible answer:

The scenario could be more reliable if the researcher asked the different groups of people the same questions at the same places and times.

3. Students read the scenario and decide whether it is valid or not.

Answer:

Not valid, because the researcher is only asking teachers in Sittwe and not in other parts of Rakhine State.

4. Students list possible ways to make the scenario more valid.

Possible answer:

The scenario would be more valid if teachers in areas other than Sittwe were also asked the questions.

Extra Activity: Define the Terms

1. In one sentence, students define reliability.
2. In one sentence, students define validity.
3. They compare their definitions with an online or paper dictionary.

CASE STUDY

- Students read the case study.

1. They identify the characteristics of quantitative research in the case study.

Possible answers:

Numerical data: The researchers used a survey that asked participants to rank issues in order of importance. (The findings say that 49.6% of people prioritised the rule of law and 64.7% of participants think that corruption is a continuing problem.)

Generalisability: The survey was conducted across all 14 states and regions in Myanmar, which makes it more generalisable. However, some older people were reluctant to respond.

Objectivity: People were asked questions about both positive issues, like access to education, healthcare, transportation and the rule of law, and also about negative issues like corruption and conflict.

Reliability: the same questions were asked in surveys in all states and regions.

Validity: The study was about knowledge of local governance. The questions tried to measure this through asking people about local village tract administrators, understanding of rule of law, conflict and provision of services like education, healthcare, transport and electricity.

2. Students think of possible challenges that the researchers might have encountered.

Possible answers:

- Some people (for example, older people, not being comfortable with doing surveys) or interviews which might be biased because more younger people were interviewed.
- People not being comfortable, or being scared to answer honestly, when asked questions about sensitive topics like laws, conflict, corruption or local administrators.

Your Research Project: Quantitative Research

Note: This is the fourth of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students identify any quantitative research that they might include in their project.

- Check that they are coming up with examples involving numerical data (such as might be generated by surveys).

2. They think of ways to make their quantitative research numerical, objective, reliable and valid.

- Check that they understand these concepts – they can refer back to the explanations and examples on pages 30-31. For example:
  - **Numerical:** by using surveys to ask 'how many' and 'how much' questions such as numbers, or percentages of the population that do/don't have, do/don't do something, etc;
  - **Objective:** their quantitative research should measure both positives and negatives and should not allow their own biases to influence the research;
  - **Reliable:** by doing the research consistently and systematically each time;
  - **Valid:** the quantitative research methods that they use are accurately measuring what they are supposed to measure.

3. In pairs, they discuss their quantitative research plan and any difficulties that they could have with making it objective, reliable and valid.

DISCUSSION

- As a class or in groups, students discuss the question.

Possible answers:

- research asking 'how' or 'why' questions about a topic
- research that is trying to understand details about the context or background to a situation
- research that is trying to understand the reasons for people's beliefs or actions
- research that wants to understand different people's perspectives on an issue

2.3 Qualitative Research

Note: For more information about qualitative research see:

https://socialresearchmethods.net/kb/qual.php

If students undertake qualitative research they should aim to collect in-depth data (such as from interviews or group discussions), reflect the views of participants (subjectivity), keep detailed notes of all parts of their research process (confirmability) and check the accuracy of their data by checking their findings with research participants (credibility).

Confirmability and credibility (as well as reliability and validity) are important for implementing high quality research. However, these are complex concepts and students may find them confusing. It is not essential for beginner researchers to have a complete understanding of these – they will encounter them in the future if they continue to learn more about social research.

For more information about confirmability and credibility, see:

https://socialresearchmethods.net/kb/qualval.php

PREVIEW

- Students answer, predict or guess whether the statements are correct or not.
- They read the text and check their answers.

Answers:

1. Incorrect
2. Correct
3. Correct

EXERCISE

- Students match each scenario to one or more of the characteristics of qualitative research (a-c, on page 34) – non-numerical data, in-depth data and subjectivity.

Answers:

1. Non-numerical
2. Non-numerical, In-depth
3. Non-numerical, Subjective

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Answers:

1. False – confirmability is about making sure that other researchers can do your research again to check to see if it produces the same results.
2. True
3. False – credibility is about checking that the results of the research are accurate from the perspective of the participants.
4. True

ACTIVITY: Confirmable and Credible?

1. Individually or in pairs, students read the scenario and decide whether it is confirmable or not.

Answer:

Yes, because details about methods, questions and interviews were included in the report.

2. Students read the scenario and decide whether it is credible or not.

Answer:

No, because the researcher did not present the findings to the participants to check if the results were accurate from their perspective.

CASE STUDY

- Students read the case study.

1. They identify the characteristics of qualitative research in the case study.

Possible answer:

Non-numerical data: The data included notes taken during the discussions and interviews and observations of body language and how people spoke.

In-depth data: The workshops with the women went for two days and questions asked about their personal experiences, priorities and hopes.

Subjectivity: The research asked for the women's experiences, hopes, priorities, views, feelings and needs, which are subjective.

Confirmability: The research report included details about the methods, workshop processes, discussions, interviews, questions, selection of participants, and analysis of the notes and observations.

Credibility: There is no mention in the case study text of if, or how, the findings were shared with the participants.

2. Students think of possible quantitative research that could be done on this topic.

Possible answers:

Surveys could be used to gather quantitative data about the participants' general backgrounds that was not about deep personal experiences. For example, the places they were displaced from, education, income, ethnicity, religion, etc. This information could be helpful to look for relationships between their backgrounds and their personal experiences.

Your Research Project: Qualitative Research

Note: This is the fifth of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students identify any qualitative research that they might include in their project.

- Check that they are coming up with examples involving non-numerical data (such as might be generated by interviews and observations).

2. They think of ways to make their qualitative research confirmable and credible.

- Check that they understand these concepts – they can refer back to the explanations and examples on page 35. For example:
  - **Confirmable:** by accurately recording details of how they do all steps in the research process.
  - **Credible:** by getting feedback from participants about the accuracy of the data that was collected from them and any changes or additional information they may want to add to it.

3. In pairs, they discuss their qualitative research plans, and any difficulties that they may have with making it confirmable and credible.

DISCUSSION

- As a class or in groups, students discuss the question.

Possible answers:

- good speaking and listening skills
- ability to build trust with participants
- patience, as data collection may go on for a long time
- flexibility, as conversations may change from one topic to another

2.4 Mixed Methods

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answer:

using both quantitative and qualitative methods together means that results from different methods – surveys, interviews, etc. – can be compared to see if they give the same results and are reliable.

EXERCISE

- Students match each example to either *quantitative research methods*, *qualitative research methods* or *mixed methods*.

Answers:

1. **Mixed methods:** The question could be asked about in interviews (qualitative) or in surveys (quantitative).
2. **Qualitative:** The photo is not quantifiable, it provides in-depth qualitative information.
3. **Mixed methods:** It uses quantitative method data (86.7% of respondents) and compares it to qualitative method data (…was also confirmed in our interviews).
4. **Qualitative:** Qualitative: What people say in interviews, about what they believe to be true, is qualitative (and subjective) data.
5. **Quantitative:** It is a survey question that provides numerical data.
6. **Mixed methods:** Informal conversations provide in-depth qualitative data. Age, gender and occupation could be asked in surveys and provide numerical quantitative data.
7. **Qualitative:** Observations are part of in-depth qualitative data.

ACTIVITY: Mixed Methods in Research

- Students read the examples of research on pages 33 and 37.
- In pairs or groups, they decide how each project might use mixed methods.

Possible answers:

1. The researchers could have used in-depth qualitative interviews to find out more about how people experienced problems in their community and reasons for why they believed that rule of law and corruption were important issues.
2. The researchers could have done a survey with the women IDPs to collect information such as their ages, numbers of children (if they had any) and locations where they had been displaced from.

ACTIVITY: Comparing Quantitative and Qualitative Research

1. Individually, students ask ten people the questions (1-4) and record the responses.
- They could ask their classmates, or do it for homework with family, friends or community members.
2. They organise and summarise the data.
3. In groups, they discuss their findings.
4. In groups, they ask three people the questions (a-c) and record their answers.
5. They organise and summarise the results.
- The qualitative interview questions will produce more information and students might struggle to organise it. Check to see that they are attempting to summarise and to identify patterns in the responses that they get.
6. As a class, they discuss the findings.
- They compare the responses that they got for the quantitative and qualitative research.
7. They discuss the questions.

Possible answers:

a. The first set of questions are closed and the second set is open. The first set of questions also requires participants to select pre-written answers, whereas participants can answer in their own words for the second set.

b. The first set of questions produces numerical data. The second set of questions produces detailed answers in words.

c. It is easier to organise the data from the first set of quantitative questions because there are only a limited number of responses to each closed question in the table. The responses can be added up to give numbers that can be compared. In the second set of data from the open qualitative questions there is a lot of information in the form of words that need to be read carefully to be understood and to look for patterns in the responses.

ACTIVITY: Questions in Mixed Methods Research

1. Students make a list with three quantitative and three qualitative questions in random order.
2. In pairs, they swap lists, and partners identify which questions are quantitative and which are qualitative.

DISCUSSION

- As a class or in groups, students discuss the question.

CHAPTER 3: Research Ethics

3.1 Harm

Note: For more information about research ethics: https://www.fhi360.org/sites/default/files/webpages/RETC-CR/en/RH/Training/trainmat/ethicscurr/RETCCREn/pr/Contents/SectionIV/b4sl32.htm

For more case studies of research ethics:

https://www.fhi360.org/sites/default/files/webpages/RETC-CR/en/RH/Training/trainmat/ethicscurr/RETCCREn/ss/CaseStudies/cspg1.html

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. – Individuals or communities might get in trouble with authorities if the research is on a sensitive topic (for example, research about illegal activities).
   – Research might cause problems between members of a community (for example, if it is about sensitive issues like politics or religion).
   – Research could cause problems for people if it takes up a lot of their time or if there are costs for them to participate in the research(for example, if they have to take time off from work or travel a long distance).
2. – To make sure their research does no harm to people/communities participating in the research.
   – To protect the identities of research participants.
   – To accurately collect data from participants and honestly report findings.

ACTIVITY: Predict the Possible Problems

- Students read the scenario.
- Individually or in pairs or groups, they discuss potential harm that might come from this research project.

Possible answers:

– The researcher could reveal people who use drugs to the university and to the government and they could get into serious trouble.
– The researcher may be taking photos of the students without asking their permission.
– The researcher is paying the students so that they might just make up information to get money.
– The students might use the money that the researcher is giving them to get more drugs.

ACTIVITY: Identify the Harm

1. In each scenario, students identify who is at risk of harm and the type of harm that could be caused by the research.

Possible answers:

a. – The researcher and communities might suffer legal harm, because land rights is a sensitive political topic.
– Social harm to relationships between people in the community (there are conflicts over land) if they found out the identity of other participants.

b. – The students might suffer social harm because publicly discussing bullying by others who might also be in the group discussion could make the situation worse.
– They might suffer psychological harm if they have to remember and talk about difficult experiences.

c. – The researcher and the band might suffer legal harm because filming the band at the demonstration might cause problems with authorities.

d. – The researcher might suffer physical harm in an accident on the road.

e. – The researcher might experience psychological harm from hearing so many sad stories each day.
– Participants might experience psychological harm if they have to recall very sad experiences.

f. – The researcher and the domestic workers might suffer physical harm from violence if their bosses are angry about the research.
– The domestic workers might suffer economic harm if they lose their jobs if the bosses get angry with them.

2. They identify ways to reduce the risk of the harm in each scenario.

Possible answers:

a. – Conduct interviews with one person at a time, and keep the identities of participants confidential.

b. – Don't continue or pursue a question with a student if talking about it makes them very upset.
– Avoid them naming other students.
– Interview students (especially if they have experienced bullying) individually about this sensitive topic rather than in a group discussion.

c. – The researcher should not join the demonstration or film the band at the demonstration (without their consent – where they have agreed in advance to him doing so). If he does have the band's consent to film them, he should not share the film with anyone outside the research project or share it online. (There is more about consent and confidentiality in the following section 3.2.)

d. – The researcher should find out about the road and weather conditions before traveling, try to travel as safely as possible and wear a helmet and protective clothing.

e. – Get advice from experts in psychology or experienced researchers for a plan of what to do if a participant does become very sad or upset during an interview. Provide contact details to participants for organisations that can provide counselling or support.
– Interview fewer people each day to reduce possible psychological harm to the researcher from hearing so many sad stories.

f. – The photos of workers who have been beaten should not be published.

3.2 Features of Ethical Research

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. They need to be informed about the research, any possible risks of harm, and possible benefits to their community.
2. Only the researchers know information about who the participants are or what information they provided for the research.
3. Because the findings of the research could influence the decisions of organisations or government that affect communities.

EXERCISE

- Students choose the best answer to each question.

Answers:

1. a
2. d
3. c

ACTIVITY: Identify the Problem

- Students read the scenarios.

1. In pairs or groups, they match the scenario to the lack of a feature of ethical research.

Answers:

a. Honesty
b. Informed consent
c. Confidentiality

2. They decide how the researcher in each scenario could do the research more ethically.

Answers:

a. The research would be more honest and accurate by including the data about businesses that were unsuccessful when using new internet technologies as well as the data for businesses that were successful.
b. The researcher should not include the students who refused to sign the consent letter in the research project. He should remove any data from them before the report is completed and published.
c. The researcher can make sure to only include information provided by the participant that is relevant to the research topic and not include any personal information that might make it easy to identify the participant.

ACTIVITY: Guidelines for Ethical Research

- In pairs or groups, students read the two examples of codes of conduct for ethical research.

1. They identify how they are similar.

Possible answer:

They both mention harm, and both indirectly suggest honesty in research (transparency in ESOMAR and quality of research in UNESCO).

2. They identify how they are different.

Possible answer:

ESOMAR indirectly suggests confidentiality (protect personal data)but UNESCO does not. UNESCO mentions the law but ESOMAR does not.

3. They read the list of guidelines (which have been developed for this book).

- They match the guidelines (a-f) to the codes of conduct.

Answers:

a. ESOMAR iii and UNESCO iii
b. ESOMAR i and ii
c. ESOMAR iii and UNESCO iii
d. ESOMAR iii and UNESCO iii
e. ESOMAR i and UNESCO i

4. In pairs or groups, they add more guidelines to the Ethical Research Guidelines list.
5. As a class, they make a class list of ethical guidelines for research projects. They can choose to use or change the existing examples if necessary.

- Put it on the wall. Encourage students to refer to it throughout the course.

ACTIVITY: Ethics in Practice

- Students read the scenario and answer the questions.
- Remind students to look for the types of possible harm (listed on pages 42-43) and features of ethical research (page 44) as criteria for answering this question about the case study.

Possible answers:

1. **Physical harm:** The researcher might face harm when travelling to the community. There could be physical danger to villagers if the authorities (or other groups) are not happy about the research taking place.

   Psychological harm: some of the farmers have experienced armed conflict in the past, so speaking to them about their experience could be upsetting.

   Legal harm: the researcher could get into trouble by travelling to politically-sensitive areas. Community members could get into trouble by talking about politically sensitive issues to a researcher.

   Social harm: the community has experienced armed conflict in the past, so speaking to the community about political issues could cause social conflict between community members who hold different political views or who support different political (or even armed) groups.

   Economic harm: the research could cause economic harm to the community if the research stops people from working, especially if the interviews last for a long time.

   Informed consent: the researcher would need to explain the purpose of the research, benefits to the community and any possible risks to all the participating villagers,and then ask for their consent to participating in the research.

   Confidentiality: the researcher should make sure to keep the information about the villagers' names, addresses and political beliefs confidential so they don't have problems with the authorities or with each other.

   Honesty: the organisation funding the research wants to show that people in rural areas are more interested in democracy. The researcher has to be careful to make sure the research honestly and accurately reflects what the people in the community say and not what the funding organisation wants. Not all of the community members speak Myanmar, so the researcher should also ensure their perspectives are represented in the research results as well.

2. The researchers should ask for consent at the beginning of interviews with community members after explaining the purpose of the research, benefits to the community and any possible risks of harm.

3. a. **Psychological harm:** This could be reduced by not asking about this question any further, and asking different questions, or by stopping the interview and allowing the participant to rest and choose whether they wish to continue with the interview.

   b. **Economic harm:** Don't force the community members to come to the report launch if it causes them too many problems. If possible, cover the costs of participants for travel and lost time at work.

   c. **Legal harm:** Community members might get into trouble if they did discuss political issues and could be identified by names or photos if the funding organisation provided the information to the authorities. This is also an issue of confidentiality and informed consent. Remove any information, such as names and photos. from the data that could be used to identify participants so their identities remain confidential. Informed consent from villagers would be required for the funding organisation to use the notes (with names and photos removed).

Your Research Project: Research Ethics

Note: This is the sixth of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students think of ethical issues or problems that they might face with their chosen research project (for example, ensuring confidentiality, physical and psychological safety of the participants and themselves, the quality of their research, any legal issues, etc.).
2. In pairs, they discuss the ethical considerations in their research projects.
3. They look at the list from the Guidelines for Ethical Research activity (on page 46) and discuss how these relate to their research project.

DISCUSSION

- As a class or in groups, students discuss the question.

CHAPTER 4: Surveys

4.1 Surveys

PREVIEW

1. Students read and answer the questions in the survey.
2. In pairs, they compare their answers.
3. As a class, discuss the questions.

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Possible answers:

1. True
2. True
3. False – an interviewer asks the questions and writes down the respondent's answers in a structured interview.
4. True
5. False – the respondent writes their answers in a self-completing questionnaire (or chooses from a limited set of answers that are offered).
6. False – a census is usually conducted by a government to find out information about all the people in the population of a country.

CASE STUDY

1-2. Students read the case study and answer the questions.

3. They read the survey questionnaire on page 134. In pairs, they perform a role play with one partner playing the ILO interviewer asking the questions from the structured interview questionnaire form on page 134 and the other playing the participant.

4. They swap roles and ask and answer the questions from the questionnaire again.

Answers:

1. To get accurate and reliable information about Myanmar's labour force.

2. A structured interview

CASE STUDY

- Students read the case study.

1. They answer the questions.

Answers:

a. students and teachers

b. – the importance of the skills to students and to teachers
– how much students' knowledge and ability with the skills had improved

2. Students complete the Mote Oo Education *Learning Skills* Student Survey questionnaire.
3. In pairs, they compare their answers.

CASE STUDY

- Students read the case studies on pages 54 and 55.
- They answer the questions.

Possible answers:

1. For 'A', the questionnaire could be used to quickly and easily get feedback from the workshop participants. For 'B', a benefit of using a questionnaire is that it could be used to get information about the entire population of the country.
2. – Both used questionnaires.
   – Both collected data about participants.
   – The information collected was used for decision making.
3. – The census survey collected data from a large group of people and the workshop survey was for a small group of people.
   – The census collected basic information about individuals and the workshop survey collected information about people's opinions.
   – The census data was used by the government and the workshop survey data was used by an organisation that is not a government (the United Nations).

DISCUSSION

1. As a class or in groups, students discuss the question.

Possible answers:

Differences: one is spoken, one is written. One requires two people to complete.

Similarities: both are used for survey research, both ask questions.

4.2 Making a Survey Tool

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. Basic information about the research and instructions.
2. The most difficult questions, and saying thank you.

EXERCISE

- Students put the questions (a-j) into the question topic categories (1-4) outlined on pages 56-57.

Answers:

1. a, j
2. b, c, e, g, i
3. d, h
4. f

ACTIVITY: Write Survey Questions

1. Students write examples of each of the four topics of survey question – personal; questions about attitudes and beliefs; questions about knowledge; questions about experiences.
2. In groups, students take turns reading out their questions while other group members identify the survey question topic that they belong to.

EXERCISE

- Students identify whether each question is open or closed.

Answers:

1. Closed (The answer is either yes or no.)
2. Closed (The answer is limited to within a certain number.)
3. Open (Responses to this, and the length of answers, will be different for each person.)
4. Closed (There are a limited number of types of transport that someone could get to work, e.g.: walking, bicycle, sidecar, motorbike, car, taxi, bus, train.)
5. Open (There are an endless number of possible websites to visit and people will all have different responses.)
6. Open (Each person can give a different response to this question.)
7. Closed (There are a limited number of possible times.)

ACTIVITY: Write Survey Questions 2

- Individually or in pairs or groups, students design examples of each question type. The examples must help answer the research question.

Possible answers:

1. Why do you study English?
2. Is maths an important skill? Yes / No
3. On a scale of 1-10 how important are IT skills?
   1 2 3 4 5 6 7 8 9 10
4. 'Community development is an important topic for my future.'
   1. Strongly disagree
   2. Disagree
   3. Neutral
   4. Agree
   5. Strongly agree
5. Rank the following in order of importance from 1 to 6, where 1 is least important and 6 is most important.
   - English
   - maths
   - science
   - IT
   - community development
   - social science

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. Research on law, economy and society in Myanmar. MSR also does market, social and environmental research.
2. A consumer behaviour trends survey finds out about what customers like, need or want, to help businesses develop new products or services.
3. **a.** is a question about experiences.
   b. is a question about attitudes, beliefs and values.
4. **a.** is a closed question.
   b. is a rank order question.

Possible answer:

5. Confidentiality. MSR follow this by keeping personal information collected through surveys private.

DISCUSSION

- As a class or in groups, students discuss the questions.

Extra Activity: Community Consumer Behaviour Trends Survey

1. In pairs or groups, students design a consumer behaviour trends survey on a topic that is useful for their school or community.
2. They trial this in the class.
3. If practical, they survey community members and report back to the class.

4.3 Populations and Sampling

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. lots of people; a percentage of the population; 100; 1,000; everyone

Note: Ideally, the amount of people surveyed would be sufficient that the results of the survey could be generalisable to the population as a whole.

2. Different groups that represent different parts of a community, such as men and women, different ethnic groups, old and young, community leaders, students, small business owners, migrants, etc. You should ensure that you get a sample of each.

EXERCISE

- Students choose the best answer to each question.

Answers:

1. b
2. a
3. b

EXERCISE

- Students match the populations (1-2) with the relevant criteria (a-h).

Answers:

1. b, c, d, g
2. a, e, f, h

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. active libraries in Myanmar
2. **a.** The library has a building that it can use.
d. People can borrow books from the library.
e. The library has staff that currently work there.
f. The library has a budget to buy books and pay staff.
j. The library has a collection of books that people can borrow and read.

Note: Some students may give, '*c. The library has access to the internet'*, as one of the criteria. However, that was not a criteria in itself for the library to be recognised as an 'active library' in the study. It was a resource the 'active libraries' were evaluated for, after they had been identified as an active library using the other criteria.

Your Research Project: Population

Note: This is the seventh of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students identify the population for their research and the eligibility criteria to be included within that population.
2. In pairs, they discuss their populations and their eligibility criteria.

Note: Random sampling methods are difficult to do properly. For beginner researchers, it is most likely that purposeful, convenience or snowball sampling will be more appropriate for their research projects. What is important for beginner researchers is to be accurate and honest in describing the people that participate in their research and how they were located.

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Possible answers:

1. False – to get a random sample you have to randomly choose, without any bias, people from the population, so they all have an equal chance of being selected.
2. True
3. False – random sampling is when participants are chosen from a population with equal chances of being selected and without bias.
4. False – purposeful sampling attempts to get responses from a range of different groups in a population. Snowball sampling relies on people's relationships so that they can introduce the researcher to other people who meet the criteria for inclusion in the research population.

EXERCISE

- Students decide whether each scenario is an example of random, purposeful or snowball sampling.

Answers:

1. Purposeful
2. Random
3. Snowball
4. Convenience

ACTIVITY: Analyse the Scenarios

- Students read the scenarios.

1. They identify what type of sampling is used.

Answers:

a. Purposeful
b. Snowball
c. Random

2. They describe why the researcher would have used the sampling method used in each scenario.

Possible answers:

a. They wanted to get interviews with people from different groups so that the research was representative of the wider population.
b. The researcher needed the farmers to introduce them to other participants because they know who is having land disputes and it would be hard to locate them without the introductions.
c. The researcher needs the list of households so they can select households randomly (such as one in every five households) from it so the sample is random and not biased.

3. They identify advantages and disadvantages of the sampling method that was used.

Note: Encourage students to think about what information they could get, and what information they might not be able to get in each scenario with participants selected using the sampling system described. You could use the answers to scenario a as an example to work through with the class.

Possible answers:

a. An advantage is that the researchers could learn about the different experiences of land conflict and the impacts on different groups. A disadvantage is that they might not get accurate data on how much of a problem it is for everyone in the community
b. An advantage of this is that the researcher would have a relatively simple way to collect data. A disadvantage would be that the research might not accurately reflect the wider situation in the community.
c. An advantage of this method would be that it would give information that reflects the population. A disadvantage is that some households might not want to take part.

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. households in the Dry Zones area of Myanmar, some of which send migrants and some of which do not
2. Convenience and purposeful sampling. It is convenience sampling because the research was conducted in townships where HelpAge International has worked so it would know people or have contacts already. It is purposeful sampling because the researchers chose the townships where they conducted the survey based on economic development levels and population sizes so they were comparable and they selected households that met their criteria.
3. Households with at least one migrant and households with no migrants.

Possible answer:

4. Snowball sampling would involve the researchers being introduced to one migrant-sending household and then being introduced to more of those by the people at that household, then doing the same with non-migrant-sending households.

   Random sampling would involve selecting households using a regular system such as choosing every 5th or 10th house from the household registries for the townships where they conducted the research. A problem with this is they might not know from the registry if a household was migrant sending or not until they surveyed them.

Your Research Project: Sampling

Note: This is the eighth of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

Note: Remind students to think carefully first about who or what the population would be in their research before deciding on their sampling approach.

1. Students decide what type of sampling approach would be most appropriate for their research project and how they would get that sample.
2. In pairs, they discuss how they would use sampling in their research project.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answer:

It requires a lot of work to do any sampling for any of the sampling methods. Effective and accurate sampling is very difficult and may not be possible for a lot of research in Myanmar. It requires accurate lists of the sample populations such as people, households, organisations, etc. to be available to use. Myanmar might not have many accurate lists, and lists can be difficult to get. Effective sampling in some areas can also be hard to do due to restrictions on access or because of conflict.

4.4 Writing and Administering your Survey

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. – Design and write your survey questions and questionnaire.
– Organise, plan when, from where, from who you will collect your data.
– Let people know that you will be visiting them to collect data.

2. – losing your data
– ethical issues
– rude people
– difficulty finding people to participate in your research
– difficulty finding people who fit the population and sampling criteria for your survey

EXERCISE

- Students match the guidelines (1-5) in the text) with the situations (a-e).

Answers:

a. 5
b. 3
c. 4
d. 1
e. 2

ACTIVITY: Before You Administer

1. Individually, students identify the problems with each survey question.

Answers:

a. mistakes – grammar and spelling errors
b. asking two questions at the same time
c. inconsistent (previous questions had different wording)
d. leading question
e. unclear (unnecessarily difficult wording)

2. Students rewrite the questions.

Possible answers:

a. Did you get news from television in the past week?
b. Did you get news from Facebook in the past week? | Did you get news from newspapers in the past week?
c. Did you get news from the radio in the past week?
d. Do you trust newspapers? Why or why not?
e. What other sources of news do you know about?

3. In pairs, students pilot the survey by reading their questions to a partner and answering their partner's questions. They make notes about questions that did not work well, or any ways that they might change the survey.
4. They join with another pair and compare notes about what works or doesn't, and how they might change the survey.

- If you like, discuss and decide upon the best wording for the questions as a class.

Your Research Project: Administration

Note: This is the ninth of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students consider how they would administer a survey if they used one for their research project. (For example, how would they contact participants, or arrange places and times to do the survey? Would they conduct the survey face to face, by post, online or telephone, etc.)
2. In pairs, they discuss how they would administer their surveys.

Extra Activity: Practise Your Survey Questionnaire

1. Students design a survey questionnaire based on their research project.
2. In pairs, they pilot their survey questionnaires and take notes.
3. They look back over their notes and think of ways that they might improve their survey questionnaires.

DISCUSSION

- As a class or in groups, students discuss the question.

Possible answers:

Face to face

Advantage: Can clarify anything that isn't clear.

Disadvantage: Expensive

Online

Advantage: Inexpensive

Disadvantage: Not everyone can read or has access to a computer.

By post

Advantage: Inexpensive

Disadvantage: Postal systems are sometimes unreliable.

By telephone

Advantage: You don't have to travel to talk to people.

Disadvantage: It might be difficult to clarify something, sometimes phone connections are bad.

CHAPTER 5: Interviews

5.1 What Is an Interview?

PREVIEW

1. In pairs, students interview each other about culture using the questions in the 'You and Your Culture' box.
2. They discuss questions a-c.

Note: Allow students 20-30 minutes to ask and answer the 'You and Your Culture' questions before moving to the discussion questions.

Possible answers:

a. They are open questions.
– They take longer to answer than closed questions in a questionnaire.

ACTIVITY: Advantages and Disadvantages of Interviews

1. Individually or in pairs, students decide whether each statement is an advantage or disadvantage of interviews, or both.

Answers:

a. Advantage
b. Disadvantage
c. Advantage
d. Both
e. Advantage
f. Advantage
g. Disadvantage
h. Both

2. In pairs or groups, they list more advantages and disadvantages of interviews.

Possible answers:

– During an interview you can clarify responses with the person (advantage).
– Some people might not feel comfortable discussing sensitive issues with a stranger (disadvantage).
– Interviews can be done face to face or over the phone (both).

CASE STUDY

- Students read the case study.
- They answer the questions.

Answer:

1. The survey asked basic personal facts about people (such as their age, gender, income and tobacco use), and about what they knew about the effects of tobacco use. The interview asked about peoples' perceptions (their thoughts, ideas and opinions) about tobacco use and its impacts.

Possible answers:

2. Interviews could get more in-depth information about why people smoke and their perceptions of the effects that it has.
3. People might feel uncomfortable talking about negative impacts of tobacco use on their families.
4. – What does your family think about your tobacco use?
   – If you didn't spend money on tobacco, how would you use that money?
   – What effects do you believe your smoking has on your family?

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. – when you need detailed information about personal or sensitive topics
   – when you want to know more about why or how people do or think something
   – when you want to know more about people's opinions, perceptions or beliefs
2. In all these situations you could not use surveys because you need to talk to people for a longer time and in a more in-depth way. There would be too many different answers and they would be too long to ask about in a survey.
3. – when you need information from lots of people in a short time
   – when it is difficult to travel to the location of the interviewee(s)

5.2 Interview Structure

PREVIEW

- Students look at the photos and discuss the questions.
- Write students' ideas on the board.

Possible answers:

- the settings – in a tea shop; in an office; sitting on the floor
- the numbers of people.
- In one photo, someone is writing down what is said in the interview. In the others, people are just listening.
- In one photo, someone is showing people something on a computer. In another, they are reading something out from a computer.

ACTIVITY: Interviews in Research Projects

- Students read the examples of interviews used in research projects.

1. They decide if each is structured, semi-structured or unstructured.

Answers:

a. Structured
b. Semi-structured
c. Unstructured

2. They decide if each is using the right tool for the situation.

- If relevant, they suggest ways it might be improved.

Possible answers:

a. Maybe not the right tool. A structured interview can be easy to complete and record the data for, especially with a large number of participants. However, less structured interviews might get interesting answers about underlying reasons for, and experiences of, child labour. Therefore, maybe the interview should have been semi-structured.

b. The right tool. Semi-structured interviews allow for the interviewer to get more information about things that the interviewee knows most about and ask follow-up questions, while still getting information from the key questions.

c. The right tool. An advantage of using unstructured interviews is that the researcher can have an in-depth conversation about the research topic with the interviewee (conducted through Facebook chats in this example). Also, it enables the interviewee to focus on what they consider important and the interviewer can ask them more questions about those issues.

ACTIVITY: Interview Roleplays

1. In pairs, students take turns to interview each other using the structured interview protocol. The interviewer asks questions and takes notes and the respondent answers the questions.
   - They swap roles and repeat.
2. They find a different partner and do the interview using the semi-structured interview protocol.
   - They swap roles and repeat.
3. They find a different partner, and do the interview using the unstructured interview protocol.
   - They swap roles and repeat.
4. In groups or as a class, they look back at their notes and discuss questions a-d.

ACTIVITY: Structured and Unstructured Interview Questions

- Individually or in pairs or groups, students write structured and unstructured interview questions for each research scenario.

Possible answers:

1. **Structured**
   - Do you grow potatoes?
   - Do you have a land ownership certificate?
   - Do you know about organic farming?

   Unstructured
   - What do you think is the best way to make money from farming?
   - Why do you grow potatoes?
   - How can the government support farmers?
2. **Structured**
   - Do you use computers at school?
   - On a scale of 1 to 5, how important are computer skills?
   - How often do you check your phone during class?
   - Is technology good or bad for learning?

   Unstructured
   - What do you think are the effects of technology on the classroom?
   - How do you use technology at school?
   - What is the relationship between social media and school?
3. **Structured**
   - Do you know about Myanmar labour laws?
   - Is the right to form a union protected by law in Myanmar?

   Unstructured
   - What laws do you think Myanmar should have for workers?
   - What laws protect Myanmar workers?

Extra Activity: Class Question Lists

1. Divide students into three groups, one for each scenario. Each group lists structured and unstructured questions for one of the scenarios on a large piece of paper.
2. Groups pass their papers to the next group. Groups add structured and unstructured questions for this scenario to the list.
3. Groups pass papers a final time, and add questions to the lists.
4. Put the class lists of questions for each scenario on the wall.
5. Discuss these questions and correct any that are wrong

DISCUSSION

- As a class or in groups, students discuss the question.

5.3 Interview Protocol

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. – Introduce yourself.
- Introduce the research.
- Speak slowly and clearly; be polite.
- Try to predict any concerns or confusion that might occur during the interview.
- Take your time.
- Take notes.

2. – You might ask the questions incorrectly.
- You might forget to take notes.
- You might get lost on the way to the interview.
- You might do something that might make collecting data not possible (such as arrive late or doing something offensive).

EXERCISE

1. Students match the questions (i-x) with the parts of the interview (a-c).

Answers:

i. b
ii. a
iii. c
iv. a
v. b
vi. b
vii. c
viii. b
ix. b
x. a

2. They put the questions in the correct order.

Note: There is no precise order for some of the questions. However, check that students have used a logical order that reflects which part of the interview the questions are from.

Possible answer:

ii, x, iv, v, ix, vi, i, viii, iii, vii

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. Women's experiences of abuse and violence from husbands and other men.
2. – The interviews were semi-structured.
   – They asked the least sensitive questions first and the most sensitive questions last.

Possible answers:

3. So that researchers were able to ask interview questions in a sensitive and respectful way.
4. They probably gave a careful and polite explanation of the research, ensured interviewees knew about confidentiality and privacy, knew that they didn't have to answer all the questions and knew that they could stop the interview at any time.
5. They probably thanked the interviewees and told them that if they didn't want their stories used in the research to contact the researcher. They reminded the interviewees about confidentiality and privacy. They provided women with information about organisations which provide support to sufferers of abuse.
6. Developing a project to support women in Yangon and Mawlamyine who are experiencing violence from their husbands and other men. Guiding further research about gender-based violence. Doing advocacy work to highlight this problem.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. – They could cause psychological harm to interviewees.
   – If the researcher gets inaccurate information, it might influence projects or policies that could cause negative impacts.
2. – During the opening, you might let the interviewee know that you will be discussing sensitive topics and that they don't have to answer everything.
   – During the closing of an interview, you might want to offer information that could support them if they were in a bad situation.

ACTIVITY: Roleplay an Interview

1. In pairs, one person interviews the other using the interview protocol.
   - Students should be able infer the 'purpose of the research' from reading the rest of the interview protocol, i.e.: students' knowledge about food safety and getting sick from food.
   - Check that they demonstrate interview skills and behaviours such as pausing, showing interest or repeating things if the other person does not understand the first time.
2. They swap roles and repeat the interview.
3. They discuss which questions they found easy to answer and which they found difficult, and the reasons why.

Your Research Project: Interviews

Note: This is the tenth of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students consider how interviews could be used in their research project, and if they would be an appropriate tool.
2. They decide what type of interviews they would use – structured, semi-structured or unstructured – and why.
3. In pairs, they discuss how the interviews would be relevant to their research project.

Extra Activity: Practise Your Interview

1. Students write some example interview questions that they might use in their research project.
2. In pairs, they ask and answer their interview questions, while taking notes.
3. They look back over their notes and think of ways that they might improve their interview questions.

DISCUSSION

- As a class or in groups, students discuss the questions.

CHAPTER 6: Focus Groups

6.1 Why Use Focus Groups?

Note: Researchers use focus groups to learn about how people interact with each other in a group setting and about the different and/or shared perspectives that people in a group may hold about a research topic. The way that people behave around others may tell the researcher something interesting. For example, if a researcher asks participants in a group how they are feeling, they are more likely to say that they are happy. If the researcher asks participants this in an interview, some might say that they are annoyed or unhappy. The researcher can infer that these research participants are hiding their feelings from their peers.

Focus groups can be interesting because researchers can learn new things by analysing what people say, and how they say those things, when others are present.

PREVIEW

1. In pairs, students discuss the question.
2. They join with another pair and discuss the question in groups.
3. They discuss the question as a class.
4. As a class, they discuss questions a-c.

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Possible answers:

1. False – a focus group may generate data that is different from an interview because the information comes from group discussions and also shows how people interact with each other in the group.
2. True
3. False – an interview involves one person and a focus group usually involves four to ten participants.
4. True

ACTIVITY: Advantage or Disadvantage

1. Individually or in pairs or groups, students read the comments and decide whether the speaker is talking about an advantage or a disadvantage of focus groups, or both.

Answers:

a. Advantage
b. Disadvantage
c. Both
d. Disadvantage
e. Both
f. Both
g. Disadvantage

2. Groups list other advantages and disadvantages of focus groups.

- Make a class list on the board.

Possible answers:

Advantages: Focus groups can be done with a large number of people. You can get a lot of information in a shorter period of time than interviews.

Disadvantages: One person might dominate the discussion in a focus group discussion. Some people might not want to be open about their thoughts because of the presence of someone considered to be higher status, or powerful, from the community.

Both: Some people may have arguments in focus group settings. Sometimes people enjoy debating a topic during a focus group.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

2. You could include one or more facilitators, a note-taker and a timekeeper.

6.2 Organising a Focus Group

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1.
- finding relevant participants
- contacting participants
- organising a time and place for the focus group discussion
- deciding how many participants you will have
- organising snacks and drinks
- encouraging discussions and input from and between participants

2.
- open questions
- questions that make people think a lot
- questions that are interesting
- questions that are relevant to the participants
- questions that generate conversations between participants

EXERCISE

- Students choose the best answer to each question.

Answers:

1. a
2. b
3. b

EXERCISE

- Students match the activity titles (1-6) with the descriptions (a-f).

Answers:

1. e
2. a
3. d
4. f
5. b
6. c

ACTIVITY: Improve the Focus Group

1-3. Individually or in pairs or groups, students read the focus group questions and answer the questions.

4. In pairs or groups, students think of and plan an activity that could be used in the focus group.

- For ideas, encourage students to look at the focus group activities in the previous exercise and the different question types from 4.2.
- They present their activities to the class and demonstrate them if possible.

5. Groups write notes or paragraphs, outlining what they would say to participants during the introduction to the focus group, the explanation of consent before it began and the closing of the focus group.

- Have some groups present one of their paragraphs (or notes) to the class.

6. In groups of five-ten, they practise their focus group discussions. Each group member takes a role.

- If you like, have them present their roleplays to the class.

Possible answers:

1. 'a' could be changed to, 'What conflicts between people are there in your community?'
   'g' could be changed to, 'What can you tell me about challenges to peace in your community?'
2. 'd' could be changed to 'What contributes to religious conflict in Yangon?'
   'e' could be changed to, 'How could you improve your relationships with people?'
3. 'f' could be changed to 'Describe a time that you helped to build peace.'
4. – Make a list of rules for people to follow to promote peace.
   – Rate a list of activities on a scale of how easy or difficult they would be to do.
5. **Introduction:**
   'Hello everyone. My name is Neo and this is Morgan. I will conduct the discussion about peace and Morgan will take notes. Please feel welcome to express yourselves freely during the discussion. We will be recording this discussion. This is only for the research and we will not share the recording or any personal information.'

   Consent
   'This research is about peace and we are interested in learning about how people experience peace. We will use this information to develop a project to work with communities in Yangon and Mandalay for peacebuilding. You don't have to answer any questions and, if at any stage you want to leave, that is okay.'

   Closing
   Thank you for coming today to talk about these issues. Does anyone have any final questions or comments that they would like to share? I will give each of you my card so you can contact me if you have any further questions.
6. In groups of five-ten, they practise their focus group discussions. Each group member takes a role.

- If you like, have them present their roleplays to the class.

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. 'Young people in Yangon's knowledge and experiences of finding work.'
2. The population was youth living in or on the outskirts of Yangon. The sampling methods used were purposeful and snowball sampling.
3. The researcher improved the focus group discussion questions through piloting.

Possible Answers:

4. **a.** Youth might not be able to speak privately or comfortably.
   b. A structured survey wouldn't allow researchers to get as much in-depth information as quickly, to get different perspectives or to explore new topics that came up in a focus group discussion.

Your Research Project: Focus Groups

Note: This is the 11th of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students decide if a focus group discussion would be appropriate for their research question.
2. In pairs, they discuss how a focus group discussion would be relevant to their research projects.

Extra Activity: Practise Your Focus Group

1. Students design a focus group schedule based on their research project.
2. In groups, they pilot their focus group activities and questions and take notes.
3. They look back over their notes and think of ways they might improve their interview questions.

DISCUSSION

- As a class or in groups, students discuss the questions.

CHAPTER 7: Observations

7.1 Observation

PREVIEW

1. Individually, students look at the photo for one minute.
- Time them, and when the minute is over tell them to stop.
- They write down everything that they can remember from the photo, in as much detail as possible.
2. They close their books. In pairs, students compare what they observed in the photo. They discuss what things they remembered differently.
3. Pairs think of a research question based on the photo.
- Pairs explain their research questions to the class.

Possible answers:

- How are motorcycles used in urban Yangon?
- What are the differences in income between market stall owners on roads and away from roads?
- What are community perceptions of the impacts of street markets?

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Possible answers:

1. True
2. False – observations can happen in many different places, including family homes as well as other places like streets, libraries or markets.
3. True
4. False – observation notes are written at the same time or soon after something happens.

ACTIVITY: Observations

- Students read the scenarios.

1. In pairs or groups, they identify what the researchers are observing in each scenario.

Answers:

Scenario One: The buying patterns of elderly people at local markets in Yangon.
Scenario Two: How people use water facilities in an IDP camp in Shan State.

2. They think of a research question for each scenario.

Possible answers:

Scenario One: What are the buying patterns of elderly people in markets in Yangon?
Scenario Two: What are the water, sanitation and hygiene issues in IDP camps in Shan State?

3. They decide when the researcher should make their observation notes – during or after the observation, and why.

Possible answers:

Scenario One: The researcher should take notes after observing because it might be rude or impractical to take notes about people at the market.
Scenario Two: The researcher should take notes during the observation. The community members are likely to understand why the researcher is there so they will be more comfortable.

4. They identify possible problems that might occur during the observation process.

- They think of solutions to these problems.
- Get some groups to present their ideas to the class.

Possible answers:

Scenario One: They might make elderly people uncomfortable by following them around and staring at them. The researcher could make people more comfortable by speaking to store owners about their research and also to the elderly people who they are observing.
Scenario Two: The researcher might find it difficult to observe people using water facilities because people might be doing other things during the time that they are there, or the water supply may be turned off. The researcher could make sure that they are prepared by finding out when is the best time to observe people using water facilities.
For both scenarios: The researcher could explain to people the purpose of the research that they are doing observations for.

ACTIVITY: Observing an Activity

1. Divide students into two groups.
   - Group One, without speaking, performs the three tasks.
   - Group Two observes and takes notes about the activities of Group One.
2. As a class, identify possible problems doing this research, and think of possible solutions to these problems.

Possible answers:

Problem: There might be a lot of things happening, making it difficult to take detailed notes.

Solutions:

- Take a video.
- Have two people taking notes.
- Focus on fewer points.

3. As a class or in groups, students discuss the question.

Possible answer:

- Make sure that observations of each group are done in a similar way – at the same time of day/ week, with the same researchers if possible. This will make the observations more reliable because there will be less variation caused by time, location, different focuses of researchers.
- Have a set list of criteria that is used by the researcher/s, so that they observe the same things about each group.

EXERCISE

- Students identify whether the examples are participant observation or not.

Answers:

1. Participant observation
2. Participant observation
3. Not

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. Any research that observes changes over time, e.g.: how effective awareness campaigns against using polystyrene boxes in food centres are.
2. A topic where there are a lot of people doing the actions that you are observing.
3. A topic which involves knowing people's opinions and ideas.

Extra Activity: Observation or Participant Observation?

1. Give students some research scenarios, for example:
   - A researcher wants to know what snack foods university students buy.
   - A research team wants to explore the similarities and differences between male and female beauty competitions.
   - A researcher wants to know about health issues for farm labourers.
2. As a class, discuss whether it would be better to do observation or participant observation in each scenario.

7.2 Field Notes

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

2.
- Recite it in my head over and over.
- Talk to someone about it.
- Write short notes to help remember later.
- Make a recording into a phone.

ACTIVITY: Tips for Observations

1. Individually or in pairs or groups, students classify the tips into things you do before, during and after an observation.

Answers:

Before you observe: a, b, f, h

While you observe: d, f, h

After you observe: c, d, e, g, i

2. In groups, students add more tips to each list.

Possible answers:

Before You Observe: Find a useful place to observe from.

While You Observe: Pay attention to things that are most closely related to your research topic.

After You Observe: Listen to any recorded observation notes.

- If you like, make class lists on the board.

ACTIVITY: Observe Your Surroundings

Note: If students struggle with choosing a method of observation, you might want to remind them of some different ways of doing observations (see list below) at the start of this activity.

1. Individually or in pairs, students choose a topic that they can observe that is near to them, in their neighbourhood or around their class.

- They decide what they will observe and how they will observe it. For example:
  - Observe and take notes at the time, or;
  - Observe and write notes later, or;
  - Participate in an activity and then write about it, or;
  - Follow a set of observation criteria similar to the list of questions in a structured interview, etc.

2. They do their observation and make their notes.
3. As a class or in groups, they discuss the questions.

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. Challenges facing international students at Chiang Mai University and strategies to overcome them.
2. Where international students sat, and who they talked to in class and in the school canteen.
3. Yes she did, sometimes she joined the students for lunch.
4. First, she observed the students so that she knew what behaviours to ask them about. Interviews were then used to get more information about what she observed. In this research, she used the interviews to ask students what the reasons for their behaviour were, and how this affected other aspects of their life.

Your Research Project: Observations

Note: This is the 12th of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students decide if observation would be appropriate for their research question.
2. In pairs, they discuss how they might use observations in their research projects.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. – being able to take notes at the same time as observing
   – missing important things because there is too much happening
   – remembering what happened if you write your notes afterwards
   – the risk of affecting people's behaviour or making them feel uncomfortable because you are observing them

CHAPTER 8: Analysing Quantitative Data

8.1 Quantitative Data

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. numbers, counting, maths, putting numbers into tables, statistics, creating charts
2. **a.** the amount of different food items sold or eaten
   b. the number of customers throughout the day
   – the number of meals sold throughout the day

EXERCISE

- Students match the steps (1-3) with the activities (a-f).

Answers:

1. d, f
2. a, b
3. c, e

Note: While the difference between numerical and categorical data is often that numerical data is made of 'numbers' while categorical data is 'words', some data that have numbers are not always 'numerical.' This is because there is some data that can include numbers but it does not have any mathematical meaning. For example, phone numbers. Adding or subtracting or calculating the average for a collection of phone numbers will not produce a result that has any use or mathematical meaning. Therefore, phone numbers (like the numbers for street addresses) although they include numbers, are an example of categorical data.

The example in the text and 'g' and 'h' in the following exercise are examples of categorical data with numbers.

EXERCISE

- Students decide whether the questions and the answers are numerical or categorical.

1. **Answers:**
   - **a.** Numerical
   - **b.** Numerical
   - **c.** Categorical
   - **d.** Categorical
2. **Answers:**
   - **a.** Numerical
   - **b.** Numerical
   - **c.** Categorical
   - **d.** Categorical
   - **e.** Numerical
   - **f.** Numerical
   - **g.** Categorical
   - **h.** Categorical

EXERCISE

- Students code the responses and put them in a table.

Answers:

	Q1	Q2	Q3	Q4
Participant 2	3	3	2	2
Participant 3	3	6	2	1
Participant 4	2	7	1	1

ACTIVITY: Problem Solving with Data Recording

1. In pairs or groups, students design a data table.

Note: Check with the pairs or groups as some might need a suggestion for how they would organise the ages into categories in their data table – see the possible answer as an example (i.e.: <20, 21-30, 31-40…, etc.)

Possible answer:

<20	21-30	31-40	41-50	51-60	61-70	71-80	>80
3	4	3	2	2	1	3	1

2. Groups discuss the situation and identify possible solutions.

Possible answer:

Have a category for 'no answer' in the data table and a category for 'other religion'.

0	1	2	3	4	5	6	7
3	8	2	2	1	1	2	1

0 – No answer
1 – Buddhist
2 – Muslim
3 – Christian
4 – Hindu
5 – Animist
6 – No religion
7 – Other religion

Then explain what is included in the 'other religion' category in the analysis and/or discussion sections of your research report (see chapter 10).

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answer:

Numerical data can be analysed with more advanced statistical analysis methods because it is already in number form. Categorical data needs to be coded first to give it number values.

Categorical data can be organised into groups or categories and can give information about the size of those groups or categories relative to each other.

8.2 Descriptive Statistics

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Note: If necessary, explain that the left column of the table is the number of brothers and sisters that it is possible to have (based on the data). The column on the right is the number of students who have that many siblings (i.e.: two students have no siblings, seven students have two siblings, etc.).

Answers:

1. 2
2. 4
3. This table summarises the data by displaying how many times different values appear. The table on page 99 includes the value for each response from each individual participant.

Note: The mean, median and mode are used to calculate central values in a data set.

The MEAN is most useful when you are calculating the average for numerical data that has no unusually large or small values that could distort the result. For example, if you want to know the average weekly income of people in your community, and everyone earns similar amounts, you could calculate the central value using the mean.

The MEDIAN is used for numerical data that contains an extreme high or low number that could distort the central value compared to the rest of the data. For example, if you wanted to know the average weekly income of people in your community but there is one person who earns a lot more than the others. The mean income would be higher because of the person who earns more when most people actually earn a lower amount. The median (middle value) would be closer to what most people earned.

The MODE is most useful with categorical (non-numerical) data like gender, occupation or towns where people live. For example, if you asked people in your community what their occupation was. The most commonly occurring occupation would be the mode.

EXERCISE

- Students calculate the mean, median and mode of the English class's sibling statistics.
- When you elicit the answers, have some students demonstrate their calculation on the board.

Answers:

Mean: 0 + 0 + 1 + 1 + 1 + 1 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 3 + 3 + 3 + 3 + 5 + 5 + 5 = 45
45/20 = 2.25

Median: 0, 0, 1, 1, 1, 1, 2, 2, 2, **2, 2,** 2, 2, 3, 3, 3, 3, 5, 5, 5 = 2

Note: As there is an even number of responses (20) take the average of the middle two (10th and 11th) values to calculate the median (which is 2).

Mode: 0, 0, 1, 1, 1, 1, **2, 2, 2, 2, 2, 2, 2**, 3, 3, 3, 3, 5, 5, 5 = 2

ACTIVITY: Analyse and Create a Data Table

1. Individually, students look at the data table and answer the questions.

Answers:

a. 34.125
b. 2 hours / 120 minutes
c. For people under 35, sport is more popular (three respondents said 'sport' and only one said 'reading'). For people over 35, reading is more popular (three respondents said 'reading' and only one said 'sport').

2. In pairs or groups, they create another data table.
- They interview eight people, asking the same three questions.
- They put their data into a data table.

3. Discuss the results.

a. Do they show any patterns, such as older people having more or less free time?
b. Do they show any patterns about people's age and preferring either sport or reading?

- If you like, combine all the results into a class data table.

4. Discuss who might use this information, and for what purposes.

Possible answers:

– Advertisers might use it to sell sports equipment or books/newspapers/magazines to specific age groups.
– Public campaigns might use the data to encourage youth or the elderly to do sports.

EXERCISE

- Students look at the data set and frequency distribution.
- They identify and correct the two mistakes in the frequency distribution table.

Answers:

- Four people got a score from 401-500. (not six).
- Three people said chemistry was their favourite subject (not two).

ACTIVITY: Frequency Distribution Table

1. Students look at the frequency distribution table about the ages of example class.
- As a class, make a similar frequency distribution table about the age of your class.
2. Compare your class with the example class.
- Students make a list of sentences based on what they can say, comparing and contrasting the ages of the example class and their class, for example:
  - 'The example class has an older mean age than our class.'
  - 'There are fewer people aged 16-20 in the example class than in our class.'

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answer:

- Categorical data can be easier because there are only a few numbers to analyse when it is coded (if necessary, remind students about coding, pages 98-99).
- Categorical data can be easier to understand, especially if they are simple categories, for example favourite types of food.
- Numerical data can be easier because you don't have to do any coding first before doing statistical analysis.
- Numerical data because there are more ways to analyse the data (such as mean, median or mode).

8.3 Visualising Quantitative Data

Note: In this section, students will practise creating bar charts and pie charts using data that is presented or that they have collected. They could either draw these by hand or practise using spreadsheet software, such as Microsoft Excel, to create the charts.

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Answers:

1. A = bar chart; B = pie chart
2. They are used to show data in a way that can be more easily understood than if it were in a data table.

EXERCISE

- Students decide whether the statements are true or false.
- If false, they write a correct statement.

Possible answers:

1. False – the café was most popular in December.
2. False – more people visited during the second half of the year.
3. False – it dropped in May and June and then increased again.

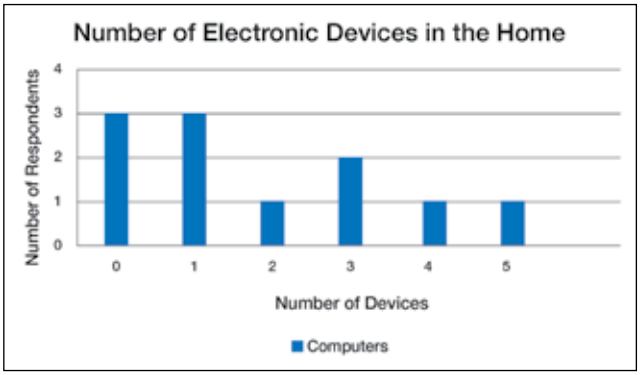
ACTIVITY: Make a Bar Chart

Note: Check students are developing charts that look similar to the example bar charts below. Remind them that they can look at the example bar chart on the previous page in their books as well.

Their charts should have a title, labels for the X-axis (number of devices) and Y-axis (frequency/number of respondents). The chart for Question 2 needs a key indicating how the bars for the two items – laptops and phones – are differentiated in the chart (such as by different shades or colours) for each number from 0-5.

1. Students look at Q1 in the *Electronics in the Home* frequency distribution table.
- They create a bar chart presenting this data about laptop computers in the home.

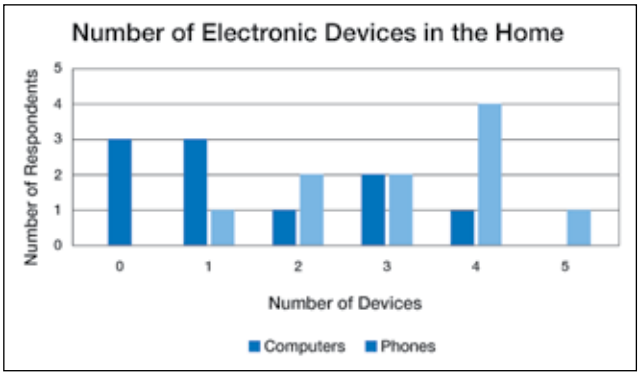
Answer:



2. Students look at Q2 in the *Electronics in the Home* frequency distribution table.
- They create a bar chart presenting this data about laptops and mobile phones in the home.

Note: If necessary, suggest they use different shades, colours or patterns for the two sets of bars (frequency of people with laptops and frequency of people with phones) on the X-axis (see the differently-shaded blue bars in the bar chart below).

Answer:



3. In pairs, they check each other's charts.
- They check their partner's charts each have a title, key, correctly labeled X-axis and Y-axis, and check that the charts show the correct data.

EXERCISE

- Students identify which of the statements is correct.

Answer

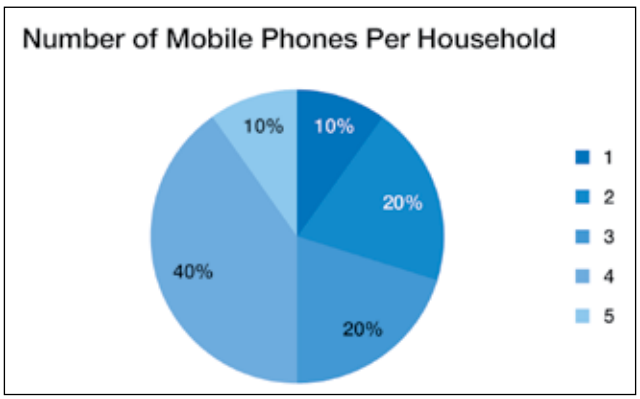
2

EXERCISE

Note: It is difficult to present two different data sets on one pie chart. Because of this, students only present the Q2 (mobile phones) data.

1. Students make a pie chart based on Q2 in the *Electronics in the Home* frequency distribution tables.
2. In pairs, they check each other's charts.
- They check their partner's charts each have a title, key and correct data.

Answer:



ACTIVITY: Working with Quantitative Data

- Students look at the survey and data table about Water Problems in Myanmar.

1. Individually or in pairs or groups, they answer the questions.

Answers:

a. Question 4 is numerical. Questions 1, 2, 3, 5 and 6 are categorical.
b. 2
c. 25%
d. bottles

Note: Although ages (Q1) are represented as numbers, they are categorical data in this example because the ages have been organised into five age-range categories.

2. Students read the report.

- They fill the gaps with appropriate words.

Answers:

a. eight
b. purposeful
c. reliable
d. 75%
e. rural

3. Students decide what each chart on page 107 shows.

Possible answers:

a. The bar chart shows the frequency of sources of people's drinking water based on their location.
b. The pie chart shows the percentage of people that have or don't have easy access to clean water. It shows that 75% of people do not have access to clean water on a daily basis.

4. **1.** No access
2. Access

ACTIVITY: Collect and Analyse Quantitative Data

Note: The *Community Survey on Water Problems* may be easier to assign as homework, so that students can get a variety of responses from different community members.

1. Individually, students do the *Community Survey on Water Problems* with four people and record their answers.
- They record the answers in a data table.
2. In pairs or groups, students combine their data.
- They make data tables for 8, 12 16 or 20 respondents and put all their data in them.
3. Groups present their results on a bar chart and a pie chart.
4. They put their charts on the wall.
- They walk around looking at other groups' charts.

Note: The information on the Statistical Package for the Social Sciences (SPSS) computer program is optional to teach. It is used in academic and other social science study to assist with data analysis. It is usually used by experienced researchers, so if your students are learning research skills as beginners, this is not likely to be very useful to them.

Both SPSS and a spreadsheet program like Microsoft Excel can be used for quantitative analysis, and both have their advantages and disadvantages. Generally speaking, SPSS is considered a better tool for analysing large amounts of data and doing complex analysis. However, it can be difficult to learn how to use. For basic statistical analysis, Excel can be quicker and easier to use, and people likely already have it installed on their computers as part of the Microsoft Office suite.

CASE STUDY

- Students read the case study.
- They answer the questions.

Answers:

1. SPSS is a computer program used to analyse data quickly and accurately.
2. Charts and tables.
3. SPSS would be useful for projects with a lot of data because it would be quicker using it do statistical analysis and produce charts and tables to illustrate the research.

Your Research Project: Charts and Tables

Note: This is the 13th of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. Students decide if charts and tables are appropriate ways to present their research findings.
2. In pairs, they discuss how they would use charts and tables in their research projects.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. with numerical data; when you have a data set
2. with categorical data; when you want to compare between groups; when you want to show patterns in your data visually

CHAPTER 9: Analysing Qualitative Data

9.1 Analysing Qualitative Data

PREVIEW

- Students read the scenario and discuss the possible steps the research might take after the interviews are completed.
- Write students' ideas on the board.

Possible answers:

- Combine all the notes after data collection has finished.
- Look for patterns in the things people said in the interviews.
- See how the data answers the research questions.
- Draft a research report including key findings.
- Check findings against research questions.
- Get feedback about findings from research participants.
- Include participants' feedback in the report.
- Write the final report.

ACTIVITY: Compare and Contrast

- Students read the steps in the analysis of qualitative data. They compare it to the steps in the analysis of quantitative data on page 97.
- In groups or as a class, they list the similarities and differences.

Possible answers:

Similarities

- Both have three main steps.
- Both involve organising data.
- Both involve coding.
- Both involve finding relationships and looking for similarities and differences in the data.
- The conclusions should link to the research question.

Differences

- Quantitative analysis involves developing descriptive statistics, charts and tables. Qualitative analysis may involve the transcription of interview text.
- Qualitative analysis involves looking for patterns (themes) in text data compared to numbers in quantitative data.

ACTIVITY: Match the Texts to the Codes

1. Individually or in pairs or groups, students match the responses (i-vii) to the codes (a-f).

Possible answers:

i. c, d, e
ii. a
iii. b, c
iv. a, b, d
v. a
vi. b, d, e
vii. b, e

2. Students identify the code that was not mentioned in these interviews.

Answer:

f – Politics

3. Students identify possible new codes in the interview responses.

Possible answers:

ii. and **iii.** New Code: 'Health'

iv. and **vii.** New code: 'Family help with migration'

4. As a class, discuss which codes would have been similar or different if the research project was about what young people are looking for when they apply for a job. They think of other codes that they could add or change for that question.

Possible answers:

- 'Money' and 'work experience' would still be relevant.
- 'Lack of skills' could change to 'skills'.
- Feelings about travel' might change to 'travel'.
- They could add new codes such as 'training opportunities', or anything else that young people might want from a job.

ACTIVITY: Coding Interview Responses

- Students read the interview responses.

1. They identify which responses match codes 'a' and 'b'.

Possible answers:

a. **Respondent One:** 'funny films'
Respondent Two: 'action films'
Respondent Three: 'Indian movies'
Respondent Four: 'mystery films'

b. **Respondent One:** 'be nice to one another'
Respondent Two: 'good guy is brave and strong, the bad guy is doing evil things'
Respondent Three: 'family and love'
Respondent Four: 'think critically and understand how people think'

2. They read the interviews and identify two more possible *emergent* codes.

- You could check with the class as a whole here for what codes they identified as emergent.

Possible answers:

c. feelings
d. characters

3. They match possible emergent codes to parts of the text from the interviews. Check that they are only identifying codes in parts of sentences (words or phrases), not whole sentences.

Possible answers:

c. **Respondent One:** 'makes me feel happy'
Respondent Two: 'we feel brave and strong'
Respondent Three: 'I like music and dancing'
Respondent Four: 'it is exciting'

d. **Respondent One:** 'silly characters'
Respondent Two: 'good guy; 'bad guy'
Respondent Three: 'someone from a poor family and someone from a rich family'
Respondent Four: 'person who committed the crime'

CASE STUDY

- Students read the case study.
- They answer the questions.

Possible answers:

1. What pregnant migrant and refugee women living on the Thai-Myanmar border know about mental illness.
2. Symptoms of mental illness, causes of mental illness, suicide, mental illness during pregnancy, mental illness after pregnancy and managing mental illness.
3. family support from partners, feelings of loneliness and isolation
4. They did it independently to see if both researchers got the same results (known as triangulation) which contributes to the credibility of the research findings (see chapter 2, pages 34-35).
5. Transcribe data/organise date; label/code data; identify themes; develop conclusions; ensure your conclusions link to your research questions.

Note: NVivo is one of many different programs used for qualitative data analysis. Users usually learn how to use these programs in universities, through work or by being shown how to use it in a workplace. Its most useful when a researcher is analysing a lot of data.

Similar to SPSS, NVivo can be difficult to use and is often used on large research projects with large amounts of data. For beginner researchers, it may be more practical to code text using tools that learners are familiar with, such as word processing programs or handwritten notes.

1. a computer program for qualitative data analysis
2. It can navigate, sort and code large amounts of qualitative data (such as text, pictures or video) very quickly.
3. a project where there is a lot of text, pictures or audio data to organise, code and analyse

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answer:

Write down codes on a piece of paper, and then write next to the code how many minutes and seconds into the recording someone says something that corresponds to that code.

9.2 Thematic Analysis

PREVIEW

- Discuss the questions. Write students' ideas on the board.

Possible answers:

1. Themes help you identify what the main recurring ideas are in your data and help answer your research questions.
2. Themes are broader than codes and allow for codes to be grouped together.

EXERCISE

- Students match the codes and themes (a-d) to the gaps in the diagram (1-4).

Answers

1. d
2. b
3. a
4. c

EXERCISE

- Students classify the parts of the interview (1-8) into the themes.

Answers:

Child Raising: 1, 5

Income Generation: 2, 3, 6, 8

Advice: 4, 7

ACTIVITY: Thematic Analysis

Note: When doing thematic analysis it can be difficult to distinguish between themes and codes. It is particularly difficult when you are identifying emergent codes and themes, and you are unsure if its broad enough to be a theme or specific enough to be a code. It is not important for beginner researchers to get this exactly right; it gets easier with experience.

- Students read the research question and the three extracts from interviews.

1. In pairs or groups, they identify other possible codes (a-c) from the interview responses that could relate (one each) to the existing codes of 'insects', 'heavy rain' and 'diseases.'

- If students struggle with this step, point out that the other code/s for a. that they choose to go with the code of 'insects', needs to fit within a bigger existing theme of 'animals.' For example, two of the respondents mention an issue with 'chickens'. The codes they choose for 'b' and 'c' should also contribute to bigger themes 'd' and 'e'.

Possible answers:

a. chickens, smell of chickens, the killing of animals
b. blocked drains, rubbish in drains, poor drainage system
c. diarrhea, fever, sickness from dirty water

2. They identify possible themes ('d' and 'e') that could include the codes they have identified in the first column. The first theme 'animals' has been done so they can see how it is a larger group within which 'insects' and other related codes like 'chickens', 'smell of chickens' or 'killing of animals' could fit.

- Once they have tried identifying the themes, encourage students to check that their themes are larger topics (as suggested by the possible answers above) contributed to by the smaller codes. For example, the codes 'heavy rain' and 'blocked drains' contribute to the larger theme of flooding.

Possible answer:

d. flooding, rising water levels, flood water spreading disease
e. health, health problems, unhealthy conditions

3. Groups write short summaries ('f' and 'g') for their themes and the codes that contribute to these themes (see the summary of the 'animals' theme as an example).

4. They join with another group and discuss the themes they chose. They show their summaries to each other and give feedback.

Extra Activity: Collect Data and Develop Themes

1. Students ask five people the following question and record their responses.
   'How can schools better support student learning?'
2. They develop codes and themes for the responses to the questions.
3. They write summaries of the themes and the main points made about each idea.

To help students to get started with the codes and themes, suggest to students that a possible code could be 'resources' and a possible theme could be 'activities outside of class.'

Besides the suggested code and theme, students will need to decide on other codes and themes when they are analysing their interview data.

The interviewing part of the activity can be done either in class (students interview each other) or out of class (students interview friends, family or community members).

Your Research Project: Themes

Note: This is the 14th of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. They discuss whether thematic analysis would be appropriate for their research project.
2. They identify themes that could be present in their research project.
3. In pairs, they discuss how thematic analysis could be relevant to their research project.

DISCUSSION

- As a class or in groups, students discuss the question.

Possible answers:

- It can be difficult to know what is a theme and what is a code.
- Understanding what people are talking about and identifying relevant themes.
- Deciding which code to link to a piece of text.

CHAPTER 10: Communicating Research

10.1 Research Outlines

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

Details about the methods that you used and your research approach, ethics and main findings.

EXERCISE

- Students choose the best answer to each question.

Answers:

1. b
2. a
3. c

EXERCISE

- Students place the sentences within the parts of the research report outline (introduction, background, methods, results and discussion) in the most likely order.

Note: It is possible students may give different orders for the sentences to the one shown here. What is important is that they place the sentences within the appropriate parts of the research outline: i.e.: introduction; background; methods; results; discussion.

Answers:

Introduction

1. i
2. k

Background

3. h
4. l
5. e

Methods

6. d
7. a
8. g

Results

9. j
10. b
11. n

Discussion

12. f
13. m
14. c

Your Research Project: Outline

Note: This is the 15th of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

Students may not have completed an entire research project at this stage. Encourage them to think of existing information they could include in parts of the research outline from some of their previous 'Your Research Project' activities. For example, the topic/issue or problem and research question(s) (introduction); any existing information they have read about their topic (background); methods they will use (methods); any statistics or patterns in the data, etc., they may have found (results); or conclusions (discussion) if they have, in fact, done the research. If not, these sections can wait until they have completed the rest of their research project.

1. They develop a research outline for their research project.
2. In pairs, they discuss their outlines.

DISCUSSION

- As a class or in groups, students discuss the question.

Possible answers:

- ethics, such as confidentiality in the methods
- how the data was analysed in the methods
- tables, charts or graphs in the results

10.2 Writing and Revising

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

- errors in spelling and grammar
- the structure
- unclear main idea
- too many ideas
- not able to make connections between ideas

ACTIVITY: Create a Checklist

- Students read the checklist.

1. Individually, students think of two more things that they could add to the checklist.

- They should identify things that they often miss when they are preparing to submit written work.

2. In groups, they compare the items that they added to their checklists.
3. They make a group checklist of all the most useful ideas.

Possible answers:

- has page numbers
- has date
- has names of the research team
- has a list of sources (bibliography) such as articles, books, websites, etc., that were referred to in the report
- has consistent font type and size

- If you like, make a class checklist and stick it on the wall.
- If you think it is important, as a class, order the items in the checklist in the way that would be the most logical when working through it.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. – Have someone else check your writing.
   - Put it away, and look at it again the next day with fresh eyes.
   - Use spell- and grammar-checking software on a computer.
   - look at other research reports as examples to see how the report should be structured and what it should include

EXERCISE

- Students match the statistics/quotes (1-6) to the conclusions (a-d).

Possible answers:

1. a, b
2. b, d
3. b, d
4. a, c
5. b, d
6. a, c

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. Quotes might be more persuasive than statistics if you are presenting research about people's personal experience, ideas and opinions.
2. Statistics might be more persuasive than quotes if you are presenting to organisations, management or government officials that need precise numbers to guide their policies.

10.3 Oral Presentations

PREVIEW

- Discuss the question. Write students' ideas on the board.

Possible answers:

1. – speaking clearly
   – speaking accurately
   – using visual support
   – being confident
2. – It is easier for people to listen to a short presentation about research than to read a long research report.
   – Some people might not be able to read in the language that you write your report but can understand the spoken language or can have the oral presentation translated.

ACTIVITY: Analyse the Research Presentations

Note: There could be many possible interpretations of the settings, approaches to presentation, audiences and their levels of knowledge for these presentation settings. Encourage students to provide explanations for their choice of answers for each of the settings.

- Individually or in pairs or groups, students look at the photos of oral research presentations and answer the questions.

Possible answers:

1. **a.** in a conference centre or hotel
   b. people working in the same sector as the research topic
   c. a lot
   d. speaking confidently, showing your expertise
   e. statistical evidence, so that they can use the research to inform policy
2. **a.** outdoors, in a community
   b. community members, research participants
   c. They are probably not research experts.
   d. clearly, and related to their own experience
   e. examples, case studies and quotes
3. **a.** Parliament
   b. government ministers, members of parliament and officials
   c. Some might know a little about research, few would be research experts.
   d. with clear evidence and in a professional and persuasive way
   e. statistics and case studies

Your Research Project: Presentation

Note: This is the last of 16 'Your Research Project' tasks, designed to take students through the process of developing and implementing a research project from beginning to end.

It can be effective if students have one topic that they use throughout all 'Your Research Project' tasks. However, as students complete these tasks, they might find that their previous research topic or question is no longer practical, interesting or useful, or they might become more interested in a different topic or question.

1. They decide whether they would do a research presentation, and where, how and for who they would present.
2. In pairs, they discuss their presentations.

DISCUSSION

- As a class or in groups, students discuss the questions.

Possible answers:

1. – By working with communities when designing the research.
   – By involving community members as participants (or researchers/assistants).
   – By clearly communicating about the research so people can understand and engage with the research and researchers.
   – By making sure that, where research is relevant or intended for people without a research background, it is also accessible and interesting for them.

Final Research Project

Note: This is a final project that students can use to check how well they understood the research process, or teachers can use it for formal or informal assessment purposes, or for revision.

It takes students, step by step, through the research process that this book has outlined.

Some students might want to use the material that they worked on in the 'My Research Project' activities. If they do this, they should carefully document each stage of the process in one place – we recommend a folder, either physical or electronic.

Other students might want to choose a new research topic. Similarly, they should keep a record of each step and substep of the process in a folder.

This will work either as an individual or group project.

Step 1: Develop research questions

- Students follow steps a-f.
- Ensure that they document each step so that you can tell that the step has been followed. Short notes from any discussions or decisions are sufficient.
- When they have finished Step 1, you might want to look over their work and give feedback.

Step 2: Find accurate information

- Students follow steps a-d.
- They should create a detailed plan and keep it in their folder, along with any notes.
- Discuss their data collection plans with them before they collect data, to check that their plans are realistic.
- After they collect their data, ensure that they are storing it safely.
- When they have finished Step 2, you might want to look over their work and give feedback.

Step 3: Analyse the information and conclude

- Students follow steps a-c.
- They put all notes, tables, statistics, etc., from analysis into their folders.
- They should produce some charts, tables or quotes to support their research.
- When they have finished Step 3, you might want to look over their work and give feedback.

Step 4: Share your findings

- Students follow steps a-c.
- Students (or you) decide on whether a written report or oral presentation is more appropriate to present their research, or both.
- They prepare either a five minute presentation or a 200 + word report.
- The rubric below outlines a method for marking the process out of 20 marks (or 25 if they do both a written report and an oral presentation).

Suggested Grading

	Below Expectations 0-1 mark	Meets Expectations 2-3 marks	Above Expectations 4-5 marks
Background Folders	folder incomplete, some steps skipped or undocumented	folder mostly complete, most steps documented	folder complete outlining all steps followed
Process	research process not followed	research process mostly followed	all steps in research process followed
Data	data not reliable, valid, confirmable or credible	data mostly reliable, valid, confirmable or credible	data completely reliable, valid, confirmable or credible
Report (for written report only)	confusing and unclear, too short, no tables, charts or quotes	mostly clear and well presented, some supporting evidence	Clear, interesting and well-presented, supporting evidence
Presentation (for oral presentation only)	confusing and unclear, too short, no visual support	mostly clear and well presented, some visual support	Clear, interesting and well-presented, plenty of visual support