Activity • • • • • • • • • • → 16

Choosing a Research Topic

STUDENT HANDOUT

Choose a topic for your research. Once you have done this, try to sum up your research in one sentence only. If you are unable to do this your research topic may be too broad, ill-thought out, too obscure or too complicated, so you will need to modify, adapt or refine your topic until you are able to sum it up in one sentence.

Once you have thought of a topic and summarized your research, you will need to present your sentence to the rest of your group so that you can receive peer and tutor feedback. You should also be prepared to offer feedback on the sentences of your fellow students. Modify and refine your one-sentence summary, if required, after having received feedback.

There are many interesting and creative methods that you can use to stimulate thought and focus in on your research topic. Here are some suggestions:

- Observing. Using this method, you observe phenomena or behaviour that, in your opinion, needs further investigation to explain patterns, behaviour or processes. Asking questions such as 'what' and 'why' about your observations will help to stimulate your thoughts.
- Reflecting on your experiences. This method enables you to consider past and present experiences in relation to possible research topics. For example, you might have experienced phenomena or behaviour in the workplace or during a social encounter that, in your opinion, requires further investigation. Asking in-depth questions about, and reflecting on, these experiences will help to stimulate your thoughts and further develop your research topic.
- Questioning. This is a useful technique for all students starting a research project. There are different types of question that you can ask to stimulate your thoughts and help you to choose and focus in on a suitable topic. This includes questions that:
  - o stimulate reflection;
  - o introduce a problem;
  - o lead to deep and critical thought;
  - o test existing assumptions and/or knowledge.
- Visualizing. You can create a picture to help you to think about your research. Or you may decide to draw a graph, diagram or mind map that helps you to clarify your thoughts and pull together your research topic.
- Discussing. Take every opportunity to discuss your thoughts with friends and family. This helps to stimulate

thought, and receiving feedback from interested, knowledgeable parties enables you to test, modify and refine your ideas.
- Reading. If you have a general idea for a topic, read around the subject. This will deepen your understanding of current research in the field, help you to decide whether there is scope to advance this research and, if so, help to stimulate ideas.
- Brainstorming. Think about an issue and write down any thoughts that come to mind, without judgement, analysis or reflection. This is a useful technique if you have a general idea of a topic for your research, but need to focus in on important issues.
- Lateral thinking. This involves approaching an issue through an indirect route that does not follow logical ways of thought. Examples of this type of thinking include choosing an idea completely at random (opening a page in a dictionary, for example) or going against the obvious (questioning something that is taken for granted, for example). This method of thinking is useful if you want to create new ideas, perhaps for a unique research project on a topic that has not been covered before.
- Logical thinking. This way of thinking follows a logical, sequential order in which you move from one related thought to another. It involves taking important ideas and working through them in a series of stages or steps. This method helps you to organize your thoughts and focus in on your research topic.

Activity • • • • • • • • • •   →   17

Producing Aims and Objectives

STUDENT HANDOUT

Produce your aims and objectives for your research, using the information given below as guidance. Once you have done this, swap them with the student that you have been paired with. Review each other's aims and objectives, again following the guidance given below. If relevant, make suggestions for improvements. Modify your aims and objectives accordingly.

An aim is the overall driving force of your research. It is a simple and broad statement of intent that describes exactly what you want to achieve from your research. It should emphasize what is to be accomplished and address the outcomes of your project. Most research projects only have one aim, although it is possible to have more than one aim for certain types of research.

The objectives are the means by which you intend to achieve the aim. They are detailed and more specific statements that describe specifically how you are going to address your research question, building on the main issue that has been introduced in the aim. Five to ten objectives is usually a good number, but this can be flexible, depending on the type of research. The main point is to make sure that your objectives show how you intend to meet your aim.

Take note of the following points when producing your aims and objectives:

- Your aims and objectives should give a clear indication of the five Ws of your research (what, who, why, when, where). These should not be stated explicitly, but should be implicit within your aims and objectives.
- Your aims and objectives should provide an indication of how your project will proceed: this is not a specific statement of methods, but will give an indication through the terms used, for example 'identify', 'describe', 'explain' and 'observe'. This will also give an indication of your epistemological and methodological preferences.
- Your aims and objectives should support your methodology (for example, you should only mention the intention to generalize when this is your methodological goal).
- Your aims and objectives should be clear, succinct and unambiguous, defining any technical terms used. They should also be brief and concise.
- Your aims and objectives should provide an indication of the long-term outcome, such as 'produce an analysis' and 'develop associated theory'.
- Your aims and objectives must be realistic in terms of what you can achieve during your research (available resources, time, access to participants, for example). Don't attempt too much or make your aims and objectives too ambitious.
- Your objectives should relate to your aim and you should ensure that each objective is distinct and that they do not merely repeat another using different terms. Number your objectives so that they are clear and distinct.
- Take care not to produce a list of issues that are merely related to your research topic and/or methods. Also, ensure that you do not mistake research objectives for project objectives (the latter is a list of practical steps involved in the day-to-day running of your research project).

If you are struggling to produce your aims and objectives, read around your subject, find other research that deals with similar issues and find out how the researchers have produced their aims and objectives. Also, discuss the issues with the student that you have been paired with. If this student has already produced their aims and objectives, review their work as it might help you to develop your own ideas.

Once you have produced, modified and refined your aims and objectives, you should refer to them throughout the research process to ensure that your research remains on track. This is of particular importance during the design of your methods, the data collection and the data analysis stages. For example, if you intend to design a questionnaire for a large

survey, each component or each question must be linked back to your aims and objectives. This will stop you asking irrelevant questions and will help to ensure that your questionnaire produces the type of information required to answer your research question.

You will need to assess whether you have met your aims and objectives during the data analysis and writing-up stage of your project. If you have not met them, analyse why and state this in your thesis/dissertation. There could be a number of reasons, such as variables that could not be considered during the planning stages, or new insights that are essential to your research question but had not been identified in your aims and objectives. A thorough critical analysis can help to improve your thesis or dissertation, even if you find that you have not been able to meet all your aims and objectives.

Activity 17

Activity • • • • • • • • • • • → 18

Developing a Research Question

STUDENT HANDOUT

Develop your research question using the guidance given below. Once you have done this, you will need to present your research question to the rest of your group for peer and tutor feedback. You should also be prepared to offer feedback on the research questions of your fellow students. Once you have received feedback, modify and refine your research question accordingly.

A research question is a clear, concise and complex question around which your research is focused. It helps you to focus in on your study, determines your methodology and guides and structures your choice of data collection and analysis methods. Research questions tend to be easier to generate when much is known about a topic and there are clear and well-developed theoretical frameworks in place. They can be harder to generate in cases where little is known about a subject or where the emphasis is on knowledge discovery or theoretical development.

Your research question should:

- be relevant, clear and simple;
- be workable and allow for the collection of the required data over time and within budget (if relevant);
- be well formulated, credible and easy to understand;
- be specific and defendable;
- lead to research that extends or adds to existing knowledge;
- lead to interesting, significant and influential research;
- lead to a research design and analysis that holds scientific credibility (if it is stated in hypothetical form, for example);

- allow for more than one outcome and the possibility that the working hypothesis (if relevant) can be refuted;
- allow for variability and different results under a variety of conditions;
- allow for adaption and change (within certain qualitative methodologies, for example);
- be consistent with the requirements of your course and assessment (enable your research to be produced at the right standard and level of study, for example).

If you are struggling to develop your research question, you can try working through the following stages:

1 Choose a topic for your research.
2 Undertake some preliminary background research to find out about other research on this topic. Are you able to add to existing knowledge or develop new knowledge on the topic?
3 Think about your audience. Does your chosen topic provide enough scope to work at the right intellectual level?
4 Think about your goal(s). This could be to build on existing knowledge or encourage change in practice, for example.
5 Start to ask relevant questions and pick the one that is most suitable.

6 Develop this question into your research question. Make sure that it is focused and complex (that is, it cannot be answered with a simple yes or no based on existing knowledge).
7 Reflect, analyse and/or hypothesize. Is your question suitable and workable?
8 Rewrite as appropriate.
9 Once you are happy with your research question, present it for peer and tutor feedback.
10 Modify and refine as appropriate.

Developing the right research question is crucial to the success of your research project. However, it can take a long time to develop a good, workable question so try not to become frustrated or impatient. Speak to fellow students and read more about the subject if you are struggling. The following books may be useful:

Alvesson, M. and Sandberg, J. (2013) *Constructing Research Questions: Doing Interesting Research*. London: Sage.
White, P. (2009) *Developing Research Questions: A Guide for Social Scientists*. London: Palgrave Macmillan.

Activity 18

Activity • • • • • • • • • • • → 20

Choosing Research Methods

STUDENT HANDOUT

Work through the examples given below, in your group, and answer the following questions for each example:

1 What data collection method(s) would you use?
2 What sampling method(s) would you use?
3 What recording method(s) would you use?

4 How would you store the data that you have collected?
5 How would you analyse the data that you have collected?

Example 1

This research seeks to identify, describe and produce an analysis of the interacting factors that influence the learning choices of final-year undergraduate students who intend to go on to postgraduate study in the year that they graduate, and develop associated theory.

Example 2

This research seeks to evaluate the integration, effectiveness and costs of different models that deliver primary health-care to homeless people.

Example 3

This research will explore the role of women in the gothic novel.

Example 4

This research will seek to provide new social scientific explanations and theories of alternative cultural movements and activities in selected European cities. It will consider the development, use and closure of alternative cultural venues and sites after anti-squatting and anti-rave legislation.

Example 5

This research will test the assumption that taste is the primary reason for buying a new type of chocolate product.

Example 6

This research seeks to identify the causes, and reduce the risk, of language and literacy disorders in preschool children who come from disadvantaged backgrounds.

Example 7

This research seeks to understand the prevalence of Chalara dieback of ash trees (also known as Chalara or ash dieback) in northern Europe and chart its movement.

Example 8

This research aims to develop new research tools for the study and manipulation of the parasitic flatworm species that is responsible for bilharzia disease.

Example 9

This research seeks to examine the impact of political radicalism on Scottish workers before, during and after the Great War.

Example 10

This research seeks to increase cheese manufacturing efficiency and sustainability through changing farming practice.

Tips

When you work through each example, consider the following points:

- Decide whether the research is exploratory, descriptive or causal (or a combination of these) and match the methods accordingly.
- Decide whether the research is to generate theory, test theory or explore theory and match methods accordingly.
- Ensure that the chosen methods are appropriate to the methodology. It is important to note that for some qualitative research it may be difficult to state specific methods at the beginning of the project as these might be developed, refined or changed in light of emerging themes. If this is the case, highlight these issues in the relevant example(s).
- Choose a combination of methods if appropriate, desirable and feasible (if the methodology enables this).
- Ensure that the methods are ethically sound.

Activity 20

Activity • • • • • • • • • • → 22

Knowing about Probability Samples

STUDENT HANDOUT

This worksheet helps you to recognize, analyse and apply probability sampling methods in research. In probability samples, all people within the study population have a specifiable chance of being selected. These types of sample are used if the researcher wishes to explain, predict or generalize to the whole research population. Since the sample serves as a model for the whole research population, it must be an accurate representation of this population.

There are several probability sampling methods that are used in research and examples of these are given below. Work through these examples and, for each one:

- name the sampling technique;
- highlight possible strengths and weaknesses;

- give another example of a research project that could utilize this particular sampling technique.

Example 1

A researcher wants to find out how many children are absent from school in a given month. It is important to ensure that every school in the country has an equal chance of being chosen so that generalizations can be made. He obtains a list of every school, assigns each a number and, using an online random number generator, creates a list of schools to which he can send his questionnaire.

Example 2

A researcher wants to understand more about the coping strategies of nurses working in busy hospitals at night. It is not possible, financially or practically, to visit every hospital in the country. However, precision is important as the researcher wants to be able to give an explanation of coping strategies and make predictions about how nurses will cope in a given situation. The researcher decides to choose several specific geographical locations and then obtain a list of all hospitals within each location. Each hospital is assigned a number and a list of hospitals, within each geographical location, is chosen using an online random number generator.

Example 3

A researcher wants to find out about the lunchtime eating habits of workers in a particular car factory. She obtains a list of all employees, chooses a starting number, chooses an interval number and then works though the list, developing her sample list from the employees that appear at the correct interval on the list.

Example 4

A researcher wants to find out about participation in sport among undergraduate students from different subject areas studying at a particular university. It is important to the researcher that he is able to interview students from all subject

areas as he wants to find out whether there is a connection between subject studied and participation in sport. He decides to arrange his sample by undergraduate subject and then, within each subject, choose students on a random basis.

Example 5

The researcher described in Example 4 finds that there are many more arts students than science students. So he decides to increase the sample size of his science students to make sure that his data are meaningful.

Activity 22

Activity • • • • • • • • • • • → 23

Knowing about Non-Probability (Purposive) Sampling

STUDENT HANDOUT

This worksheet helps you to recognize, analyse and apply non-probability sampling methods in research. Non-probability samples (also referred to as purposive samples) are used if description rather than generalization is the goal. In this type of sample it is not possible to specify the possibility of one person being included in the sample. Instead, the sample is selected on the basis of knowledge of the research problem.

There are several non-probability sampling methods that are used in research and examples of these are given below. Work through these examples and, for each one:

- name the sampling technique;
- highlight possible strengths and weaknesses;

- give another example of a research project that could utilize this particular sampling technique.

Example 1

A market researcher wants to find out what members of the public think about a new chocolate bar that has just been produced. He wants to make sure that all sections of the population are represented in the sample, so he works out what major characteristics are important (gender, age and ethnicity, for example) and then how many people from each of these categories should be sampled. He stands on a street corner and chooses people that fit into each category, until the target number within each category is reached.

Example 2

A researcher is interested in finding out about graffiti in her local city. One aspect of this research is to speak to those who produce graffiti. She realizes that she has to be trusted and establish rapport with these people before they will talk to her. Through personal contacts she comes across a person who admits to producing graffiti at a site in the vicinity. The researcher is able to talk to this person, establish a good relationship and gain some useful information. This person then recommends a friend who is also willing to talk to the researcher. This continues, with one person recommending another and so on, until the researcher has spoken to 15 different people.

Example 3

A researcher is interested in finding out about the learning choices of adults who decide to return to education later in life. She wants to find out the issues that are important to the adults, rather than make assumptions or develop a hypothesis. Therefore, she decides to interview three participants, analyse the results and decide whom to interview next depending on the emerging themes. As these themes develop, she chooses further people to interview, and consults the background literature to help explain what she is finding. She continues with this process until no new themes are emerging and all themes are fully explained.

Example 4

A researcher wants to find out what students think of the entertainment facilities on a university campus. He stands by the entrance to the university library and stops students as they pass by, asking a series of questions about the university entertainment facilities. He does this until he has asked the opinion of 100 students.

Example 5

A researcher is interested in finding out how family bereavement can impact on research activities. Having personally experienced family bereavement, and having come across others in a similar position, the researcher chooses whom to interview based on his existing knowledge of who would be suitable.

Activity 23

Activity • • • • • • • • • • → 24

Choosing Sample Size

STUDENT HANDOUT

Choose a tool or a method that helps students and researchers to work out, or decide on, an appropriate sample size. This could be:

- an online sample size calculator;
- specialist software;
- a published sample size table;
- sample size formulae;
- a statistics textbook or journal article;
- a methods book or journal article describing a particular sampling method that does not define sample size at

the beginning of a project (such as those used in certain types of qualitative research);
- a methods book or journal article about using a census for small populations (sampling is not required because everyone in the population can be contacted).

Once you have chosen a suitable tool or method, post and share it with other students, using the suggested digital platform. You will need to post specific information about the tool or method so that it can be found by other students, such as URL, book reference, journal title, blog title and so on. When you post these details, include the following information:

- the strengths of the tool or method;
- the weaknesses of the tool or method;

- advice and guidance for students who might be thinking of using this particular tool or method.

Provide as much detail and useful information as possible so that you and your fellow students can assess the merits of the different tools and methods that are posted and shared. You can use this resource to help you choose an appropriate sample size tool or method for your research.

Activity • • • • • • • • • • → 25

Avoiding Sampling Problems

STUDENT HANDOUT

Read the examples given below. For each of these examples:

- Identify the sampling problem or the difficulties that could be encountered with the chosen sampling method.
- Discuss ways in which the problem and/or difficulties could be overcome or rectified.

Example 1

A business student decides to interview 30 executives from manufacturing companies in the UK. He chooses a simple random sample (where each member of the population has an equal and known chance of being chosen). He draws up a list of what he thinks are all the manufacturing companies in the UK, assigns a number to each and uses an online random number generator to produce his sample. His intention is to make generalizations and predict behaviour.

Example 2

A medical student wants to find out about the gaming habits of fellow medical students to ascertain whether the manual dexterity required for certain games will be of use in their medical careers. He intends to generalize his results to all students training to be doctors and devise gaming training that would help in medical careers. He decides to invite all the students studying in his medical school to complete an online questionnaire.

Example 3

A geography student wants to find out whether bad behaviour in schools is affected by school location. She is interested in whether there is a difference between rural and inner-city schools. She chooses two areas: one where she studies at university and the other her home town. Using the personal contacts of her tutor and her parents, she contacts head teachers in four schools: one urban school and one rural school near her home town, and one urban school and one rural school near her university. Within each school she asks if she can speak to school pupils who 'display bad behaviour'. These pupils are chosen by teachers in each school, according to their own criteria.

Example 4

A student wants to find out about levels of alcohol consumption among his fellow students. He is interested in finding out whether this varies between gender and subject studied. He decides to draw up a quota of students that includes an equal representation of male and female students, and students studying humanities, social sciences, engineering and sciences. He stands at the entrance to the university library, stopping students and asking filter questions to find out if they fit into any of his categories. If they do, he asks them a few short questions about how much alcohol they drink.

Example 5

A student wants to find out about drug taking at music festivals. She decides to attend three different music festivals during the summer months of one academic year. She intends to approach people at each festival, introduce herself, explain what she is doing and then ask about drug habits. She hopes that people will introduce her to other people and so on, perhaps by using a type of snowball sampling technique.

Activity 25

Activity • • • • • • • • • • → 26

Justifying your Research Topic

STUDENT HANDOUT

Produce a justification for your research topic. In doing so, consider the following questions:

1 What is your reason for choosing this topic? Is this reason valid, reliable and justifiable?
2 Does the topic provide enough scope to work at the right intellectual level?
3 What is exciting about your topic?
4 Why is research on this topic needed?
5 How can you add to existing knowledge, or develop new knowledge, on this topic?
6 What is original about this topic or your approach to the topic?
7 What is the likelihood of success in your research, when compared with other work in this field and in its own right?
8 Why is your research useful and worthwhile?
9 Who benefits from your research, and how? This could be individuals, groups, specific organizations or the wider public, for example.
10 What is the expected impact of your research? 'Impact' includes the societal and economic benefits to be gained from your research.

Once you have produced a justification for your research topic, prepare a 10-minute oral presentation to give to your fellow students. They can ask questions about your topic justification, so be prepared to answer these and defend your chosen topic. You can also put questions to other students, so think of some questions that you might ask after they have made their presentation.

Activity · · · · · · · · · · · → 27

Defending Methodology

STUDENT HANDOUT

Prepare a defence of your chosen research methodology. You will need to make a short verbal presentation to the rest of the group in which you defend your methodology. Other students will be able to ask questions at the end of your presentation, so think about what they might ask and prepare some answers. You will also be able to ask questions about the methodologies of other students, so prepare some questions that you can ask. Each student will be allocated a total of 10 minutes for their presentation and for questions from other students.

Consider the following questions when you prepare your defence:

1   Why have you chosen this particular methodology?
2   Why is your chosen methodology the most appropriate for your research topic?
3   What other methodologies could have been chosen and why were they rejected?
4   How does your methodology help you to work towards answering your research question?
5   How does your chosen methodology fit with your epistemological standpoint and theoretical perspective?
6   Is it possible to refine, combine or alter your methodology (if required) yet still retain a coherent epistemological position?

When you prepare your defence, take care to avoid methodological fundamentalism. This implies that your methodology is the one true approach and that all other methodologies are flawed and/or inferior. Be prepared to critique your methodology and change, adapt or combine it with others where necessary. You may find that some alterations are required after you have completed this activity and received feedback from other students.

Activity · · · · · · · · · · → 28

Costing a Research Project

STUDENT HANDOUT

Using the costing method guidelines produced by your institution (or funding body), discuss the following issues with your group members:

1 How are costs categorized?
2 For each category, think of specific examples of costs that would be included in that category.
3 What are allowable costs? Draw up a list of these allowable costs.
4 What are unallowable costs? Draw up a list of these unallowable costs.

5 Can you identify any caps or limitations on funding (this could be salary caps and stipends, or limits on equipment purchase, for example)?
6 Identify specific people or offices at your institution (or funding body) that will be able to help if you encounter any difficulties when working out costs.

Activity • • • • • • • • • • → 29

Producing and Justifying your Budget

STUDENT HANDOUT

This activity requires you to produce and justify your budget. Budget justification is one of the most important parts of a grant application. You must be able to demonstrate that you are only applying for appropriate funds, that all funds are realistic, specific to the proposed research and necessary for the success of your project. You must also be able to prove value for money in terms of economy, efficiency and effectiveness. All sections of your budget justification must adhere to funding body and institutional policy.

When you produce and justify your budget, contact your chosen funding body to find out what should be included. Large funding bodies have very specific criteria, whereas smaller funding organizations may leave structure, style and content decisions to individual researchers. As a general guide, you will need to include the following when producing and justifying your budget:

- Personnel. This includes a detailed list of, and justification for, each member of staff intending to work on the project. When working out costs you need to take into account the cost of hiring any new members of staff required for the project, salary levels for their grade/expertise and the cost of fringe/employee benefits (holiday entitlement, sick leave and health insurance, for example). Salary costs should also include any increments, promotion or regrading, where appropriate. You will need to demonstrate that staffing levels are sufficient and appropriate to the needs of the project.
- Staff development. This includes training, seminars or workshops. These will need to be justified in terms of their importance and relevance to the research project.
- Travel. This includes a description of, and justification for, the travel expenses of project personnel. The cheapest prices should be quoted. Taxi fares, accommodation, tips (if relevant) and parking may need to be included.
- Equipment. This will include items that need to be purchased (or rented) for the success of the project. You will need to include methods of procurement and a justification for using a particular model and supplier.
- Supplies. This includes a description of, and justification for, items such as office supplies, phone and internet services. All items should be listed separately with costs based on current market prices.
- Consumables. This includes items such as laptops, software and charges for access to research data. Each item should be listed separately, with costs based on current market prices.
- Professional services and consultants. This section provides a detailed list of costs (fees and expenses) associated with outside professional services and consultants. The use of outside services and the methods of procurement used will need to be explained and justified. It is important to check that your chosen funding body will provide funds for professional services and consultants before you include this category.
- Data preservation, data sharing and dissemination costs. This will include detailed information about costs associated with sharing and making public the results of your research. Careful justification of these costs will help you to produce your impact statement.
- Exceptional items. This could include equipment costs over a specified amount of money, studentships and survey costs, for example. You must be able to demonstrate the importance of exceptional items and justify their inclusion in relation to the success of your project.
- Indirect costs. These include library facilities and estates, for example, and can be listed and justified if a funding body agrees to pay all or a proportion of these costs. A standard estimate is used to generate these costs.
- Other costs. This includes other costs that are not listed in the above categories (often because they are costs unique to a particular project). These will need to be listed and justified in relation to your research.

TIPS

The following tips will help you to produce your budget justification:

- Your budget justification should follow funding body instructions as closely as possible, providing as much detail and justification as necessary, while working within any page length or word count limits.
- Be as specific as possible.
- Write your justification in the same order as the budget line items so that reviewers can compare them easily.
- Your budget justification should answer questions rather than generate new questions.
- Sample budget justifications (or examples of best practice) can be downloaded from the websites of many university research offices and provide good examples of how you should work through this process. Some research offices also provide templates that you can use to generate your budget justification for certain types of funding (such as federal funding in the USA).
- Consider the five Ws when justifying costs: who, what, when, where, why? For example, when justifying staff costs, ask the following questions: who are the members of staff? What is their role on the research project and what skills and experience can they bring to the role? When and for how long will they be working on the project? Where will they be working? Why are they required for the project?
- All funding bodies will want to see value for money. This is discussed in terms of the three Es, economy, efficiency and effectiveness, and these provide a useful way for you to work out whether your research provides value for money:

  o Economy. Are you using resources in the best way possible? For example, how will requested equipment save time and effort? Is it possible to show how you will do more for less money?
  o Efficiency. Will your research be carried out in the most efficient way? For example, do members of the team have the necessary skills and experience to carry out the required work with minimal disruption? Do you have examples of good practice that encourage efficiency?
  o Effectiveness. Is your research going to be effective? What is the intended impact and benefit to society? Can you demonstrate how your study will provide a good return on the investment from the funding body?

When justifying your budget, you must ensure (and illustrate) that your figures are appropriate in terms of funding body policy and your organization's policy. Funding bodies will not provide more than their stated cap, however persuasive your argument. They will also want to see that all requests are consistent with your university/employer policies in terms of salary levels, benefits and so on (in most cases your budget will need to receive internal verification that it is appropriate, complete and accurate before you submit).

Activity 29

Producing a Research Proposal

STUDENT HANDOUT

Produce a research proposal following the guidance given below. Once you have done this, swap proposals with your selected fellow student so that you can review each other's proposals. Once you have received peer review on your proposal, modify and refine accordingly.

A research proposal is an important document that provides a detailed description of your research project. Proposals can vary in terms of structure and style, depending on the purpose, methodology and audience. A good proposal should be clear, well written, well justified in terms of topic and method, and have a clear timetable and well-developed budget (if you are applying for funding). Although proposals can vary, in general they should include the following sections:

- Title. This should be short and explanatory. It can hint at your research question, your methodology and your research population. If you are struggling to choose a title, brainstorm possible titles and choose the best, or discuss possible titles with your peers.
- Background. This section should contain a rationale for your research. Why are you undertaking the project? Why is the research needed? This discussion should be placed within the context of existing research and/or within your own experience or observation. If you are unable to find any other research that deals specifically with your proposed project, point this out, illustrating how your proposed research will fill this gap and create new knowledge.
- Aims and objectives. The aim is the overall driving force of the research and the objectives are the means by which you intend to achieve the aim. You will need to provide one clear and succinct aim (perhaps with one or two subsidiary aims) and several objectives that relate to your aim(s). Your aims and objectives must relate to your research question and demonstrate how this will be answered.
- Methodology. This section describes your proposed research methodology and provides a justification for its use. Why have you decided on this particular methodology and rejected others? How does your proposed methodology relate to epistemological standpoint and theoretical perspective? Can you foresee any problems with this methodology, and, if so, how do you intend to overcome them? If you have chosen a less well-known methodology (or a multiple or mixed approach), you

may need to spend more time justifying your choice than if you had chosen a more traditional methodology.
- Research methods. These are the tools that are used to collect your data and answer your research question (samples, numbers of people to be contacted, methods of data collection and methods of data analysis, for example). You need to illustrate how these methods relate to your methodology and discuss why they are the most appropriate to answer your research question.
- Timetable. This should include tasks such as time taken to conduct background research, questionnaire or interview schedule development and piloting, data collection, data analysis and report writing, for example.
- Budget and resources. This section is required for researchers who intend to apply for funding for their project. Obtain the most up-to-date guidelines about producing a budget and costing your project from the relevant funding body or institution. All funding organizations will only meet acceptable costs and will want to see value for money, in terms of strategic importance and research impact.
- Research impact. Funding organizations and universities are interested in research impact (defined by Research Councils UK as 'the demonstrable contribution that excellent research makes to society and the economy'). For some researchers this is both difficult and controversial. However, for most funding organizations it is a necessity. Your university research office will be able to offer further advice if you struggle with this section.
- Dissemination. This section demonstrates how you intend to let others know about the results of your

research. This can be through producing a thesis and providing a copy for the university library, journal papers (including deposits in open access repositories), conference papers, internal and external seminars, blogs, lectures, monographs, chapters for books and entire books, for example.

• References and bibliography. The reference section contains all the literature to which you have referred in your proposal, and the bibliography contains all other relevant literature. Ensure that you use the correct referencing procedure required by your institution.

When writing your research proposal, and reviewing the proposal of your peer, make sure that the following questions can be answered:

1 Is the research question of sufficient importance?
2 Has the originality of the topic been clearly demonstrated?
3 Has it been made clear that the research will add to existing knowledge or generate new knowledge on this topic?
4 Does the proposal illustrate comprehensive knowledge of the background literature and/or the topic to be researched?
5 Are the aims and objectives clear, succinct and unambiguous?
6 Are the aims and objectives realistic in terms of what can be achieved during the research (available resources, time, access to participants, for example)?
7 Do the aims and objectives support the methodology?
8 Is the connection between epistemological standpoint, theoretical perspective and methodological position clearly stated and well defined?
9 Has the chosen methodology been well justified, and have reasons given why other methodologies were not chosen?
10 Have methodological limitations been highlighted?
11 Does the adopted approach match the issues to be addressed?
12 Is the proposed timescale appropriate and realistic? Is the overall plan achievable in the time available?
13 Is information about the data collection method(s) sufficiently detailed?
14 Is information about the data analysis method(s) sufficiently detailed?
15 Is there enough information about required resources and budget? Are all costs relevant and justified?
16 Is it clear how the results are to be disseminated?
17 Has the expected impact of the research been demonstrated?

Activity 30