MANAGING EXTENDED PROJECTS

JO WILCOX &

www.getrevising.co.uk
search • share • create

PETER LANGLEY

Brought to you by **Get Revising**

Managing Extended Projects

Authors: Jo Wilcox and Peter Langley
Design and cover: Kate Benjamin **Editorial management:** Peter Langley **Authors' acknowledgements**
Thanks to Jess Jung (notetaking, bibliographies) and Dave Roberts (formatting), for their contributions and to both Jess and Dave and also Neil Commin for all the inspirational ideas and discussions about how best to develop the Extended Project programme. Heartfelt thanks go to Gaynor Green for her unfailing support and wisdom in getting the programme off the ground and helping us to realise our ideas. This book could not have been written without them.

A big thank you from Jo to Penny Somerville (thanks Mum!) from whom I learned so much about organising exhibitions without even realising that I had, and for all her advice on managing creative projects. Thank you also to Charlotte Wilcox, Nicky Falkof and Lizzie Ockford for their suggestions and advice. Finally, thank you to Tim Bick, who helped me to see the big picture and convinced me to see past the endless to-do list so that I could write this book.

Permissions: whilst every effort has been made to contact copyright holders, this has not proved possible in every case.

Published for teachers by The Student Room Group, The Grain Store, 127 Gloucester Road, Brighton, BN1 4AF, Tel: 0800 9993 222
First published in 2010 by Connect Publications
www.thestudentroom.com | www.getrevising.co.uk |
www.markedbyteachers.com © The Student Room Group, 2012

Copyright statement
The publisher grants permission for the contents of *Managing Extended Projects* to be used only within the purchasing institution. No part of the contents may be distributed beyond the purchasing institution or be placed on any website which can be accessed from outside the purchasing institution.

So you CAN
✓ Make as many copies as you like of any material from the book as long as they are used within your own school or college.
✓ Use any material from the book freely within your own school or college.

✓ Place any of the material from the book on your school or college intranet or virtual learning environment (VLE).
✓ Place any material from the book on your school or college network.

But you CANNOT

✕ Give or lend the book or any materials from it to anyone outside your school or college community.
✕ Place any material from the book on a website which can be publicly accessed from outside your school or college. ✕ Use any material printed from the book outside your school or college community.

Please contact the publisher if there are any queries regarding copyright.

The contents of this book are being made available free of charge to all interested teachers. Please note the copyright restrictions above.

www.getrevising.co.uk
search • share • create

Get Revising: every student's personal learning kit

Create and share flashcards, mindmaps, notes, crosswords, quizzes, questions and ideas - and use our revision timetable tool

FREE SUBSCRIPTION FOR EVERY UK TEACHER

Register now at **www.getrevising.co.uk**

Managing Extended Projects

Contents

1 Starting the project

What is an Extended Project? 6
Why do an Extended Project? 8
Getting an idea 10
Getting an idea form 12
Safe, ethical, practical, accessible? 13
Evaluating your project idea 15
Developing a focus 16
Developing a focus form 17
Developing a title for a written project 18
Writing a brief for an artefact-based project 19
Communication design brief template 20
'Art in context' brief template 21
Planning a performance for a group project 22
Planning a performance checklist 24
How will your project be assessed? 25

2 Managing the project

Planning the project 28
Creating a project timeline 29
Project task list and Gannt chart 31
Making the most of tutorials 33
Tutorial planning and recording form 34
Keeping a record of progress 35
Conforming to ethical guidelines 36
Using risk assessments 37

How to carry out a risk assessment 38

Risk assessment form 39

3 Using sources

Avoiding plagiarism 42

Taking notes 43

Creating a bibliography 45

Record of online sources 47

Record of paper-based sources 48

Analysing how texts communicate 49

Textual analysis form 51

Content analysis 52

Thinking critically about written sources 53

Assessing claims in a text 54

Assessing the credibility of primary sources 55

Assessing the credibility of secondary sources 56

Using critical thinking in your research: checklist 57

Brought to you by www.getrevising.co.uk

4 Collecting primary data

Doing your own research 60

Sampling 62

Accessing organisations 64

Questionnaires 65

Questionnaire planning form 67

Interviews 68

20 steps to a good interview 70

Interview planning form 71

Observation 72

Observation planning form 74

Analysing quantitative data 75

Presenting quantitative data 76

Presenting and analysing qualitative data 78

Evaluating primary data 80

Research methods glossary 82

5 Constructing logical arguments

Constructing logical arguments 86

Using argument maps 88

Structuring a discussion 89

Reasoning checklist 90

A glossary of reasoning 91

6 Writing and presenting the project

Writing coherently 94

Formatting your project 96

Editing your work 98

Suggested project structure: Essay or dissertation 99

Suggested project structure: Investigation 100

Suggested project structure: Artefact 101

Suggested project structure: Performance 102

Presenting your project checklist 103

Presenting work in an exhibition 105

Planning for an exhibition: guidance and checklist 106

7 Evaluating the project

Evaluating your project 110

Evaluation checklist 112

8 Giving an oral presentation

What makes a good oral presentation? 114

Planning an oral presentation 115

Oral presentation planning form 116

Using visual aids 117

Preparing the presentation 119

Giving the presentation and dealing with questions 120

Presentation checklist 121

Brought to you by www.getrevising.co.uk

Chapter 1

What is an Extended Project?	6
Why do an Extended Project?	8
Getting an idea	10
Getting an idea form	12
Safe, ethical, practical, accessible?	13
Evaluating your project idea	15
Developing a focus	16
Developing a focus form	17
Developing a title for a written project	18
Writing a brief for an artefact-based project	19
Communication design brief template	20
‘Art in context’ brief template	21
Planning a performance for a group project	22
Planning a performance checklist	24

How will your project be assessed? 25

Starting the project

WHAT IS AN EXTENDED PROJECT?

Imagine you could use some time at school or college to do something you really want. Maybe you'd love to produce your own play or explore quantum mechanics. Perhaps you've always wanted to find out about organ transplants or to trace the origins of celebrity culture.

What about the arguments you've had with classmates about the influence of the USA in world politics, or the rights and wrongs of assisted suicide? What if you had the chance to make your own clothes or musical instrument? Or to ask important questions such as: why are there differences between the behaviour of young men and young women or why do so few young people vote?

All of these could provide the basis for an Extended Project. The aim of the Extended Project Qualification (EPQ) is to provide freedom and time to develop skills and explore an idea that interests you.

Doing an Extended Project is great for building confidence and broadening horizons because you are free to be creative, practical or academic, you can be led by your curiosity and you can pursue an idea to see how it evolves and takes shape over time. In fact, students often comment at the end of their project that they could never have imagined where their project would take them when they started out.

What kind of work does the project involve?

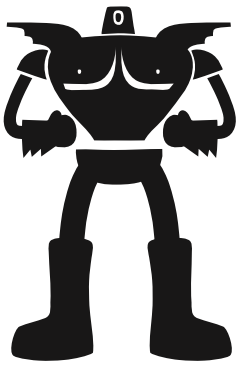
The point of the EPQ is that you work independently most of the time. At first this might be a daunting prospect, but most students also find it rewarding and motivating. You will have a project supervisor who will guide and support you through the whole process although, ultimately, it is up to you, and this means that you will need to be organised and motivated by the topic and by the project format you choose.

Projects can take a wide range of forms. Some students choose to write an extended essay or to do their own research, others to create a computer application, performance, mathematical solution, design, piece of art, or an event. This list is not exhaustive – it is up to you to make a choice. Many students choose to do something which develops skills that will be useful in their future career or in higher education.

Whatever format you choose, the project will involve a written element, which is likely to be between 1000 and 6000 words, depending on whether there is a further practical or creative element to the project or whether it is just a written document. It will also involve some form of presentation near the end of the course where you will describe and explain the project.

What are your initial ideas for a project?

How does the Extended Project fit in with my other courses?



An Extended Project is a compulsory part of all Diploma courses and the AQA Baccalaureate, but can also be taken as a separate qualification alongside traditional qualifications such as A levels. You may want to select a project that complements other courses, or extends your knowledge of one subject – maybe a subject that you want to study in more depth in the future.

?

How is the project assessed?

The assessment is very different from other qualifications because there are no exams. In fact, in the EPQ, the learning process is more important than the outcome. That is, the skills you develop and the experiences you go through are more important than what you actually make, present or conclude. When things go wrong – as they inevitably will – you actually gain marks for explaining what went wrong, why it went wrong, and how you could prevent it from going wrong again in the future.

Four areas of skills are assessed:

1. **Project planning and time management**
   Working out how best to use the time available
2. **Using resources and research skills**
   The way you collect information and use resources such as books, journals and the internet
3. **Developing an idea and producing an outcome**
   The whole project process

How much work will be involved?

The EPQ is worth half an A level (70 UCAS points for an A* grade) at A2 standard. Most A2 courses require something like six to eight hours of learning per week over at least two terms if you include class time and independent study – which works out at around 180 hours in total. You will need a reasonable amount of time for the whole

www.getrevising.co.uk

Extended Project process, from gathering initial topic ideas to

What help will I get?

The EPQ is based on independent, university-style learning but that does not mean you work entirely on your own. You will be allocated a supervisor to support you through the process of doing the project.

4. Evaluation and presentation

Reflecting on the process of doing the project and your ability to communicate your work orally to other people

These four areas will be assessed throughout the project process, although you will probably focus on each one in turn.

Whatever project you choose, you should finish with an excellent grounding in research, critical analysis and presentation skills.

> ? Which of the skill areas do you feel is likely to be your main strength?

presenting the outcome of the project and reviewing your learning. Of course, to some extent you can decide when to put in more work and when to put in less, which could be helpful around exam times. Ultimately, the amount of independent learning time you put in – and what you get out of it – is up to you.

Advantages and disadvantages

Every student needs to think carefully about the decision to opt for the Extended Project because it is a big commitment.

So what are the advantages? Ultimately, what you gain will depend on the project you choose and on your level of commitment, but there are some benefits that are well worth thinking about.

Personal benefits

No matter what your next step in life, a carefully chosen Extended Project can help you to make sound decisions, to become more confident, and to develop important skills and knowledge. Completing an Extended Project to the best of your ability brings a huge sense of achievement and personal satisfaction. It is a challenging process that is likely to provoke doubts, setbacks and disappointments. These are a natural part of the process, and with a little determination they can be important learning experiences.

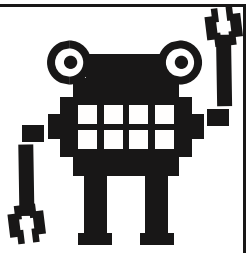
Work-related benefits

Confidence in your own abilities and the self-awareness to know your limitations are vital to career success. Completing an Extended Project can help with the development of these qualities, if you take the time to reflect seriously.

Useful work skills that you will develop are:

- time management and personal organisation
- problem solving and decision making

summary…



The Extended Project:

- gives you the opportunity to study something of your own choice
- requires you to work independently with the support of a supervisor
- is assessed by the skills you show in managing, researching, developing and presenting the project
- is worth half an A level at A2 standard.

www.getrevising.co.uk

Some students find the idea of presenting their work to an audience challenging at first, but find that they do well and have a great sense of achievement as a result. During the project you will be encouraged to keep records of your progress, thoughts and decisions. Reviewing these as you near the end of the project will help you to understand how overcoming challenges and finding creative solutions to obstacles help you to develop maturity, confidence, resilience and self-awareness.

One large employer states that through activities such as the Extended Project:

… students will develop their capabilities in terms of problem solving, critical analysis, team working and communications, as well as high standards of Maths and English – all of which are highly prized by employers.

Gary Argent, UK Graduate Recruitment Manager, LogicaCMG[1]

? How will these skills benefit your chosen career or university course?

Educational benefits

- clear, concise and accurate written communication
- communicating complex information to a 'lay' audience
- use of ICT to communicate effectively.

You will probably be working on your project alongside different subjects – which can enrich your understanding other courses, perhaps AS or A levels or a Diploma. Your of all of them. Because you don't have to worry about topic could link closely to another course, so the knowledge learning huge amounts of information for an exam, you can and skills you develop will be useful to both. The project concentrate on really extending your skills instead. might also help you to bring together perspectives from

1 'What employers and industry leaders are saying about the Diploma' (www.dcsf.gov.uk/14-19/employers)

University benefits

Universities really value the Extended Project Qualification (EPQ), as it helps them to select students with a commitment to their chosen subject and a head-start in the independent learning skills that higher education demands.

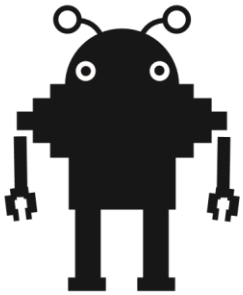
Here are some examples of what universities say about the Extended Project.

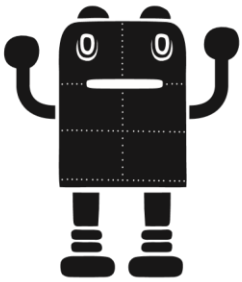
www.getrevising.co.uk

Bristol

"The University recognises that some A level students may also choose to offer the Extended Project. In such cases, some admissions tutors may make two alternative offers, one of which involves success in the Extended Project (for example, either AAA at A level or AAB at A level plus Extended Project)."

www.bristol.ac.uk





Newcastle

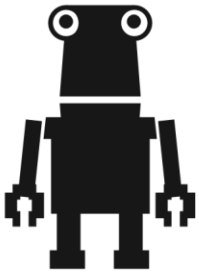
"We value the skills of research and independent learning that the Extended Project is designed to develop. We welcome applications from students offering the Extended Project alongside A levels. As the Extended Project is optional it is not a requirement for application. If you offer an Extended Project, it will be taken into account. Your offer may be varied as a result, in recognition of the level of study skills you will have developed."

www.newcastle.ac.uk

University College London

"UCL welcomes the introduction of the Extended Project into the curriculum, recognising that it will develop many of the skills necessary for successful study at university. For students presenting A levels, UCL will be accepting a pass in the Extended Project as an alternative to the need to offer a pass in a fourth subject at AS level."

www.ucl.ac.uk



summary…

There are many benefits to be gained for completing an Extended Project. The skills you develop such as time management and the ability to work independently are valued by universities and employers. You can also select a project that benefits the other courses you are studying at school or college.

Very rarely in life are we offered a completely free choice, so starting an Extended Project can be quite frightening. In reality though, it is likely that there will be some restrictions on what you can choose to do.

How much choice do you really have?

The first thing to consider is whether your options are limited by your main qualification or your school/college.

www.getrevising.co.uk

- If you are doing an Extended Project as part of a Diploma, then your topic must relate to the principal area of learning or proposed career path.
- Many project ideas are simply not practical, ethical or safe. See the guidance on 'Safe, ethical, practical, accessible' to check that you have considered all the pitfalls here.
- Your school or college may not have the resources necessary for some types of project.

These issues will need to be talked over with your project supervisor. They will be able to offer advice about the most suitable types of project for you.

What format should your project take?

If you are hoping to link the project to higher education plans, it is worth keeping in mind that universities are often more interested in Extended Projects which combine academic research and writing skills, rather than those which result in a performance, product or event.

However, if you are hoping to develop skills more useful in employment, such as leading a group project, marketing, and interpersonal skills, then a project focused on communication or involving the public in some way could be more appropriate.

Extended Projects can take various forms. Some of these are:

- **Extended essay or theoretical dissertation** e.g. a defence of the view that anabolic steroids should be allowed for male athletes in the Olympic Games.
- **Creative writing** e.g. fiction or film script.
- **A formal report of a scientific/social scientific investigation or field study** e.g. an analysis of the attitudes to feminism of women from different age groups.

? What limitations are there on your choice of project?

Once you are ready to start thinking about your choice there are two key elements of the project to consider:

1. The format 2. The topic

Let's look at these in turn.

- **ICT/ Media product** e.g. CD-ROM or application.
- **Artefact:** the design and/or creation of an object, artwork, construction, website or other piece of communication e.g. producing, creating and marketing a CD for a school or college band.
- **Performance-based activity** e.g. acting in or directing a dramatic production or film, staging a performance of your own dance piece.
- **Vocational project and report** e.g. a business plan based on market research, sports coaching, skills analysis and development.
- **Planning and managing an event and report** e.g. organising a charity ball to raise money for Oxfam.

?

What topic should you choose?

It is best to choose an area in which you have some background knowledge, but have not studied in depth; or a topic related to your proposed career or future studies.

What form do you think your project might take?

- Personal experiences and interestsare an obvious starting point. Study your social/physical environment. Is there a problem which frustrates you and your peers, waiting to be solved? Is there an emotive issue which could be the inspiration for a piece of artwork? Is there an opportunity for an event involving the community?
- Your future plans for a career or university course are a great place to begin – work that is connected to these should benefit you in the future.

www.getrevising.co.uk

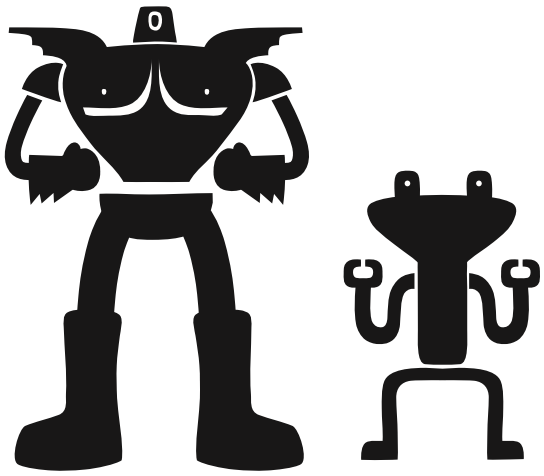
- Many students are involved in, or have strong links with, organisations such as workplaces, charities and sports clubs. Could these provide a starting point?
- Strong views about an issue can be very stimulating. Controversial issues or ethical dilemmas are good for
- Take a broad approach: look for the links between subjects you enjoy. For example, someone who studies Biology, Psychology and Sociology developing a focused theoretical argument.
- You could try a 'spotlight' approach. Is there a particular book, theory, artist, character or genre which has inspired you? Is there something you have learned which you feel contradicts your own experience or that you feel strongly about? could choose to study approaches to mental health issues. Another project might use a period of social history to inspire a piece of art for a public building.
- Alternatively, you could develop a practical extracurricular activity or event related to one of your courses. For example a Politics student could investigate young peoples' attitudes to political participation whilst organising a mock election at school or college.

An Extended Project can take up to a year to complete, so it's important to choose a topic that can hold your interest.

? What topic might you study?

summary…

Be aware of any limitations in your choice of project and think carefully about its form. Choose an area to study in which you have some background knowledge and which is related to a strong interest, proposed career or future studies.



Use this form to record your initial ideas.

www.getrevising.co.uk

[redacted]

Name and contact details
Main programme of study Subjects, courses and levels
Proposed topic to study This can be a broad topic or activity idea at this stage. You may have ideas for different topics.
Why you are interested in this topic? e.g. university course, career, personal interest. Give as much detail as you can.
Suggested project format e.g. extended essay, investigation, artefact, performance, event, design
Facilities and/or equipment needed Be as detailed as you can because this could be an important factor in choosing a format.
Possible sources of information e.g. books/websites (which ones?), people (who?), libraries (where?)

www.getrevising.co.uk

Possible difficulties
e.g. will the necessary resources/equipment be available? Do you have the technical skills required?

Safe, ethical, practical, accessible?

As an independent learner you will be expected to take responsibility for some of the decisions which, in the past, will have been made for you by teachers. These decisions relate to the ethics (morals), safety, and practicality of your project choice. For a project idea to be viable, you will need to be able to answer 'yes' to the following questions. Any 'no' answers will mean a rethink is required.

Is my project safe?

If you are doing any practical research, one of your most important responsibilities is to ensure that everyone involved in the project stays safe. This includes working alone in the local community or natural environment, or if you are using equipment and materials in a laboratory or studio that could be hazardous.

It is probably impossible to eliminate every potential risk but these risks do need to be identified and plans set out to manage them. A risk assessment should be carried out to check the potential hazards associated with your project, and to set out the practices that need to be put into place to ensure safety. Your supervisor should be able to help check that all the potential problems have been considered. See the section on 'Risk assessment' for more detail.

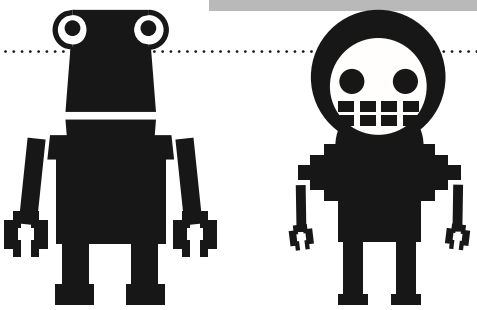
? Is your proposed project safe?

Is my project ethical?

Ethics are formal or informal moral codes which govern what is the right or wrong action in a particular situation. Researchers must always pay heed to the ethical context of their work, particularly when investigating sensitive social or personal issues, or when working with vulnerable people or children.

It is your responsibility to ensure that your project does not cause distress, that you are open and honest about what you are trying to achieve and the methods you are using, and that you respect people's right to choose to be involved or not. For more information on handling ethical issues in projects where people are being studied, see the section on 'Conforming to ethical guidelines'.

? Is your proposed project ethical?



www.getrevising.co.uk

Is my project practical?

If you want to carry out a project which requires particular facilities, such as laboratory space and equipment, a drama studio or specialist software, you need to ask whether these facilities are easily available. Resources like these are usually in frequent use and may require supervision from qualified staff. Have such staff allocated the time to supervise your work? If not, you may find that you have to rely on their goodwill, and so access to facilities may not be guaranteed for the amount of time you need.

Is my project accessible?

Some of the most interesting and controversial topics to study are also the most difficult. This is because you need to locate a range of information on the topic you have chosen – and this is not simply a matter of typing key words into a search engine and using what appears. You need to go further and find books and, possibly, articles in academic journals. This is because others are likely to have studied the topic before and their work will be a key reference point. So you need to check that there is accessible material available and that it is at a suitable level that you can understand.

Unless your project is to be done as part of an organised, timetabled group session, you may find that a written essay that you can work on at home or in a library is more practical. Remember also, that projects which focus on extended writing, critical thinking and the construction of a coherent argument are those which most universities value highly in their students following traditional academic courses.

? Is your proposed project practical?

summary…

All Extended Projects need to:

- be safe for everyone involved
- conform to ethical codes

If not, it will be difficult to access marks for the breadth of your research, and you are likely to experience unnecessary frustration as you search in vain for resources or struggle to understand complex academic concepts.

? Is your proposed project accessible?

- take into account the availability of resources, facilities and equipment.

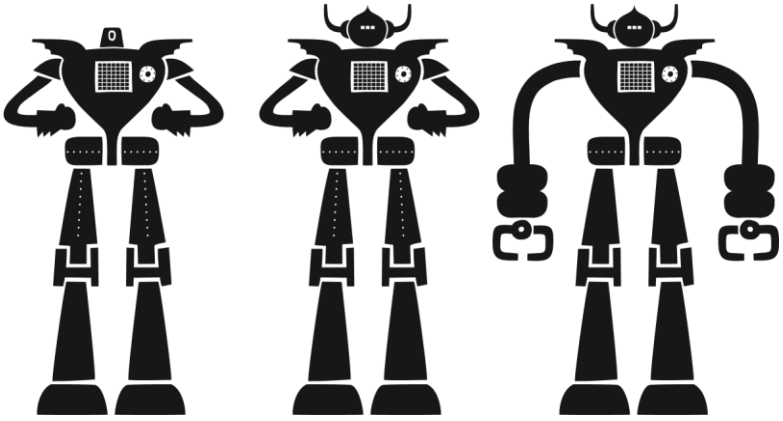
Evaluating your project idea

If you can tick all these ten boxes, then it is likely that your project idea will work for you. If you are unsure or have put a 'x' by any of the statements, then it is worth talking the point over with your supervisor.

✓ or ✗

www.getrevising.co.uk

1. My project idea interests me
2. There are good reasons for me to do this project
3. My idea is suitable for an Extended Project
4. My project idea is practical
5. My project idea is ethically justifiable
6. The risks involved in doing this project can be managed
7. There are a range of resources available on this topic
8. I will be able to gain access to the people and equipment I need
9. I am aware of the skills I need to complete this project
10. It is possible to complete this project within the time available



OK, you have an idea for your Extended Project. Great – but that's just the beginning. Now you need time to give that idea a clear focus and purpose.

Imagine that you are about to set out on a long car journey on a route you have never taken before. You wouldn't set out without first consulting a map, or finding some directions, because it's dangerous to drive and map-read at the same time, and the chances are you'll end up getting horribly lost somewhere around Birmingham. Think of the Extended Project as being a

www.getrevising.co.uk

Selecting a starting point

First you need to decide whether the main outcome of your project is to be written or more practical.

If it is written, you will need to develop a focus which allows you to write 5000 to 6000 words (depending on the exam board). If it is practical, depending on the scope and nature of the project, you will still need to write at least 1000 words describing and reflecting on the process.

Next you will need to create a shortlist of ideas for discussion with your supervisor, who will be able to help you think through any difficulties not yet considered and, perhaps, suggest some introductory reading or other research.

A few words on the project proposal

All Extended Project Qualifications require students to complete a proposal for the project. This is a form that outlines the research question or objective and explains how you plan to go about answering it or achieving your aims. This is one of the most important parts of the project. It does not have to be a scary prospect – in fact, if it is done at the right point in the project process, it should clarify your thinking. Think of the proposal as the road map and directions for your project. You may need to take detours as things crop up, but you should have a good idea where

summary…

bit like this – you can easily get into difficulties if you set off without a clear idea of where you are going.

A good project is one that starts out with a clearly focused aim, brief or research question, and addresses this in an organised, systematic way. It should state clearly at the outset what is to be achieved and how.

When you have selected one of these, the next step is to develop a focused question, aim or brief. It may need to be redrafted a few times before you are completely happy with it.

Specific guidance on starting points for different project formats can be found later in this chapter.

? What is the question, aim or brief for your project?

you will end up. Start to write the proposal when you have done some initial research and gathered enough material to develop some ideas or interesting questions.

? Have you looked at the necessary paperwork?

point in the form of a research

All Extended Projects need a clear starting question, aim or brief. They also require a project proposal form to be completed.

Developing a focus form

Name

www.getrevising.co.uk

Suggested project format e.g. extended essay, investigation using primary research, artefact, performance
Facilities and/or equipment needed Be as detailed as you can
Resources consulted so far Write details of any sources – author, title, website addresses etc.
Questions or issues raised through this initial research
Will you be writing an aim, a question, a research hypothesis or a brief?
Draft title
Tutor/supervisor comments

www.getrevising.co.uk
search share create

[redacted]

Written projects usually have titles in the form of a question or a statement. Writing this is an important part of the process and should be done at an early stage, even if it is a 'working title' which is changed before submitting the project.

This title may be an aim or statement of what you intend to find out, a question, hypothesis or proposition (see below). A focused title helps direct your thinking – by giving clear limits to what is relevant and what is not.

How to phrase a research aim

1. A research aim may be written as an intention to find out whether or not there is a relationship, pattern or trend.

An investigation to determine whether the market for vegan cafes has reached saturation point in Brighton and Hove.

2. It could be an 'open' question, to which there might be many possible responses; or a 'closed' question which could prompt a 'yes, because…' or 'no, because…' response.

Are there gender differences in the free play of under fives?

3. It may be a set of objectives which can be addressed systematically:

Research the opportunities for improving environmentally sustainable practices within a college and make recommendations for a new environmental policy to include:

- *Re-use and recycling facilities*
- *Energy use*
- *Purchasing decisions*
- *Transport*
- *Awareness raising*

How to phrase a research hypothesis

A scientific investigation would usually start with a research aim. Then, on the basis of your own observations or knowledge of previous research findings, this would be refined into a predictive statement in a form which could be tested and measured to produce data, for example:

Farmland which has achieved Soil Association organic status will support a greater diversity of species per metre than land which is conventionally farmed.

Here there is a clear and direct comparison between farmland with Soil Association organic status and that which is conventionally farmed. The criteria for organic farming are made clear, so we know what counts as organically farmed and what does not. We know what will be measured too – it is the number of species per metre of land. This clearly defined prediction is called an 'operationalised hypothesis'. The research hypothesis is then accepted or rejected on the basis of the data analysis that is completed.

How to phrase a proposition for a discursive essay

A proposition is a sentence expressing something true or false i.e. a statement, claim or judgement which is to be accepted or rejected through reasoned argument. It is often phrased as a principle or a recommendation, for example:

Richer countries have a moral responsibility to provide aid for poorer countries.

In this type of project, you would consider arguments that may be in opposition to each other, or may have similarities and differences. The essay would explore these in turn, assessing any evidence or reasoning on which they are based, leading to a reasoned conclusion in support of or challenging the statement. So your proposition should be phrased so that it could be answered with a 'yes, because…' or 'no, because…' response.

www.getrevising.co.uk

summary…

A written project needs a clear, carefully thought out starting point in the form of a research aim, hypothesis or proposition.

Writing a brief for an artefact-based project

An artefact might be a work of art, a design for a product, a marketing or advertising campaign Whatever the format, it will involve the use of creative and technical skills.

What is a brief?

Professional artists and designers usually work on commissioned projects for clients. When working on commission, the designer is guided by a 'brief' – a document which sets out the aim of the project and all the information needed to produce a design or artwork that fulfils the client's requirements.

Why use a brief?

You might find it useful to work to a brief rather than be tempted by the idea of complete freedom, because the project requires you to demonstrate planning and research skills. Writing the brief provides an opportunity to show that you have researched the social, cultural and environmental contexts of the artefact. It will also demonstrate understanding of resources and materials, safety requirements and costs. Your brief will show that you can identify a need and solve the problem of how to fulfil that need.

Another reason for writing a brief is to prepare for a future creative career. When working with clients in a commercial capacity, it is often the designer's responsibility to set out the questions that the client should answer in the brief. Poorly written briefs can result in work being rejected by the client, who then refuses to pay for it because the design 'isn't right'! So planning the questions for a good design brief is an important skill for those working in creative industries.

How is a brief written?

Perhaps you will have the opportunity to work on a commission for a real client. Alternatively, you could create an imaginary client for the briefing process. In the first

summary…

situation, you would develop the structure and questions for the design brief and fill in the answers through discussion with your client (an example of primary research). In the second case, you would produce the questions for the brief and then conduct primary and secondary research in order to answer these questions yourself.

There is no one correct approach to writing a brief. The appropriate questions to ask will depend on the context and the type of artefact – a brief for a documentary film will need different questions from a brief for a business website for example.

There are some qualities shared by all good briefs. The brief should:

- be open-ended enough to allow creativity whilst being clear about the project's specifications
- challenge the client to find and communicate clear aims for the project
- include information about the context including current situation, background and any competitors
- consider costs, safety, materials, environment and timescales for completion
- consider audience, message, purpose,style of communication
- have stimulus ideas such as guiding principles, concepts and creative inspirations
- include what is not wanted as well as what is wanted
- plan for an interim presentation of ideas to the client before the actual production begins.

www.getrevising.co.uk

Students considering an artefact-based project may find it useful to look at the 'Communication design brief template' or the 'Art in context brief template'. These can provide a starting point that can be adapted to produce an appropriate brief for your project.

A brief is a document setting out the aim of the project and asking the key questions that need to be answered in order to make the artefact. Creating a brief shows that you can identify a need and solve the problem of how to fulfil that need. To help create a clear focus for the project it is useful to work with a real or imaginary client.

Communication design is concerned with the function of an artefact in communicating a message to an audience as well as its form or appearance. Communication design also includes the media channels used in reaching audiences such as illustration, book design, animation, graphics, video and film making, website design, photography and advertising. Although primarily used to refer to visual communication, design can be applied to any communication in any sensory mode: a play, a podcast, a perfume or even a food product. Depending on your project idea, you might find the 'Art in context brief template' useful too.

……..

Use and adapt questions from this template to produce a brief that is appropriate for your project.

1. Summary

Provide a brief overview of the whole project (written last).

2. Context

Current situation: Why the project is needed. What is not working in the current situation? What needs to be improved? What does currently work and therefore needs to be retained? If it is a commercial product, what is the client's assessment of competing products? (What are the major competitors and what do they like/dislike about them?). What is the designer's assessment of the competition? Do both parties agree?

Project client or sponsor: Who is the main client briefing the designer and who will sign-off the project as satisfactorily completed?

Aims and objectives: What is to be achieved? For example: Generate sales? Engage interest in an idea? Encourage participation in an event? Tell a story? Make a political statement?

What needs to be done in order to achieve this?

Stakeholders: Is anyone involved in or affected by the project other than as an audience member? How are they affected? What is the plan for managing their involvement e.g. team meetings, public consultations, progress reports? Who is responsible for this?

3. Focusing and communicating the message

Who is the target audience? Are there any specific characteristics that they share? Consider: gender, age, nationality/location, typical occupations, psychological or personality characteristics, lifestyles.

How will the audience be reached? The medium or format of the message – live, print or digital (if online: text, image, audio, video etc. including any technical requirements). The location of the message – website, hoardings, broadcast TV, viral campaign, catalogue, shop etc.

What will the client supply to the designer? Most importantly, what is the message to be communicated? Include any message content or ideas for marketing copy, images, product samples etc.

Where can the designer look for inspiration? What aspects of the product could be a starting point for the

www.getrevising.co.uk

design? What ideas, images or words reflect the spirit of the product? What design styles does the client like/dislike – language, colour, imagery and typography (text style)?

Promotion/communication plan: When and how will this product be promoted and communicated to its audience? Who is involved in and who is responsible for the communication?

4. Budget and deadlines

What are the budget constraints? – for design, materials, communication?

What is the deadline for the project? Are there any milestones that must be met?

stakeholders are there? What consultation has already taken place? What further consultation is required? When and how should this take place? What roles do artist and client have in managing these?

3. Site

The human body might be the site for some artefacts; the physical interior/exterior environment for others. **You could consider:** location, size, layout or surfaces, structural issues such as mountings and any obstruction to view, safety, site uses etc. Include photographs and/or plans of the site and surroundings, measurements of space etc. How might any current use of the space be accounted for? For

'Art in context' brief template

'Art in context' means that the artist produces an object that the public uses or engages with in some way outside the confines of a gallery. It includes applied arts such as jewellery, metalwork, ceramics, stone and woodcarving, architectural artworks, furniture and interior design, public art, film-making, textile design and fashion. It also includes art-based activities such as community art workshops. 'Art in context' might also include design communication activities such as graphic design, illustration and photography. If you are planning a project in any of those areas you might also find the 'Design communication brief template' useful.

Use and adapt questions from this template to produce a brief that is appropriate for your project.

1. Summary

Provide a brief overview of the whole project (written last).

2. Context

Project client and background to the project: Is the client a civic body/commercial business/private individual/ community organisation? What is their history and organisational culture? Are there any partners or sponsors?
What is their rationale for commissioning the project? What are their aims for the project?

Community context and stakeholder consultation (if applicable): You could consider the demographics of the local community, geography, history, cultures, economy, industries, future prospects etc. What

public areas, you might consider architectural and cultural heritage, public access, pedestrian and traffic flows, access to utility services, climate and weather conditions. If there are alternative sites, compare advantages and disadvantages.

4. Artefact

Target audience characteristics: General population or specific groups: gender, age, culture, history etc.

Concept: The client's vision, thematic ideas and aims for the project. The client should be clear about what is wanted and what is not, but should also utilise the artist's expertise, allowing freedom to explore ideas.

Ambience/relationship with audience: Is the function of the artefact to decorate, to challenge convention, to provoke an emotional response or to encourage participation? What relationships are there with existing objects?

www.getrevising.co.uk

Viewing considerations: Scale and size, viewing distance and proportions, night time viewing, lighting etc.

Material considerations: ***Aesthetic*** e.g. colour, surface, texture, proportions, contrasts. ***Practical*** e.g. durability, sustainability, ease of manipulation, adhesion, safety considerations, use of local resources, construction issues such as weight, load capacity, supports. For outdoor situations, consider resistance to vandalism and weathering.

5. Budget and deadlines

Funding: What is the available budget and swhat sources of funding are available? Are any conditions imposed by the funders?

Costings: Design time, materials, production. If applicable: site preparation and installation, lighting, insurance, maintenance etc.

What is the deadline for the project? Are there any milestones that must be met for client consultation and approval, completion etc?

20-step performance planning guide

1. Select the script and/or music to be performed.
2. A ppoint a **producer** to lead the organisation of the whole process, a **director** to guide the cast and their performance, a **choreographer** and **musical director** – if applicable – to select/compose and lead any dance and music. Also a set designer.
3. W ork out your **budget**. Will your school or college help or will you need sponsorship or a loan? If necessary, where can you borrow from? How much do you need? If you take a loan, you will need to work out venue capacity and ticket prices before you go any further; and your publicity team will need to work hard to sell tickets. What are your contingency plans if you don't sell enough tickets?
4. S elect an appropriate **venue**. Consider cost (can you use school or college facilities free of charge?), performance space including acoustics, space for musicians and crew, sound and lighting equipment, size of audience, relationship between performers and audience – including a decision between standard

A performance might be a play, musical, concert, dance, panel debate or spoken word performance. This guide is for a musical. For an Extended Project it is likely that you would produce either a simpler piece of theatre without sound equipment, or a dance piece or concert with fewer set and costume requirements. Simply omit or adjust anything that is not relevant. You can also select from this guide if planning a staged event such as a panel discussion or talent show.

Roles you may need:

- Producer/Production manager
- Director
- Choreographer
- Musical director
- Performers (actors, dancers, musicians, speakers)
- Set designer
- Stage manager and stage hands
- Costumier
- Lighting director
- Sound manager
- Publicity manager and team
- House manager and team

You will probably be a small team and most of the group will take on a number of roles. It is a good idea to keep production and performance roles separate, and make sure that no-one is required in two places at once during the performance! You will probably also seek expert help from your school or college performing arts department. Make sure that you keep very clear and detailed records of your contribution to the performance for your own project.

www.getrevising.co.uk

staging 'in the round' or promenade performance, access and health and safety issues including fire safety restrictions on layout and capacity – including audience, cast, crew and house staff. (You will need a **Risk assessment** – see guidance in chapter 2).

5. Work out major **fixed costs**. Check that you won't need to pay for performance rights for the script or music – rethink if necessary. Will you need to hire any sound or lighting equipment? This can be a major expense. Do you have access to free photocopying facilities for publicity and organisation?

6. Now work out any **further costs**: the set, props, costumes etc. There are always incidental costs too, so you will need a 'buffer' of spare cash in your budget. Are your costs realistic? Get someone experienced to check them for you. Scale down your ambitions if necessary.

7. Find out **when the venue is available** before and after the performance so you can plan for lighting and sound design and checks, dress rehearsals, constructing and breaking down the set. As a rule of thumb, triple the length of time you think you will need – equipment goes wrong, pieces are lost, people make mistakes and adjustments will be needed.

8. Select the cast/performers through **auditions** and/or readings, or by invitation; check the size of part and level of commitment that each is happy with.

9. Find suitable **rehearsal space** and begin your rehearsals. Ideally you will have three months from this point, but at least two are needed.

10. The **set** designer might produce a model or drawings of the set design, including details of backdrop, props, and lighting. Your budget will be limited, so keep it simple. Creative use of lighting, costume and props can suggest an atmosphere without building elaborate structures. The set should be inspired by the script of course, but you should also consider cost, time and practical restraints – and don't forget sightlines from all parts of the auditorium. An important decision is whether to follow or disregard any stylistic conventions for your chosen genre. For example a Shakespearean production might use traditional Elizabethan-style costume and set; or deliberately take a more contemporary, minimalist approach.

11. The **set designer** oversees the set construction and also designs, sources or makes the set dressing and props.

12. The **costumier** designs and sources or makes costumes and smaller props. Fittings may be needed. It is often possible to rent costumes cheaply from a community resource centre or at higher cost from a commercial costumier, but many costumes can also be adapted from second-hand or unwanted items – advertise around the school or college for the items you need.

13. T he **lighting director** designs lighting sequences with the director and sets up lighting. You may need to hire equipment and will need someone with sufficient expertise on hand. Good lighting is essential for a professional performance.

14. I f applicable, the **sound manager** selects, organises and sets up sound equipment and recordings. Again, specialist knowledge will be needed here.

15. T he **publicity team** design publicity materials and publicise the performance around the local community with posters, flyers, press releases, invitations etc. Guidance on promoting an event can be adapted from the section 'Presenting work in an exhibition'.

16. A **box office** should be set up, possibly by the **house manager**, who will also recruit the house team – to do the doors, hand out/sell programmes, staff the bar/ refreshments area, set up chairs etc. on performance night and clear up the auditorium afterwards.

17. O nce the venue is ready and set is complete, carry out full **dress rehearsals, lighting and sound checks.**

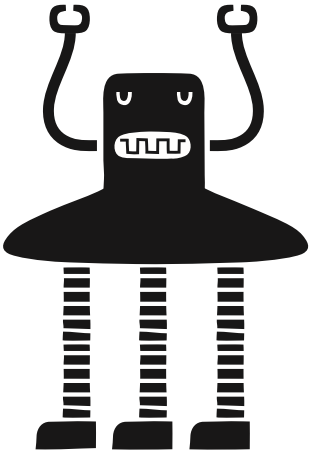
18. T he **stage manager** and **stage hands** run the nuts and bolts of the production. They make sure that the set is ready, that all props and costumes are to hand, that performers arrive on cue, that the sound and lighting team are organised and that the performers are prompted if they lose their words. They may help to **break down** the set and will clear up the performance and backstage areas afterwards.

19. Y ou will need a backstage dressing room area and actors may need help with **hair** and **make-up**.

20. T he **house manager** sets up the front of house areas ready for the audience.

www.getrevising.co.uk
search share create

[redacted]



Have you: ✓ or ✗

www.getrevising.co.uk

1. D ecided on the nature of your performance and selected a script/music etc.?
2. Appointed people to all the relevant production roles?
3. Found funding and worked out your budget?
4. F ound an appropriate performance venue and worked out your maximum audience capacity?
5. Worked out your major fixed costs?
6. Worked out the rest of the costs and fitted them into your budget?
7. Checked availability of the venue for dress rehearsals, set up etc.?
8. Selected the performers?
9. Found an appropriate rehearsal space?
10. Designed a set?
11. Constructed the set and designed and made/sourced props?
12. Designed and made/sourced costumes?
13. D esigned and sourced appropriate lighting and technical expertise?
14. S ourced and organised appropriate sound equipment and technical expertise?
15. Publicised the performance?
16. Organised a box office to sell/distribute tickets?
17. R ecruited stage manager and stage hands to run the performance backstage?
18. Carried out dress rehearsals, lighting and sound checks?
19. O rganised your backstage area and dressing rooms, hair and make-up?
20. S et up the front of house areas for the audience, perhaps including bar and seating?

How will your project be assessed?

Examination boards identify the skills they want to see students develop in their Extended Projects and then assess them according to these **assessment objectives**.

www.getrevising.co.uk

All boards use four broad assessment objectives when assessing Extended Projects. The table below explains these and compares the weighting attached to each by the different boards.

Table: Distribution of marks across the assessment objectives by each examination board

Assessment objectives	*Assessment criteria*	*AQA*	*Edexcel*	*OCR*	*WJEC*
AO1: Manage the project	Identify, design, plan, and carry out a project, applying a range of skills, strategies and methods to achieve objectives.	20%	17%	20%	20%
AO2: Use resources	Research, critically select, organise and use information, and select and use a range of resources. Analyse data, apply relevantly and demonstrate understanding of any links, connections and complexities of the topic.	20%	22%	20%	20%
AO3: Develop and realise	Select and use a range of skills, including, where appropriate, new technologies and problem-solving, to take decisions critically and achieve planned outcomes.	40%	44%	40%	40%
AO4: Review	Evaluate all aspects of the Extended Project, including outcomes in relation to stated objectives and own learning and performance. Select and use a range of communication skills and media to present evidenced project outcomes and conclusions in an appropriate format.	20%	17%	20%	20%

For AO1, you are required to develop your ideas and plan your project independently. You also need to monitor and keep detailed records of your progress throughout the project.

For AO2, you are required to use appropriate research skills for the type of project you are working on and to show effective assessment of the reliability of any sources you use. You need to be able to analyse relevant data and draw on material effectively to develop your own ideas.

The examination boards approach AO3 slightly differently.

- OCR has a stronger focus on the project planning and management process and less emphasis on the outcome of the project than the other boards.
- AQA has the same weighting as OCR, but the wording of the AO3 criteria puts more emphasis on quality of outcome and fluency of communication than OCR.
- WJEC has a similar approach to OCR, with some emphasis on appropriate use of new technologies and working cooperatively with others.
- Edexcel has slightly different assessment weightings. There are slightly fewer marks for managing and evaluating the project than the other boards. There is similar focus to AQA on the quality of the outcome, and an additional focus on thinking skills relevant to the project.

Self-assessment and presentation skills are the main aim of AO4: presenting the outcomes of the project, answering questions orally and reviewing and evaluating the project and your learning.

AQA use one mark scheme for all projects, as does OCR. Edexcel has four units with slightly different mark schemes for different formats: dissertation, investigation, artefact and performance.

www.getrevising.co.uk

Examiners apply broad criteria to the whole project process, rather than giving marks for individual sections as in other coursework assessments. The criteria are a typicalset of descriptions arranged in three mark bands for each assessment objective. Mark schemes and exemplar projects are available on the exam board websites. You can use them to assess your own progress. Ask your supervisor if you are not sure which board your centre is using.

Advice on the typical performance expected of students at A/A* and E/U grade boundaries can be found at: www.ofqual.gov.uk/files/2009-05-grade-boundary-candidate-project-performance.pdf.

What makes a really good project?

These descriptions of work at the boundary of A/A* are adapted from information provided by the Office of the Qualifications and Examinations Regulator. More details can be found at www.ofqual.gov.uk/files/2009-05-grade-boundary-typical-candidate-project-performance.pdf.

AO1: Manage the project

- Candidate personally develops the project title, phrases it as a clearly focused question, hypothesis or brief, and provides a clear rationale for the project.
- Candidate personally identifies appropriate strategies, tasks and objectives, justifies his or her choices and engages with them.
- Work is well-planned, well-organised, coherent and includes appropriate autonomous review and modification.

AO2: Use resources

- Candidate uses a rich and varied range of sources of information critically and effectively, and candidate uses resources appropriately.
- Candidate shows evident and well developed research skills, technical language and/or specialist vocabulary.
- Candidate shows clear understanding of the complexities of the topic.
- Candidate shows evidence of synthesis by making relevant links to related areas.

summary…

AO3: Develop and realise

- Candidate gives considered response to guidance and shows evidence of critical reflection, plus appropriate action on advice.
- Candidate references problems encountered and justifies action taken to address these.
- Candidate shows evidence of the development of skills, including underpinning ideas and concepts where appropriate, and of clear understanding of the topic area.
- Candidate achieves a high quality and appropriate outcome that realises most of the intentions of the project.

AO4: Review

- Candidate carries out an in-depth evaluation in relation to stated objectives and to his or her own learning and performance.
- Candidate identifies reasons for any non-realisation of objectives and any flaws in the original objectives.
- Candidate clearly presents the outcomes of the project, including explicit commentary on findings and conclusions clearly related to the original objectives.
- Candidate makes use of a range of appropriate presentation skills.

- Candidate responds well to questions and displays a clear and in-depth knowledge and understanding of the topic area.

Extended Projects are assessed using four assessment objectives. Examiners tend to look at the project as a whole rather than marking individual sections.
Mark schemes and sample projects can be found on exam board websites.

Chapter 2

Managing the project

Planning the project	28
Creating a project timeline	29
Project task list and Gannt chart	31
Making the most of tutorials	33
Tutorial planning and recording form	34
Keeping a record of progress	35
Conforming to ethical guidelines	36
Using risk assessments	37
How to carry out a risk assessment	38
Risk assessment form	39

Planning the project

Planning any project will always involve the following key activities.

1. **Setting project aims (what you want to achieve/learn) and a focused question or title.**
4. **A ssessing the length of time each activity will take, and creating a timeline of activities to be done, taking into account any other commitments that you have**

www.getrevising.co.uk

2. **Developing objectives (specific actions) that will help you to achieve your aims and/or answer your question.**

3. **Outlining the scope of each activity and the availability of resources needed in order to complete it.**

(e.g. exams, coursework, part-time work, holidays).

? made on these issues? What progress have you

What is the examiner looking for?

The examiner will expect you to develop some project management skills and to plan the project in advance. They will be looking for evidence of your ability to plan thoroughly and to foresee problems and make contingency plans before things go wrong. If you can show that you have thought through these issues, it will not matter so much if an unforeseen problem does crop up later on. The examiner will also be looking to see that you are able to communicate confidently with others in building your plan.

Records you will need to keep

- Evidence to show that you have considered in advance the resources you will need for your project, that you have checked availability and found out when and how to book any equipment, and that you have consulted anyone who might be required to supervise you when using it.
- Evidence of preparation for meetings with your project supervisor to discuss progress. Your project supervisor is an important resource in planning the project, but you must decide what questions to ask before you attend a meeting. See 'Making the most of tutorials'.
- Plans for any other support that you might need. When you approach anyone other than your project supervisor for help or for information, you should have already thought about when you will need to contact them and what you will say. Organisations and professionals are often very busy and it can take time for them to respond and to set up meetings. You should give them plenty of time to respond to your requests. It is a good idea to make first contact in writing or by email, outlining your project and what support you will need, as this will help the other person to judge whether they can help and will allow them to prepare in advance, as well as being a written record for your project. See guidelines on 'Accessing organisations'.

You might find it useful to develop skills in using project management software (e.g. Microsoft Project), but this is not a requirement of the examining boards. You may already know about project management techniques such as the Critical Path Method or Gannt charts from your other subjects. You are not expected to use complicated professional techniques but you do need to show a grasp of basic techniques such as producing a planning timeline.

summary…

- It is very important to plan your project carefully as project management skills are assessed.
- You need to keep evidence of your planning.
- Contact people and organisations whose help you may need well in advance.

www.getrevising.co.uk

Creating a project timeline

You will need to meet a deadline for the project which may be months or even a year in the future. Managing your time independently to meet this deadline is an important skill for higher education and for a wide range of careers.

……

You may have used timelines to understand the past – a chain of events in history, or perhaps to understand the timescales involved in scientific concepts such as evolution or rock formation. A project timeline works on a similar basis to help you plan for the future. If you have ever produced a revision timetable for yourself, you have created a planning timeline.

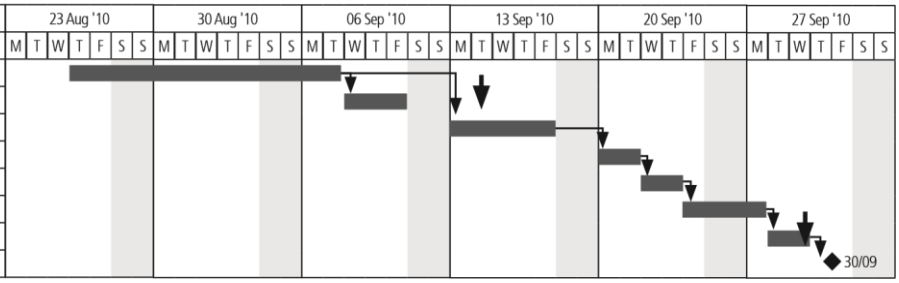
Planning your project timeline requires you to think about a number of factors. These include:

- Project milestones and deadlines, holidays, exams and other commitments
- The way that differenttasks depend on each other
- The resources and supervision you will need and when they are available.

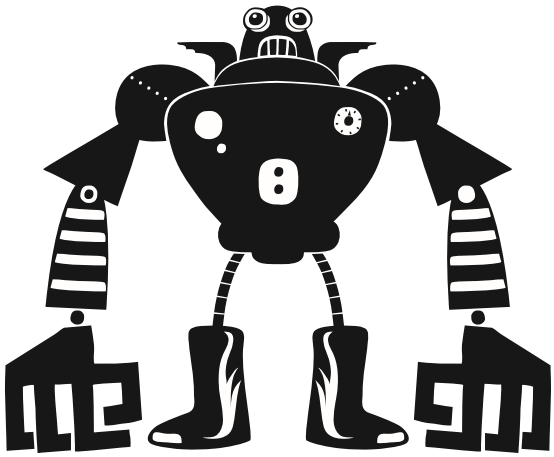
? Have you considered these factors?

It it is useful to think of a project timeline as a series of connected task 'lines', as shown in the Gannt chart below, rather than as a single line as with some dates and events.

ID	Task Name	Duration	Predecessors
1	Introductory reading on chosen topic	9 days	
2	Prepare 1 min presentation on topic	3 days	1
3	Research and decide project question	5 days?	1
4	Research and identify clear objectives	2 days?	3
5	Make interview appointment	2 days?	4
6	Produce timeline for the whole project	2 days	5
7	Write up project proposal	2 days	6
8	Meet with supervisor	1 day	7



This Gannt chart shows the first stages of planning a written project. It includes deadlines set by a supervisor, which are marked as block arrows. The meeting with the supervisor is marked as a project milestone, that is, a formal review meeting for discussing progress.



www.getrevising.co.uk

How to produce a Gannt chart

Gannt charts can be produced using a variety of software packages. If you prefer, you could produce a chart by hand or in a spreadsheet. It is possible to download online templates to produce Gannt charts in Microsoft Excel.

It may be practical to divide the time up in months rather than weeks if you want to fit a long project schedule onto one sheet, or you might want to divide up your project into phases and put these onto separate sheets, as in the above example. You should outline the nature and scope of each activity and identify any resources needed. This can be added as notes to the task in a software package, or written in a separate document if you are producing a timeline by hand or in a basic spreadsheet.

A basic Gannt chart should include:

- The full range of dates from start to finish along the top.
- A separate row for each task or activity on the chart.
- Bars to indicate the length of time allocated to each activity. This
- Project milestones and any other deadlines set by your teacher or supervisor.
- Links to show the connections between different activities. In the example, activities 2 and 3 cannot be started until activity 1 is complete. Some tasks may overlap or run concurrently.

could be broadly estimated in days or weeks allocated to that activity, or hours needed to complete the task.

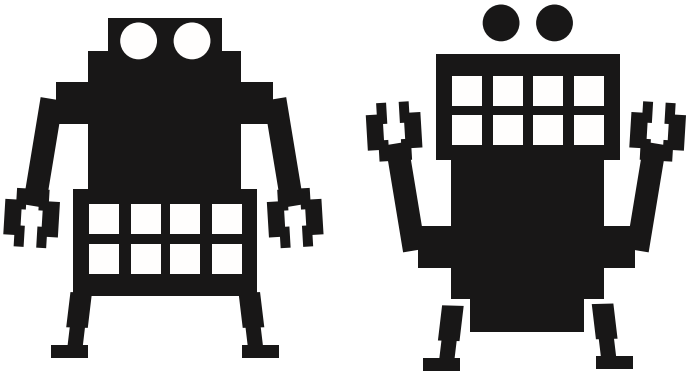
The Gannt chart is a working document. This means that it can be adapted to take account of changing circumstances and new decisions. It is useful to print out and to keep a copy of the original plan and to keep another version to update as and when necessary. This will help you keep track of your progress and to evaluate your organisational skills at the end of the project.

? Have you created a project timeline?

summary…

- Managing your time effectively is an important part of your project work.
- Some kind of project timeline is an important part of project management.
- You can produce Gannt charts in a variety of ways.
- Whatever method you use to manage your project, it will need to be adaptable as circumstances can change.

www.getrevising.co.uk



www.getrevising.co.uk
search share create

Project task list and Gannt chart

Name ..... Project title, topic or outcome .....

Start date ..... Finish date ..... Supervisor .....

Number each task in chronological order

Give each task a name. You should also write an outline of what each task involves, perhaps in a separate document where you can add details.

Duration can be estimated in hours or the days/ weeks allocated to the task.

If you have been given a deadline for completion, place it here.

Add task numbers that must be completed before this task can start.

Add start and finish dates which take account of your other commitments.

Task No.	Task name	Duration	Deadline	Predecessors	Start by	Finish by

u by www.getrevising.co.uk
Managing Extended Projects
www.getrevising.co.uk
search share create

Task No.	Add dates to fit your timescale in the first row and draw vertical lines for columns to show the weeks or months. Number the tasks in the first column, then draw a bar for each task to show duration and timing. Link the bars together with arrows if one task must be completed before another starts and add your own symbols for deadlines and milestones.												

www.getrevising.co.uk
search share create

The role of the project supervisor

Your project supervisor is one of the most important resources available to you, but he or she cannot and should not be the source of all the information you will need. Do not expect to be 'spoonfed' information and ideas. Your supervisor may be working with many students with different projects and may not have specialist knowledge of the field of study or the specific skills you are choosing to use.

A good tutorial is usually one in which you do most of the talking. It is your opportunity to get feedback on anything that is bothering you. Your supervisor can check that you are on track, raise any concerns or point out problems, and can help you to find solutions to problems, but they will probably not direct you towards a particular course of action – that is your responsibility.

Preparing for the tutorial

Ideally you should have submitted or given your supervisor access to whatever part of the project you want to discuss some time before the meeting – perhaps a week in advance – so that they can consider it fully before the discussion.

Be prepared to start the conversation about your project. Have you planned for the list of questions to ask or points you would like to discuss. Have a tutorials you have had? This is called an **agenda**. If you have a short meeting (say five minutes), just choose one or two issues, and consider giving a list of questions to your supervisor How?

beforehand, this might also be helpful in pointing them to the issues you are most concerned about.

During and after the tutorial

Keep a written note of the decisions made and the advice given during the meeting and write this up into your **project diary** afterwards. You may or may not choose to take the advice – it is your project, after all. However, if you keep a record, you can always come back and re-visit the ideas later if your own don't work out. You can also mention why you decided to follow the advice or not – an important record of your decision making process.

Do you have a written record of tutorials? Where do you keep it?

summary…

- Make effective use of tutorials but don't expect to be spoonfed.
- Prepare in advance for tutorials and keep a writtenrecord of their outcomes.
- Try to lead the discussion and do most of the talking.

Name	Supervisor
Time and place of meeting	
Agenda	**Outcome of discussion**
1	
2	
3	

4	
5	
Any other issues	

You will need to submit detailed evidence of how well you have managed the project, so it is a good idea to keep a **weekly diary**: a record of your project's progress against the timeline plan you produced at the start.

What format should my diary take?

It is a good idea to keep this project diary in electronic format, so that you can create hyperlinks to internet resources and other documents that you want to keep linked to your record of progress. Alternatively, a paper-based record or a sketchbook might be more appropriate. Get into the habit of updating it at the same time each week.

Using online records for group projects

Particularly if you are working with others in a group, you might find an online forum useful, as you can all access and update the document whenever any new progress is made, so it can be a useful communication tool as well as a record of progress. It may be possible for a teacher to help you set up a forum or a wiki on your school or college intranet or VLE (virtual learning environment). Alternatively, you could create a Facebook group for your project. Whatever format you choose to use, it will be helpful for your project supervisor to be able to access your records so they can keep up to date and perhaps comment on your progress in between group sessions and tutorials.

[redacted]

Making the most of your project diary

Make reflective rather than just descriptive comments, as these will help you when you come to evaluate the project at the end.

You can use your diary to:

- Keep a record of discussions with your supervisor
- Keep hold of ideas or thoughts as they come to you
- Attach hyperlinks to keep track of online resources you have used
- Keep records of emails, phone numbers and appointments for future use
- Assess how well you are keeping to the timeline in your plan
- Note any decisions or changes to the plan, with your reasons for making them
- Evaluate the success of aspects of your project as you go along.

Example extract from a reflective project diary

Jan 13th
I had a tutorial today and my teacher gave me useful feedback on the project so far. My background research has given me so much information on the legal side of euthanasia in different countries, but this has made my literature review too long and confusing. I have decided to just focus on the UK, as there is so much information just on my own country. I am also going to start researching the ethical arguments.

Jan 20th
Found 'A very short introduction to Medical Ethics' in the library catalogue which looks perfect for getting my head round some of the ethical arguments about euthanasia. Unfortunately it's out on loan. I have asked the librarian to recall it for me.

Ethical considerations

Ethics are formal or informal moral codes which govern what is right or wrong to do in a particular situation. Researchers and project workers must always pay attention to the ethical context of their work. Five key principles of ethical conduct are:

1. Informed consent
Anyone involved in your project should be fully informed about what you are planning to do, why you are doing it and how this might affect them, and also what school or college you attend. They should be given the right to refuse to participate before you involve them. In some circumstances this is difficult (for example in some social science research), in which case you should refer to subjectspecific organisations for more guidance. It is generally acceptable to observe people in public (where they would expect to be observed by others) without first obtaining consent, as long as you maintain confidentiality.

2. Right to withdraw from the research People have the right to refuse to be involved at any point before, during or after the project. This is their right and it must be respected. If data has already been collected from them, it must be destroyed.

3. Respecting confidentiality and privacy All information about people collected during the course of your project must be treated as completely confidential. The right to anonymity should be respected. You should not intrude on people's privacy without their fully informed consent. This includes copying and using photographs and digital information without permission. It is acceptable to use images from the internet as long as they are not copyright protected and as long as they are referenced accurately and clearly.

4. Protection from harm
prevent any further harm. You should also consider the impact of any personal bias and avoid making judgements about others. If in any doubt about the sensitivity of the issues you are hoping to study, consult your supervisor.

5. Honesty and transparency
Researchers should be open about their aims and about the likely outcome and implications of their work and their methods. Techniques and data should be available for scrutiny to ensure ethical and safe practices are carried out. Anyone involved in your work has a right to see the outcome and to challenge any information they are unhappy about. They have the right to see that their concerns have been taken seriously and addressed.

? What ethical issues may arise during your project? How do you plan to deal with them?

Unethical work which does not follow these principles is disrespectful to those involved, and may be dangerous and illegal. You should investigate and follow the relevant guidelines for your field of study, and you should check with your supervisor that your proposed project is ethically sound.

More Guidance...

Professional organisations regulate the work of researchers and professionals in their particular fields. Each of these has their own guidelines. The British Psychological Society (www.bps.org.uk) is a good source of detailed ethical guidelines for working with people.

It is essential that you keep yourself safe, but you must also protect others from undue physical or mental distress. As a rule of thumb, no-one involved in your work should be placed at any greater risk of harm than they would have in their everyday lives. You should complete a risk assessment and check your plans with your supervisor and, if necessary, a suitably qualified professional before starting out. If there are any concerns about the well-being of any person involved in the project you must stop and take action to

summary…

Always be aware of the five principles of ethical conduct. If in any doubt, consult your project supervisor.

www.getrevising.co.uk
searc share create

A risk assessment is the process of identifying, assessing and minimising any potential hazards in a working environment, and producing a plan to set out what needs to be done to ensure safety. These actions must be carried out before you start work.

Do I need a risk assessment?

If you are doing any practical research at all, the answer is yes. If you will be working alone, out in the local community or natural environment, or if you are using equipment and materials in a laboratory, workshop or studio, one of your most important responsibilities is to ensure that you and anyone else involved in your research stays safe. A risk assessment should be done *before you start*. It is part of the planning process for any practical activity, and without it, you will not have produced evidence of effective planning for your project.

? What are the possible risks in your project?

Who has overall responsibility for risk assessing a project?

If it is necessary, your supervisor should ask you to complete a risk assessment before signing your project proposal, but do not wait to be asked. You can use a generic form such as the one in this pack and you must have it authorised by an appropriate member of staff. The person who checks your project proposal should have sufficient knowledge and experience of safety procedures in the area you are working in. Your project supervisor may not be the most appropriate person, as he or she may or may not be a specialist in your chosen project field. If in any doubt, ask the Centre Co-ordinator for Extended Projects in your school or college to find out who is most qualified, or find out who your centre's Health and Safety Officer is and ask him or her to authorise it for you.

summary…

- A risk assessment is essential for practical work.
- You must have your risk assessment authorised by a suitably qualified member of staff.
- Use guidelines, safety rules and procedures as the basis for your risk assessment.

Using policies, guidelines, procedures and safety rules

Your school or college will have safety procedures and policies for doing practical work in areas such as laboratories or studios. As students' practical work is generally supervised by teaching staff, these may not be immediately accessible to students, but you should be able to request a copy from a member of staff. There will also be safety rules for students which you must refer to when completing your risk assessment.

You might not find guidance so easily when planning loneworking off-site; for example in conducting interviews or surveys. In this case, you might find it useful to consult organisations such as the Suzy Lamplugh Trust (see below), which has guidance for personal safety in a wide range of

www.getrevising.co.uk

situations and where you will find guidelines for staying safe when working alone out in the community. Incorporate these into your risk assessment and don't forget to refer to them in your record of resources. Include any guidelines, policies or rules you have followed in an appendix to the project report.

More Guidance...

The Suzy Lamplugh Trust:

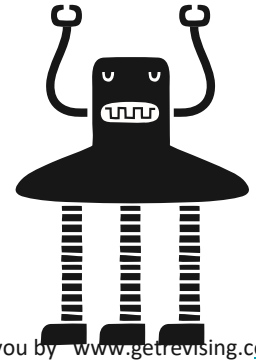
www.suzylamplugh.org/personalsafety/personal-safety-tips/

2. S urvey your working environment first, including chemicals, equipment, machinery, trip hazards, restricted visibility, lifting and handling heavy or bulky items and risk from/to unauthorised or unknown members of the public. Identify all the potential risks in that environment. Write them all down, no matter how insignificant or unlikely they might seem.
3. I dentify who each risk might affect. Think about you, your research partners or participants and anyone else who normally works there or who might have access.
4. a) Judge the severity of risk – is it high, medium or low?

   b) Judge the likelihood of harm - very likely, quite likely, not very likely or very unlikely?

Identify the hazards	*Decide who might be harmed*	*Evaluate the risks (how likely and how severe)*	*Precautions needed e.g training, safety equipment, supervision*	*What level of risk remains? Is it safe enough to continue?*
Injury while lone working from hostile members of the public or accident	Researcher	Slight injury – not very likely Severe injury, death – very unlikely	Avoid lone working, try to work with a partner and in a busy public place. Ensure that a responsible adult or 'buddy' knows where you will be working, what time to expect return, and has a contact number. Carry a mobile phone, check credit and that it is fully charged. Plan for safe travel home, check bus services and carry sufficient cash for a taxi. Check in with buddy on return.	Risk is minimised. Safe to continue with care.

1. R ead all the relevant policies, procedures or guidelines carefully, and ensure that you understand and can follow them. Ask for advice if you are unsure.



www.getrevising.co.uk
search share create

Example of a risk assessment

5. Identify ways in which these risks could be minimised, and make a risk management plan for all eventualities. Use the guidelines you have found and seek advice from others. Clearly, the more severe or the more likely a risk is, the more you should plan to minimise it. You do not need a detailed risk management plan if the risk is no greater than you would normally face during your studies at school or college.

6. Ask your school or college's health and safety officer to check, agree and sign your risk assessment. Make sure that he/she has a copy to keep on record.

7. Carry out the actions needed in your plan to make sure you are safe. You may have minimised the risks, but stay alert for any unanticipated hazards and proceed with caution. Always ask for help if you have any doubt about the risks involved in activities you might be about to undertake.

www.getrevising.co.uk

Riskassessmentform

Name: .....Proposedprojectformat/outcome:.....

Proposedprojecttopic/question:.....

Riskassessmentforarea/activity/individuals(deleteasappropriateandadddetailsbelow).. .....

.....

.Identify thehazards 2	*.Decidewho mightbeharmed*	*.Evaluatetherisks(how likelyandhowsevere)*	*.Precautionsneeded–e.gtraining, safetyequipment,supervision*	*.Whatlevelofrisk remains?Isitsafe enoughtocontinue?*
	3	4	5	

Continueonanothersheetifneeded

Brought to you by www.getrevising.co.uk

Brought to you by www.getrevising.co.uk

Chapter 3

Using sources

Avoiding plagiarism	42
Taking notes	43
Creating a bibliography	45
Record of online sources	47
Record of paper-based sources	48
Analysing how texts communicate	49
Textual analysis form	51
Content analysis	52
Thinking critically about written sources	53
Assessing claims in a text	54
Assessing the credibility of primary sources	55
Assessing the credibility of secondary sources	56
Using critical thinking in your research: checklist	57

Avoiding plagiarism

Plagiarism is passing off another person's work or ideas as your own. It does not matter how much is copied, or if it has been changed into your own words – if it is unreferenced, it is plagiarism.

Does plagiarism really matter?

Yes it does. It could cause your disqualification from the Extended Project Qualification and any other exams. Universities, exam boards and some colleges now use advanced software to detect plagiarism, not just from essay banks, but also from previously submitted work and across the internet. Plagiarism can end a student's education and ruin a professional reputation.

How to avoid plagiarism

More Guidance...

You can find detailed advice on plagiarism at www.plagiarismadvice.org.

A guide to plagiarism and using sources aimed at college and school students can be found at: www.ofqual.gov.uk/files/2009-12-24-plagiarism-students.pdf

There is also a guide aimed at parents: www.ofqual.gov.uk/files/2009-12-24-plagiarism-parents.pdf

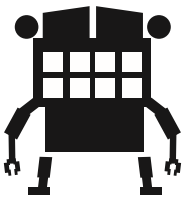
[redacted]

1. Always label your notes with the source you have 4. Avoid cutting and pasting from the internet into your consulted at the top of the page. Reference every source own notes to save time – you may get confused about you use – not just those you quote. Plagiarism applies to what was your own writing and plagiarise accidentally. ideas as well as words. If the information you are putting
5. You do not have the right to reproduce copyrighted in is widely known as 'common knowledge' then you do material. When using images or other material from the not have to reference. But if you are using someone's internet, always check to see whether it is copyrighted. opinion on that 'common knowledge' then you do.
If it does not say, then assume it is.
2. When writing notes, highlight key terms, try to
6. If images or other materials are available for use, you understand the whole paragraph and then write notes should always credit the owner or the website where it in your own words. Trying to summarise in less than half was found – caption the picture or add a footnote, and the words used in the original can help to keep your mind add it to your bibliography. engaged, ensure concise notes and avoid plagiarism.
7. Do not allow others to copy your work and do not give
3. I f you can't paraphrase a quote that you think is yours to others to 'help' them – no matter what your particularly useful, select a short extract – perhaps no motivations. more than 50 words. Write it out in quotation marks with full source details as required in the bibliography. Don't forget the page number. You can use sticky, coloured page markers to remind you where to find key passages in a text. When using the quotes, ensure that they are referenced fully in a footnote.

Whatever the subject of your project, it is likely that you will need to take notes at some time. How you take notes is a personal choice. You may need to experiment with a couple of different methods of organising and storing notes to see what works for you. Ideas might occur to you anywhere – in conversation with friends, on the bus, in the bath – so portable methods of storing notes can be useful.

Notes should help you to:

- **Concentrate** – making notes keeps you active and involved
- **Understand** – highlight key points and summarise key information
- **Remember details**– of your sources and ideas
- **Keep a permanent record**– so you can refer back, quote accurately and avoid plagiarism



The following seven steps should lead to good notemaking.

1. **Decide** how to store your notes.

Method	Advantages	Disadvantages

? Which method will you use?

Loose-leaf file and dividers New page for each source	Easy to subdivide and add to later Easy to scan through the notes and refer back by date Can be taken and used anywhere if you have no access to a PC	Papers can be easily lost Notes need to be put in folder straight away More difficult to keep systematic records of sources for references and bibliography Handwriting legibility?
Notebook New page for each source, labelled at top	Easy to carry and pages don't fall out Easy to scan through notes and refer back by date Can be taken and used anywhere if you have no access to a PC	Might not be in the right order so may be more difficult to analyse information into themes or timelines More difficult to keep systematic records of sources for references and bibliography Handwriting legibility?
Personal computer Documents organised by source title/date/relevant part of project	Easy to edit material Easy to access from home and in school/college (with USB storage or network access) Easy to cut and paste information about internet sources to keep detailed records for references and bibliography	Work easily lost Harder to flick through notes for inspiration Harder to read on a screen Can be difficult to find if not labelled and systematically organised Temptation to cut and paste, risk of plagiarism

2. **Scan** the source, thinking about the nature and relevance of its content – is it worth a closer look?

3. **Survey** the reading material – look at the contents and/or chapter headings (menu bar on a website), so that you get a general feel for the source. This step should only take a few minutes and help to determine which parts of the source will be relevant and what, if anything, needs to be read.

4. **Label your notes**

This is important. If you keep a good record of your research resources, then you can complete your bibliography as you go along and save time at the end. If you are keeping a separate bibliography, you can keep the full details there (see 'Creating a bibliography') but you should also include brief details here – at the very least, author, title and date of publication.

- If the source is an essay or article within a book or journal, remember to add the article's title and author in inverted commas.
- If the source is a newspaper, make a note of the author and title of the article, the newspaper and the date of publication.
- If the source is from a website then include author/ editor, year, and title [online]. Publisher/organisation and URL [date accessed].

5. **Read!**

More Guidance...

Most university library websites contain guides to the Harvard Referencing System. For example:

www.library.dmu.ac.uk/Images/Selfstudy/Harvard.pdf

By this stage you should have pinpointed what needs to

Sheehan, M (2008) 'The Changing Character of War'

P 212 – Around 14,400 wars have occurred throughout recorded history, claiming the lives of 3.5 billion people. 'War has not disappeared as a form of social behaviour and shows no signs of doing so, but seems to have become effectively extinct in some parts of the world.'

P 213 – The characteristics or form of war typical in any age might change, but the essential nature of war could not (linked to idea of Carl von Clausewitz)

6. **Recall and review**
When you have finished making notes, check that you understand what you have written and see if you can describe the basic idea to yourself. Finally, read over your notes and the original text and check that nothing is missed out or distorted.

7. **Use your notes and reference accurately** Making good notes is an essential part of good writing and helps with the analysis and evaluation of sources. Make sure that the ideas you use are referenced correctly following an appropriate convention for formatting your references and bibliography, such as the Harvard Referencing System.

be read and what you can get out of the reading. Skim some bits for an overview, scan others for a particular piece of information, read in detail only those sections you absolutely have to. If the source is a book, start by reading the introduction and conclusion and look for chapter summaries. On a website look for an 'About us' section or 'Overview' page.

IMPORTANT: Write down the page numbers as you make notes so that you can reference ideas and use quotes. Here is an example extract from a page of notes.

summary…

1. Decide how to store your notes.
2. Scan.
3. Survey.
4. Label your notes.
5. Read!
6. Recall and review.
7. Use notes and reference accurately.

A bibliography is a list of all the sources referred to in a project, essay or research paper. It is included at the end of the project. When you use ideas from any source in your writing this must be made clear, otherwise you may be guilty of **plagiarism**.

References should be given as shown below. However, there are various ways of organising a bibliography – whichever you use, consistency is the key.

If you have kept good notes then all the information from the sources you use can be put straight into your bibliography as you go through the project.

tip Bibliographies at the end of useful books can direct you to other useful sources

www.getrevising.co.uk

Books

For a book you need the following details:

- Author/editor – Surname, Initial.
- Publication date in brackets e.g. (2009)
- Title in italics
- Publisher
- Place of publication

Articles in books or journals

If the source is an article within a book or journal, add the article's author and title.

Newspaper articles

If the source is a newspaper, make a note of the author of the article, the title of the article, the newspaper and the date of publication.

TV/radio broadcasts

If the source is a TV or radio broadcast, note its title, broadcaster or channel, date of broadcast or URL.

Websites

If the source is from a website then it should include author/editor, year, and title [online]. Publisher, place of publication, and URL [date accessed]

Organising your bibliography

1. Alphabetically

Your bibliography might start like this:

Ellwood, W. & McMurty, M. (2001) *The No-nonsense Guide to Globalisation* (Oxford: New Internationalist Publications)

Malik. K, (2009) 'Race obsession harms those it is meant to help' [online] Originally published in *The Sunday Times* 29th March 2009. Available from: www.kenanmalik.com/essays/st_monitoring.html, 4th June 2009

As you read more, other titles get added alphabetically:

Ellwood, W. & McMurty, M. (2001) *The No-nonsense Guide to Globalisation* (Oxford: New Internationalist Publications)

New book →

Freedman, L. (1985) *Atlas of Global Strategy* (London: Macmillan)

Malik. K, (2009) 'Race obsession harms those it is meant to help' [online] Originally published in *The Sunday Times* 29th March 2009. Available from: www.kenanmalik.com/essays/st_monitoring.html, 4th June 2009

New article →

Saro-Wiwa Jnr, K., 'Now at last it is time for Shell to atone for my father's death' in *The Observer* 24th May 2009

2. By type of source

You may want to structure your bibliography with different types of resources in separate sections, because the examiner will be looking to see that you have consulted a wide range of different types of resources . Within each section list sources alphabetically, as in the examples below.

Books

Ellwood, W. & McMurty, M. (2001) *The No-nonsense Guide to Globalisation* (Oxford: New Internationalist Publications)

Freedman, L. (1985) *Atlas of Global Strategy* (London: Macmillan)

Newspaper articles

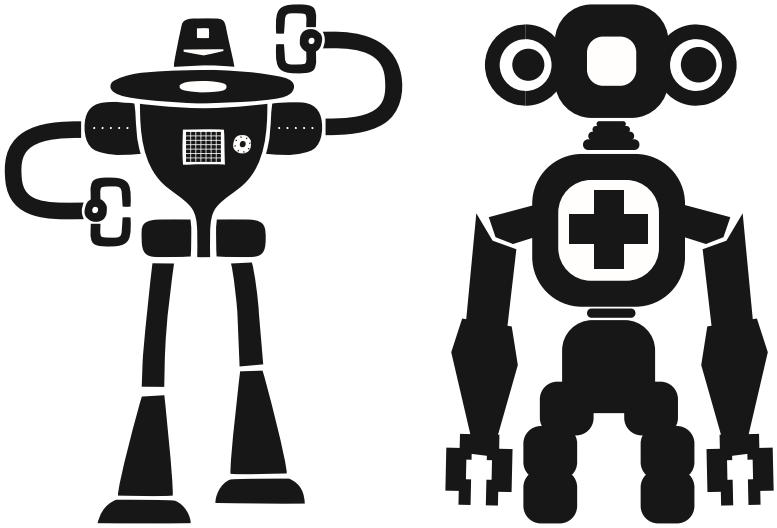
Malik. K, (2009) 'Race obsession harms those it is meant to help' [online] Originally published in *The Sunday Times* 29th March 2009. Available from: www.kenanmalik.com/essays/st_monitoring.html, 4th June 2009.

www.getrevising.co.uk

Saro-Wiwa Jnr, K., 'Now at last it is time for Shell to atone for my father's death' in *The Observer*, 24th May 2009

summary…

- Abibliography is a list of sources.
- The key to a good bibliography is consistency.
- Keep full details of all sources as you go along.
- Reference everything you use to avoid plagiarism.



You can keep records by making copies and filling in this form, but you might find it easier to cut and paste details of the source into a document. The information you should record for each website is:

1. Title of the page
2. Author of the content, if stated, and/or the organisation that owns the website.
3. Exact URL of the page you have consulted on that website, not just the home page of the site (should include the full address starting with http:// which can be copied from the address bar in your browser).
4. Date of publication/last update (usually at the bottom of the page).
5. The last date you accessed the information (this is because information on the internet is often altered, moved or removed on a daily basis and anyone checking your bibliography may not find the page as it was when you consulted it).

Title	
Author	

www.getrevising.co.uk

[redacted]

Organisation/website	
URL	
Date published/updated	
Date of last access	
Used for (aspect of project)	
Comments on reliability and credibility of the source	
Title	
Author	
Organisation/website	
URL	
Date published/updated	
Date of last access	
Used for (aspect of project)	
Comments on reliability and credibility of the source	
Title	
Author	
Organisation/website	
URL	
Date published/updated	
Date of last access	
Used for (aspect of project)	
Comments on reliability and credibility of the source	

Record of paper-based sources

Use this record to help construct your bibliography for the project as it progresses. Copy the template as many times as you need to. Your bibliography should include every resource you have consulted, including books, TV

www.getrevising.co.uk
searc share create

programmes, individuals and websites. It should be organised consistently. Most bibliographies are alphabetical and can be organised into separate sections for different types of resource.

Author (surname, initial)	
Title of article/chapter (if appropriate)	
Year (and date) of publication	
Publication	
Pages used	
Publisher and place of publication (if known)	
Used for (aspect of project)	
Comments on reliability and credibility of the source	
Author (surname, initial)	
Title of article/chapter (if appropriate)	
Year (and date) of publication	
Publication	
Pages used	
Publisher and place of publication (if known)	
Used for (aspect of project)	
Comments on reliability and credibility of the source	
Author (surname, initial)	
Title of article/chapter (if appropriate)	
Year (and date) of publication	
Publication	
Pages used	
Publisher and place of publication (if known)	
Used for (aspect of project)	
Comments on reliability and credibility of the source	
Author (surname, initial)	
Title of article/chapter (if appropriate)	

www.getrevising.co.uk

Year (and date) of publication	
Publication	
Pages used	
Publisher and place of publication (if known)	
Used for (aspect of project)	
Comments on reliability and credibility of the source	

The word 'text' refers to books, news articles, adverts, films, broadcast programmes, photographs and other images, songs and other types of music – anything that contains messages communicated to an audience.

The sources of information you use should not be taken at face value. You need to analyse the messages communicated and the way they communicate those messages.

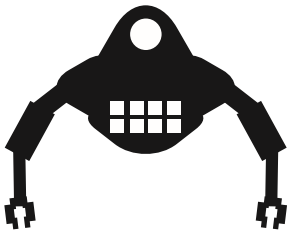
Analysing the messages communicated through texts

First, you need to look at the background of the text. Can you identify the following?

- **Subject** – what is it about?
- **Audience** – who is it for?
- **Genre:** a category of media products whose conventional characteristics make it easily recognisable, e.g. thrillers, westerns, sitcoms. Print texts may refer to these genres in order to create meanings; adverts, for example, may suggest that products belong in certain genres.
- **Purpose** – what is it for?

Next, consider the way the text uses:

- **Representation:** the way a text communicates a version of reality. Senders of texts take particular ideas, things or people and re-present them in the form of a text. That text is not reality, it is a representation of reality – the text will often include attitudes towards the subject suggested within the representation (see the section on semiotic analysis below).
- **Stereotypes:** particular representations that generalise about types of people based on one common factor, e.g. age, ethnicity or gender. There will often be positive or negative values associated with the stereotype.
- **Mode of address:** the style in which a text talks to its reader. At its simplest this could be either formal or informal, but more subtly it can suggest a whole identity to the sender of a text and their attitudes towards content or the receiver.



www.getrevising.co.uk

Textual analysis can be developed further using a **process** or **semiotic** model.

The process model

The process model of communication stresses that communication is fundamentally a matter of 'senders' transmitting information to 'receivers' of messages. From this point of view we can measure the relative success or failure of a text in achieving its purposes in the minds of the audience. There is one meaning and the receiver's role is to try and understand this as fully as possible.

Barriers can get in the way of effective communication.

They can be:

- **physical** (for example, print being too small or a bad telephone line)
- **semantic** (about meaning, e.g. speaking in a different language)
- **psychological** (personality differences in how information is perceived, e.g. not liking the sender of the message)
- **social** (e.g. mistrust caused by poor communication within an organisation)

The semiotic model

Semiotic refers to 'signs'. All communication involves making sense of verbal, non-verbal and visual signs: words, symbols, gestures, pictures and so on. **Signs** are made up of the **signifier** – what is actually shown and the **signified**: what it means to people. So the word 'dog' is actually a series of straight and curved lines (signifier) but when we see those lines and shapes we recognise it as a word that refers to a particular kind of animal (signified).

There may be multiple meanings within any text, so we need to do more than just identify the literal meaning or objective content (**denotation**/what is **denoted**).

We also need to consider what is implied or interpreted (**connotation**/what is **connoted**). Connotations are experienced subjectively by the individual receiving the text and may not be those intended by the sender. It is also important to look out for any values which are implicitly communicated within the text (**ideology**). The ideology may not be consciously intended, and is not always immediately apparent. It may be disputed.

Take the photograph below, for example.

The **denotation** of this image is a couple on their wedding day.

The **connotation** might be that this is a special, happy day for the couple and that this wedding is a significant enough event to justify the expense of professionally produced images. The connotations produced will depend on who the receiver is: if he is the devastated ex-boyfriend of the bride he may perceive some highly significant and probably negative connotations!

The **ideology** in this text is that marriage is a highly valued institution in our society. This value is represented by the formal and costly ritual of the wedding and the social norm of recognising and recording the ritual with photographs.

Symbols can also carry complex sets of meanings. For example, wearing a pink looped ribbon attached to your clothing is a symbol 'used to connote breast cancer, breast cancer awareness, the search for the cure, the

www.getrevising.co.uk

[redacted]

community of women afflicted by breast cancer, the survivors, support

for the cause, and so forth.' [1]

summary…

- A text is anything that communicates messages to an audience.
- To analyse a text, start by asking some basic questions such as, what is it about, what is its purpose and who is its audience?
- Process models focus on the how effectively the sender gets their message across.
- Semiotic models focus on the ways in which texts create meanings.

1 Elliot, C. (2007) 'Pink! Community, Contestation, and the Colour of Breast Cancer.' Canadian Journal of Communication. Vol. 32, 521-536

Process analysis checklist	
What is the text?	
Who or what is sending the text?	
Who is the intended receiver/audience of the text?	
What message is the sender attempting to communicate?	
What barriers might interfere with the successful transmission of the message?	

www.getrevising.co.uk
search share create

Semiotic analysis checklist	
What type of sign is it?	
What is the signifier?	
What is signified?	
What is the denotation of this sign?	
What are the connotations?	
Is it possible to interpret the sign in completely different but equally valid ways?	
Is there any ideology: underlying attitudes and values that are being communicated through the 'sign'?	

www.getrevising.co.uk

[redacted]

Content analysis is a research tool for use with written texts such as books, news articles, documents, questionnaires, interviews, speeches, conversations, advertising, film scripts, in fact anything involving language. It is a way of assessing the prevalence of specific words and concepts in a text, and of drawing out themes. In essence, it is a method of converting qualitative data into quantitative data which can then be organised and categorised more easily.

……

How to do content analysis

1. F irst, identify a concept that you want to investigate. Say, example, you choose to study ageism in the media since age discrimination legislation was introduced.

2. C hoose a sample (the texts you want to analyse). It should be representative of the texts you want to study. So for this topic the sample should include articles from all the daily and weekend papers, including both broadsheets and tabloids and the national broadcasters.

3. R ead around the subject to develop a focused research question and determine the categories you want to look for. So, you could categorise positive, neutral and negative statements about ageing and older people; or compare discrimination against young people with discrimination against older people. There may be broad categories and sub-categories. Don't rush this, as sloppy categorisation will cause difficulties later.

6. Number each category and read through the text, for underlining and annotating codes in the margins. An example is provided below.

[redacted]

" Rather than showing Britain what a fit He-Man we have for a Prime Minister, Mr Brown has merely succeeded in

- 01 illustrating the pathos and sheer absurdity of the middle-aged male jogger." [2]

[redacted]

H ere, the codes used are (-) to code a negative connotation and (01) to code for middle-older age.

7. To quantify the data, you can then count where each code appears in each text and enter the data into a table as shown below.

	Negative	Positive	Neutral
Text 1	3	0	1
Text 2	2	1	0
Text 3	1	1	2
Totals	6	2	3

4. As you read, keep a note of any relevant terms as you find them, and then add to these from dictionaries and a thesaurus to develop lists for each category. To analyse texts for words related to the concept of ageism, you would obviously look for comments involving the words 'age' , 'old', ' young' and derivatives such as 'ageing', youthful' etc. But you should also look for phrases such as 'over the hill' or 'past it', or even 'energetic' or 'dynamic'. Prepare thorough lists of synonyms, slang terms and related phrases.

5. D ecide in advance what to do if you find further relevant words whilst coding your data. You might identify another theme. Will you go back and start again, including these words or this theme in your analysis, or will you ignore it and make a note to mention it later in your evaluation of the project? It is up to you, but you must be consistent or your data will be invalid.

2 http://www.dailymail.co.uk/debate/article-1226236/Why-Gordon-Brownmiddle-aged-men-away-jogging-pants.html#ixzz0tNrKleZz

More Guidance...

Warning – content analysis looks deceptively simple, but it needs careful preparation and a very consistent approach if it is to produce reliable (consistent) and valid (accurate and representative) data. There is a detailed guide to content analysis at http://writing.colostate.edu/guides/research/content/com3b6.cfm , from which some of the ideas in this guide have been adapted.

Many types of project will involve the analysis of written texts that contain primary and secondary source information in the form of:

- **narratives (stories or descriptions)**
- **claims (statements that the writer wants you to accept)**
- **arguments (conclusions supported by reasoning)**

There are three stages to using texts like this effectively in your project.

1. Analysing a narrative or argument

Ask questions about what you are reading. If you are researching for a narrative (story or description) of events, use the questions that journalists use to structure their narrative when reporting - What? Who? Where? When? How? Why? (see section on 'Analysing Texts' for alternative approaches to this.)

The key to a good argument is often absolute clarity about the definition of key terms. Look them up and assess whether or not they have been used appropriately.

Identify the main conclusion of the argument that the author is trying to persuade the audience to accept. Check it by seeing if pairs of statements make sense when linked by the word 'because' or the word 'therefore'. There will be one statement which can only be linked to the rest of the argument by using 'therefore' – not using 'because'. This is the main conclusion, so look carefully at the reasoning behind it. (See chapter on 'Constructing logical arguments').

2. Assess the reliability of a claim and its author

You need to look beyond the surface of what is said to decide whether it is valid and reliable. Assess whether any claims made are factual or subjective opinion and look for corroboration and evidence. You should also consider the credibility of the author – how far can what they say be trusted or depended on?

summary…

3. Establish links and connections between different sources

This is an essential skill in the 'Using resources' section of the project assessment. It is important to develop links between ideas in different texts and to use them to develop your own independent thinking about the topic

you are working on. It also helps avoid plagiarism (see section on 'Avoiding plagiarism').

To establish links and connections:

- Consider how the information in each source adds to, supports or challenges other information in order to build up a clear picture of the topic.
- Consider the relative importance you want to give to different sources. Think about their relevance, credibility and plausibility.
- You can identify themes in texts to make sense of the meaning of the information you have found (see section on 'Content Analysis' for a research technique to help with this).
- Alternatively, you could develop a narrative of events on a timeline.

• Ask questions about writtentexts: What? Who? Where? When? How? Why?
• Aim for absolute clarity in your definitions.
• Findthe main conclusion and test it.
• Assess reliability and credibility.
• Develop links and connections between sources.

A 'claim' is an umbrella term for any statement made in a text. It might be a judgement, a demand, a recommendation or a principle. It could be a statement of fact, opinion or speculation. In an argument, it may play the role of reason (premise), assertion or conclusion. The term implies that the statement could be (although may not be) challenged.

Evaluating the factual basis of an argument

Evidence: Can the facts be verified by direct observation? How did the author establish the facts? Does the evidence seem to be representative of the situation or populations it is being applied to? Has it been carried out in a clear and open manner, under controlled conditions? Is there any scope for bias in the way it has been interpreted? Are there alternative interpretations of the data? Is there any contradictory evidence?

Reasoning: Do the facts prove the claim being made or do they merely suggest that it is reasonable? Are the facts relevant to the argument being made? Is the justification for the claims logical? Does the author draw sound conclusions, or are the conclusions too strong to be accepted on the basis of the reasons that have been provided? Does the author make any unstated assumptions which we have to accept in order to accept the conclusion? Have unfavorable or negative points been left out?

Corroboration and consistency: To what extent do the conclusions of different accounts agree with each other? If a range of sources seem to agree, then they are consistent or corroborated. But also, how far are these other sources based on fact?

www.getrevising.co.uk

[redacted]

Identifying subjective opinions

Identifying speculation

If

The RAVEN credibility criteria can be used to decide whether you want to trust what is being claimed in a source. They are all linked, but vested interests, expertise and reputation in particular often go hand in hand.

Opinions may influence the way an argument, claim, or theory is presented. They tend to be based on a person's values but can be based on factual evidence as well.

- Are there words that suggest statements of opinion, such as probably, perhaps, usually, often, sometimes, on occasion, I believe, I think, in my opinion, I feel, I suggest?
- Does the author use words that interpret, label or suggest that a value judgement has been made, such as safe, dangerous, evil, good, and so on?
- Can you identify alternative opinions that might be relevant?
- Does the opinion rest on a key definition of a certain word?

Has the author defined it? Could the definition be disputed?

Be careful! The distinctions you may have been taught about fact and opinion previously may be too simplistic here. Just because something is expressed as an opinion does not automatically mean it is not objectively true. So, even if a statement begins with 'I believe that', it might be factual, at least until there is evidence to the contrary. For example, the statement 'I believe that the earth goes round the sun' is verifiable to the extent that we believe the evidence of our own experience, space missions and astronomy. It is of course possible, although extremely unlikely, that one day evidence might be found that disproves this statement!

there appears to be no sound factual basis for a theory or a claim then you might consider it to be speculation. Speculation is a suggestion without any evidence. If it is not acknowledged as such then it may be a sign of weak argument because speculation should not be used to draw firm conclusions.

- R = Reputation
- A = Ability to See
- V = Vested Interest
- E = Expertise
- N = Neutrality

Reputation

'The boy who cried wolf' and countless public scandals involving public figures show us that our prior experience of someone being less than honest is likely to influence their reputation in the future. Reputation can be based on perceived honesty, competence, neutrality and integrity. An organisation

www.getrevising.co.uk

such as the BBC has a reasonably solid reputation for balance and reliability in its research and reporting whereas The Sunday Sport has a less shiny reputation.

Ability to see

Is this a primary source? Has the author actually experienced first hand what they're talking about? For example, was that person in a position to see properly? No matter how honest the author tries to be, if they don't have first hand and full knowledge of what they are talking about then they must be doubted.

Vested interest

If the author might gain financially by lying or exaggerating then their credibility is weakened by their vested interest. Or their credibility might be strengthened by a vested interest to tell the truth. The BBC is a publicly funded organisation with a charter which requires impartial reporting, and there is much to lose by not living up to the terms of this charter whereas there is no such restriction for newspapers – and they often follow the vested interest of the editor or the owner. Rupert Murdoch, who owns Sky, the Sun, Fox, The Times and many other companies, is arguably the most powerful individual in global and local media.

summary…

Expertise

Sometimes specialised knowledge is needed in order to fully understand an issue. So an academic expert may have more credibility than a journalist or 'Joe Public'. However, beware of investing too much authority in someone because they have letters after their name or have published on a university website. Not all so called 'experts' are equally reliable, some qualifications mean more than others and many academics take pride in their disagreements with others in their field.

Neutrality

This refers to neutrality as opposed to bias. It is not the same as vested interest – which depends on some form of financial or material gain. Bias is a matter of values and/or loyalty. So a son may be loyal to his mother, or a committed feminist may conduct research into male aggression in such a way as to show support for her values. Such bias could be deliberate, but may be unintended.

- Remember to investigate the people and story behind the document you are reading.
- Use the RAVEN criteria to assess the strength or weakness of the credibility of the author or publishing organisation.

In assessing the credibility of a secondary source (book, journal, newspaper, website etc.) the following points need to be considered.

…….

1. The credibility of the document.

a. Articles in academic journals are often peer reviewed by experts in the field to ensure that the quality of evidence and plausibility of claims can be relied upon. However, most assessment of whether there is a balanced reasoned

b. Corroboration from other sources may be important in judging whether or not to trust a source, as does an

www.getrevising.co.uk

of what is published on the internet does not go through argument and/or factual evidence – or whether it is an peer review, so you will need to apply the credibility criteria emotional rant.

(RAVEN - see 'Assessing the credibility of primary sources') c. How far does the article draw on relevant, referenced to the claims that you find there. Newspapers often have a sources? Look them up. How reliable or credible are the reputation for insufficiently rigorous research, or of selection sources that are referenced? and distortion of material to fulfil their 'news values'.

2. The credibility of the writer and/or source organisation

It can be difficult to determine the credibility of internet sources. Find out whether the website is published by an individual or organisation. You can work out a fair amount about the neutrality and vested interest of an article by the type of organisation which has published it – is it a newspaper, journal, university, independent organisation, profit-making organisation, governmental organisation, non-governmental organisation, pressure or fundraising group?

Look at the top-level domain suffix in the URL address. While any website owner can register any domain name for a fee, the conventions in the box opposite are generally observed.

Find out who funds the organisation – is there a possible vested interest here? Research the reputation of the writer or organisation by looking at what other people have said about them.

If you are looking at a website or blog, and the author uses a pseudonym or is anonymous, ask why? Does this affect their credibility? If it's an organisation, a good place to start is the 'About us' section. If there isn't one, why not? This should ring alarm bells! Look for corroboration for any sites which are anonymous.

US	UK	Usage
.com	.co.uk	Commercial businesses
.biz		Less often used, but also commercial businesses
.edu	.ac.uk	Educational institutions such as universities
.org	.org.uk	Non-commercial and nongovernmental organisations such as charities, pressure groups or community groups
.gov	.gov.uk	Official government website(local or national government)
.net		General purpose/network
.tv		Officially the country code for Tuvalu, an island in the South Pacific. This domain is popular with businesses wanting to stream video over the internet.

summary…

When assessing any source, look for information about the document and publishing individual or organisation. Look for corroboration, references, evidence of expert review or accreditation.

www.getrevising.co.uk

Using critical thinking in your research: Checklist

To think critically about a source you need to answer these ten key questions – the first five can apply to any source, the rest are specific to written arguments where the writer is attempting to persuade you to accept a conclusion.

1. What is the purpose of this source?
   (Who is its audience, what message is it trying to convey and why?)

2. What are the main ideas or concepts?

3. Do any terms need to be defined in order to understand these ideas fully?

4. Does the writer present ideas as facts, subjective opinion, reasoned argument, belief, speculation or suggestion? Are the ideas implied or clearly stated?

5. What other information do you need to decide whether to rely on the information from this source?
   (Consider credibility criteria such as expertise, reputation, bias, vested interest)

And for arguments:

6. In a written argument, what evidence is there to support the conclusion, and how good is this evidence?

7. Is the writer taking anything for granted which is not justified in the text?

8. Are there any possible alternative points of view and has the writer considered any of these?

9. What are the consequences of accepting this point of view or the alternatives? What further questions does it raise?

10. How does this source compare to other relevant sources? How are they similar/different, complementary/contradictory?

More Guidance...

Some of the ideas above have been adapted from www.criticalthinking.org

Chapter 4

Collecting primary data

Doing your own research	60
Sampling	62
Accessing organisations	64
Questionnaires	65
Questionnaire planning form	67
Interviews	68
20 steps to a good interview	70
Interview planning form	71
Observation	72
Observation planning form	74
Analysing quantitative data	75
Presenting quantitative data	76
Presenting and analysing qualitative data	78
Evaluating primary data	80
Research methods glossary	82

Doing an enquiry

Many projects are likely to benefit from some first-hand research. Anyone making a product or creating an event or performance needs to find out about their potential audience, talk to key individuals, test their ideas out and evaluate their success, while for those doing investigations the collection and analysis of first-hand information is the central part of the project.

……..

Information collected first-hand is known as **primary data**. In numerical form it is known as **quantitative data;** in written

form it is known as **qualitative data**.

Methods of primary data collection

The most common methods of primary data collection are:

Questionnaires
A questionnaire is simply a list of questions. Questions can be **closed**, where the respondent chooses their answer from a series of alternatives or **open**, where they can write freely. Closed questions generate quantitative data and open questions qualitative.

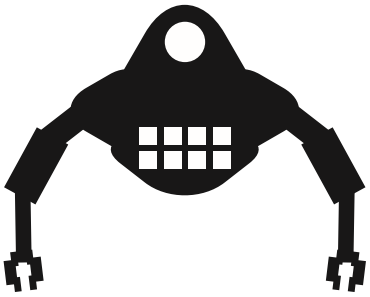
Interviews
Interviews are guided conversations between an interviewer and a **respondent** (the person answering the questions). The interviewer uses an **interview schedule** or list of questions. The interview may be recorded and **transcribed**, or the interviewer may make notes during the process. There are different types of interview:

- **Structured interviews** These involve the interviewer reading out a questionnaire consisting of mainly closed questions. Structured interviews generate primarily quantitative data.
- **Unstructured interviews** Unstructured interviews are guided by the interviewer who may have a list of topics to cover. However, the questioning is flexible and depends on the answers given. In this way the unstructured interview resembles a normal conversation. Unstructured interviews collect qualitative data.
- **Semi-structured interviews** These may start off with some closed questions but become increasingly open and flexible as the interview progresses. Alternatively they may include a mixture of open and closed questions throughout the interview. Semi-structured interviews collect a mixture of quantitative and qualitative data.
- **Group interviews (focus groups)** Group interviews need a 'facilitator' to guide the group's discussion. They produce qualitative data and need to be recorded.

Observation
Observation means watching a group or event in order to find out specific information. There are two broad types of observation:

1. **D irect observation** The observer does not join in at all. They may jot down notes in a qualitative form or use a pre-planned observation schedule that can produce quantitative data.
2. **P articipant observation** The observer joins in with the group or situation and writes up notes after the observation, usually in a qualitative form.

Which method should I choose?



Quantitative approaches are suitable if you need fairly straightforward information from a large number of people.

Qualitative approaches are suitable if you need detailed information about opinions, beliefs and feelings from a small number.

Sometimes a combination of quantitative and qualitative data is required. Both have advantages and disadvantages. Larger samples are possible when collecting quantitative data because methods such as questionnaires are quite quick to complete whereas each semi-structured interview is likely to take more time as it will go into more depth. Recording and transcribing interviews can be particularly time consuming.

? Do you need quantitative or qualitative data, or a combination of both?

No method is 'better' than any other. Which method or combination of methods you choose depends on exactly what you want to find out.

I need the detailed views of a few people	Semi- or unstructured interviews are the most appropriate method for collecting detailed qualitative opinions and feelings from one or a few people.
I just need some basic information and a few opinions from my audience	Basic factual information is usually collected in a quantitative form using a questionnaire. The questionnaire may be completed by the respondent or by using a structured interview.
I need to see how the group works together	Interaction can be studied by observation – either direct or participant; or by running a focus group. Focus groups allow the facilitator to direct discussion and ask questions.
I need to contact respondents from a variety of places	Questionnaires and interviews can be conducted online.
Some of my questions are quite complex	An interviewer might need to be present to explain questions.
I need to test my product	Questionnaires or interviews could be used. Alternatively, a focus group could be asked to discuss various aspects of the product and their reactions noted and observed.

www.getrevising.co.uk

More details on each of these methods can be found in the separate sections for each method.

? Which method or combination of methods is most suitable for your project?

summary…

Primary data can be quantitative or qualitative. The most common methods of collecting primary data are questionnaires, interviews and observation. Which method or combination of methods you use depends on what you want to find out. Quantitative data is often used to express fairly basic information from a large number of people. Qualitative data collection takes time but can provide depth and detail about beliefs and attitudes.

Any research involves sampling; whether you are studying people, animals, plants, events or materials. This section uses research with people as its model, but you can apply some techniques to any subject of study, particularly random, quota and opportunity sampling.

Researching every person in the group you are interested in (your sample population) is usually impossible so it will probably be necessary to select a smaller cross-section of that group to research. This smaller group is known as a **sample**. For example, if your sample population is 16-19 year-olds, you will need to select a smaller group of people between these ages to represent the whole group.

If your sample is an accurate reflection of the make-up of the sample population then you can claim that your sample is **representative**. If your sample is representative of the sample population then your results should be **generalisable** to the sample population.

However, if a sample is selected carelessly or with little thought, it cannot be claimed that the results based on that sample apply to the entire sample population. A particular danger is to select your friends. The problem here is that your friends are likely to be similar to you and therefore not representative of your sample population. Choosing a sample needs to be done carefully.

? What is your sample population?

What types of sampling are there?

Random sampling

The best way of eliminating any personal bias in the selection of a sample is to make the choice of respondents random. That means that everyone in the sample population has an equal chance of being selected in the sample.

www.getrevising.co.uk

To select a random sample a list of the sample population is needed from which the random sample can be taken. This list is known as a **sampling frame**. Random samples can be selected by using a table of random numbers to select from the list or by using a 'lottery' approach where the names are mixed up and then a sample selected randomly. Alternatively every *n*th name can be selected in a process known as **systematic sampling**. For example, if you have access to a school or college register then every 5th name could be selected to make up your sample.

? Is there a sampling frame you can use?

Sometimes random sampling does not produce a representative sample. For example, it may produce more males than females when there is an equal mix in the sample population. To avoid this, samples are often **stratified**: divided into categories such as male and female or different age ranges and then random samples taken from these categories.

In practice, it will prove difficult for you to achieve a genuinely random sample as a list of your sample population may not be available or accessible. However, there is an alternative.

Quota sampling

This approach involves working out what proportions of different groups are in the sample population and then selecting a sample using the same proportions.

Say your sample population is young people aged between 17 and 19. You might want equal numbers of males and females and some of the sample doing A levels, some vocational courses, some in work and some not in work or employment. You may need to do a bit of research to find out the proportions of young people involved in these activities nationally. You then decide on your sample size and work out the correct proportions of each sub-set in your sample. It is then up to you to find this combination of people to participate in your research.

Quota sampling is not random as *you* make the choices about who will participate in the research so personal biases can occur – you might select people who look friendly for example. Its main advantage is that it should create a sample that is reasonably representative of the sample population.

However, some types of sampling aim for practicality, rather than being representative. They are:

Snowball sampling

Sometimes it is hard to contact a sample population. They may be widely dispersed geographically or there may be no obvious way of contacting them, for example, women at home with children. In these cases the only method of sampling possible might be to find one or two members of the sample population and then to ask them if they know others who might be prepared to participate in the research. Then these people can recommend others and so on. In this way, a snowballing effect occurs and a sample is created.

www.getrevising.co.uk

Opportunity sampling

The easiest way to select a sample is to pick the most convenient people, perhaps friends, family or fellow students. This is an appropriate method to use if you think there are no significant differences between people in terms of whatever it is you are investigating but in most cases it will not provide an adequate cross-section of the sample population because it is prone to personal bias in selection.

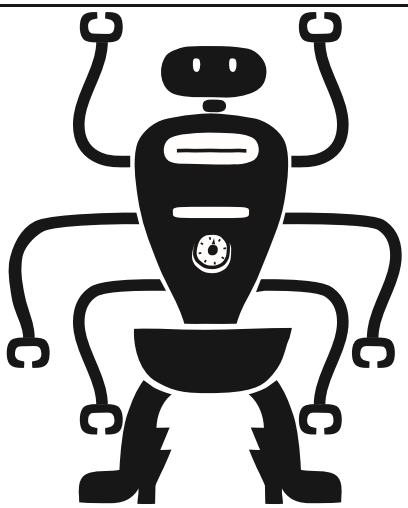
Volunteer sampling

By advertising for a sample rather than picking the most convenient people, you can avoid the personal bias involved with opportunity sampling whilst keeping things simple. However, the sample may still be biased by your chosen advertisement site, and will only consist of people who are motivated enough to respond – this is known as 'volunteer bias'.

? Which is the most appropriate method of sampling for your research?

summary…

- Most research involves selecting a sample from the sample population.
- Most samples aim to be representative – an accurate reflection of the sample population.
- Random samples are unbiased but sometimes need to be stratified before they are representative. However, they are often impractical as there may be no accessible sampling frame.
- Quota sampling is not random but can provide a representative sample.
- Snowball, opportunity or volunteer samples may be appropriate in some situations.



www.getrevising.co.uk

[redacted]

Many Extended Projects require research in organisations such as businesses, hospitals, drama and art groups and schools. In these cases you will need to gain access to the organisation and to obtain the co-operation of its members.

Getting into the organisation

The first question you must ask is: why should an organisation help me? What's in it for them? The answer is probably: not a great deal. Therefore your approach needs to be tactful and polite. Assisting a student with their project is not likely to be a high priority for busy people. You may find long delays in the return of emails, letters or telephone calls, if they are returned at all. Contact organisations as far in advance as possible in order to allow for a possible long period of 'negotiation' and have reserve organisations in mind if your first choice does not work out. Gaining access can be more straightforward if you, or a friend or relation, you have some kind of personal link with the organisation.

Usually an approach by email, letter or telephone well in advance is the first step. Explain who you are, where you are a student, what exactly you want to do, and why you want to do it. Give an indication of roughly when you will need to do the research and how much time it is likely to take. Try to be flexible – you will have to fit in with the organisation rather than the other way round. If you get no response then a further contact may be appropriate. However, if an organisation does not wish to co-operate then accept this and go on to your reserve choice. Don't wait too long to hear from your first-choice organisation.

? What organisation(s) do you need to contact? How do you plan to gain access?

Researching the organisation

Ethical guidelines will need to be strictly followed while you are working in the organisation (see 'Conforming to ethical guidelines'). Remember that you are a representative of your school or college. Clearly, politeness, due respect and a sensitivity to personal appearance and any formal or informal dress codes will be important throughout the period of your research.

As a student you possess less status and power than the important members of organisations. They will act as gatekeepers in so far as they will control your access to people and events. For this reason it may not be possible to investigate the organisation in exactly the way you initially intended. It may be necessary to compromise in the kind of research you conduct. In most cases this will have to be accepted as a limitation of your research.

Leaving the organisation

After data collection is complete, appropriate messages of thanks should be sent to individuals in the organisation who assisted with your research. In some circumstances you may wish to offer to return and talk about your findings, to send a photocopy of the completed project and/or invite individuals to your presentation or exhibition. The reactions of members of the organisation can form an important part in the evaluation of your project.

summary…

Contact organisations well in advance and explain exactly what you require and be prepared to follow-up your initial contact if there is no response. Try to have reserve organisations in mind. Whenever you visit the organisation follow ethical guidelines, be

www.getrevising.co.uk

polite and respectful and conform to any dress codes. Once your research has finished, thank all those who assisted you and offer to show them your finished project or final presentation.

Questionnaires

A questionnaire is simply a list of questions. They are usually used to collect primarily statistical or quantitative data from a large number of people.

There are two ways of getting questionnaires filled in.

1. Self-completion
The respondent completes the questionnaire themselves, either on paper or online (see below). Self-completion questionnaires allow respondents to complete the questionnaire in their own time and there is little possibility of the interviewer influencing responses. However, there is no opportunity to explain questions or to encourage more detailed answers and there is the strong possibility of a **low response rate** if participants are allowed to take away the questionnaire.

2. Structured interview
An interviewer asks the questions and inputs the answers.
Structured interviews allow for explanation of questions and prompting of respondents but there is the danger of interviewer bias, for example a business owner might not be completely honest if interviewed by a student because of the status difference between them. There are more details of interviewer bias in the section on interviews.

What types of questions are there?

Questions come in two forms.

? Which is more suitable for your purpose – self-completion or structured interview? Why?

1. Closed questions
These make the respondent select from a series of fixed choices. These may be as simple as selecting between male and female or in a more complicated form where the respondent can select one or more answers from a list.

Closed questions can be effective in collecting straightforward factual data. However they are less useful in revealing more complex factors such as attitudes, values and opinions, which cannot be easily categorised. However, if you do choose to collect this sort of data using a closed question then you might consider using a **Likert Scale**. This involves asking the respondent whether they agree, strongly agree, are unsure, disagree or strongly disagree with a statement. A problem here is that many people do not like to be seen as 'extremists' and so may avoid categorising themselves as having strong views.

Here is an example of a closed question.

How did you get to school/college today?
(tick more than one box if necessary)

a Walked	
b By bus	
c By train	
d By car	
e Cycled	
f Other (please specify)	

More Guidance...

There are online tools for creating questionnaire surveys. See www.surveymonkey.com for example.

2. Open questions

Open questions provide the respondent with a blank space so they can write whatever they choose. For example,

How did you get to school/college today?

Open questions have the advantage of allowing the respondent to express their answer however they want, thus enabling them to provide a more accurate and detailed account and increasing the validity of your data.

However, the answers to open questions are often difficult to categorise and quantify. Also, people are often not keen on writing so may produce very short answers in self-completion questionnaires.

The responses to open questions can be used as illustrative material in the analysis and interpretation of your questionnaire results.

? Are open or closed questions most appropriate for your questionnaire? Or would a combination be more useful?

How should I write questions?

The actual wording of questions is a difficult task and you should anticipate having to draft your questionnaire several times before it is completely satisfactory.

In general, questions should:

- be clear and unambiguous
- contain clear instructions for respondent or interviewer
- allow for every possible response
- not put pressure on respondents to answer in particular ways
- avoid assumptions about respondents (for instance that they are married)
- avoid sensitive areas such as asking for an exact age.

Try using these criteria to assess the question below.

Do you damage your education by often being late for school or college?

☐ **Yes**

☐ **No**

Piloting

It is important that you test out questions before you carry out the full questionnaire. A pilot survey aims to test

whether your questions can be fully understood and are effective in obtaining the sort of information you need. Try your questionnaire out on about six to eight people and then assess whether any changes are needed.

summary…

Questionnaires are most suitable for gathering straightforward information from a large sample. They can be administered using interviews or self-completion. Questions can be open or closed although in most questionnaires the majority of questions are closed in order to allow for easy collation of results. A great deal of care needs to be taken when writing questions and the questions should be piloted on a small sample before the main questionnaire is conducted.

Questionnaire planning form

If you can tick all these ten boxes, then it is likely that your questionnaire has been well planned. If you are unsure or have put an 'x' by any of the statements, then it is worth talking the point over with your supervisor.

I have: ✓ or ✗

[redacted]

1. A clear idea of the aims of the questionnaire
2. Considered whether a structured interview or self-completion is most appropriate
3. Considered the use of both open and closed questions
4. Thought carefully about why I am asking each question
5. Avoided questions that are too personal or intrusive
6. Taken great care in constructing questions
7. Decided how the questionnaire will meet ethical guidelines
8. Made an effort to achieve a representative sample
9. Piloted the questionnaire
10. Planned how the questionnaire will be carried out such as where and when, any photocopying needed and so on

An interview is a guided conversation with the aim of finding out specific information from one or more respondents. It is the most commonly used method of primary research.

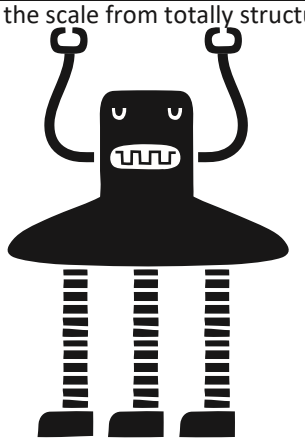
Types of interview

Interviews may be more or less structured. Structured interviews involve mainly closed questions with the same wording used in each interview, while unstructured interviews are more like real conversations, with the interviewer having the flexibility to adjust questions and to discuss issues with the respondent. The table below provides a summary of the different types of interview.

	Structured interviews	Semi-structured interviews	Unstructured interviews

Type of questions	Closed questions	Mixture of open and closed questions	Open questions
Flexibility	Interviewer uses exactly the same wording in every interview	Interviewer uses generally similar wording for each question	Interviewer varies questioning according to responses
Role of interviewer	Interviewer remains neutral and objective	Interviewer is friendly but tries to remain reasonably objective	Interviewer tries to establish a good relationship – or **rapport** – with the respondent
Type of data produced	Quantitative data	A mixture of quantitative and qualitative data	Qualitative data
Advantages	• Efficient way of collecting straightforward information from large sample • Interviewer can explain questions	• Can collect any type of data • Interviewer has some flexibility but interview still has clear structure	• Can achieve detailed accounts of experiences and attitudes • Respondents likely to be honest
Disadvantages	• Force respondents into categories that may not reflect their real feelings • No flexibility for interviewer	• May fail to produce adequate quantitative or qualitative data • May slip into structured or unstructured format	• Time-consuming as each interview can be lengthy • Easy to go off the point

In reality, interviews can fit anywhere along the scale from totally structured to totally unstructured. Most are



somewhere between these two extremes.

Individual and group interviews

Most interviews involve one respondent but in some situations group interviews – sometimes known as **focus groups** – are used. In group interviews the interviewer takes the role of a facilitator, stimulating and directing the discussion.

……

Which type of interview should I choose?

First you need to decide what type of information you require and from whom. If you require fairly straightforward information from a number of people then a structured interview is likely to be most appropriate. These focus basically involve reading out a questionnaire but they do to set up but allow the interviewer to explain questions. If more personal information (such as opinions, attitudes and experiences) is required from one person or a small number of people then a more unstructured approach might be appropriate. If a mixture of both types of information is needed then semi-structured interviews might be the best option.

In some situations you might want to see how people influence each other and develop their opinions. you want to test out a product, idea or prototype on members of your target audience. In these situations groups could be your choice. They are difficult can provide a valuable picture of social interaction.

? Which type of interview suits your purpose? Why?

Problems of interviews

The main problem affecting the validity of data collected in interviews is known as **interviewer bias**. Interviewer bias occurs when the presence of the interviewer affects the answers to questions. This can occur for a variety of reasons, for example if there is a status difference between the interviewer and respondent. In the case of project work, students may need to interview adults of higher status. Those adults may not wish to disclose the full picture or may not feel it is appropriate that a young person is requesting such information.

Other status differences that can be the source of interviewer bias involve gender and ethnicity. For example, an interview in which a young female asks her male peers about their attitudes to a drama production about feminism may result in the boys adopting more positive attitudes towards feminism than they might have done if interviewed by another male. In this situation the respondents are telling the interviewer what they think she wants to hear. Similarly, people will sometimes give answers that they think are socially acceptable rather than their own genuine opinions, for example, people may not wish to admit to any prejudice against gay people but still may hold some stereotyped views in private. This is known as **social desirability bias**.

Interviewer bias can be minimised by presenting yourself in a professional manner, planning the interview carefully and wording questions in a neutral way so that the respondent feels free to answer truthfully.

? How might interviewer bias occur in your interviews?

summary…

Interviews are guided conversations. They may have high or low degrees of structure depending on the type of information required. Structured interviews generate primarily quantitative data and unstructured interviews generate qualitative data. Interviewer bias can affect data collected through interviews so care must be taken to minimise the chance of this occurring.

Planning the interview

1. C ontact the respondent well in advance to request an interview. Explain the purpose of your research and fix a convenient time and place for the interview. Don't assume the respondent's agreement – accept their decision if they do not wish to be interviewed.
2. A rrange for the interview to take place in a quiet location where you will not be disturbed, but do bear in mind any risks that may be involved (see guidance on 'Using risk assessments').
3. Decide how you will make a record of the interview. If the interview is semi-structured you will probably make an audio recording as you will need a complete record of answers and making notes will take your attention away from managing the interview. If you do this, bear in mind that you will need to transcribe the interview later, and this can take some time.
4. P resent yourself professionally. Think about what to wear and how to manage your non-verbal communication.

Writing questions

5. Make sure you know exactly what you want to find out from the interview. Always bear in mind this 'big picture' when writing questions.
6. You will need an interview schedule. This is a list of questions or headings. If the interview is structured then the interview schedule will be similar to a questionnaire (see guidance notes on questionnaires).
7. If the interview is unstructured or semi-structured the interview schedule will take the form of a series of open questions or headings that encourage the respondent to talk. Try starting with phrases such as 'Could you tell me about …' or 'How do you feel about …'. These encourage more detailed responses.
8. S tart with easier questions to establish a rapport and then go on to more complex issues later.
9. P lan some follow-up questions if you need more information than has been provided.
10. Make sure you know how you are going to make a record of answers.

Carrying out the interview

Organise the recording equipment for the interview and check that it is working.

12. At the beginning of the interview, explain the purposes of your research in more detail.

Follow the ethical guidelines outlined in 'Conforming to ethical guidelines'. Be prepared to answer any questions.

14. Try to avoid any facial or other non-verbal clue that you either agree or disagree with anything the respondent says.

15. It is often useful to ask supplementary questions or prompt the respondent to go into more detail. This also allows you to establish a more natural conversational style. Supplementary questions may be phrased in ways such as: 'Can you tell me a little more about...?'
16. At the end of the interview, check that you have all the information you need and then thank the respondent for their time.

After the interview

17. A letter or email thanking the respondent is welcome.
18. Make sure you look after the interview data.
20. T ranscribe (write out) key parts of the interview always including quotations.

[redacted]

19. Analyse the interview data quickly while you still have a memory of the interview. Use your 'big picture' of the interview to help.

Interview planning form

If you can tick all these ten boxes, then it is likely that your interviews have been well planned. If you are unsure or have put an 'x' by any of the statements, then it is worth talking the point over with your supervisor.

I have:	✓	or ✗
1. Considered why I wish to use interviews		
2. Contacted respondents well in advance to seek permission and arrange the interviews		
3. Decided what type of interviews I need to use		
4. Organised a quiet place for the interviews where we will not be disturbed		
5. Considered how best to present myself for the interviews		
6. Decided how to make a record of answers		
7. Made plans to minimise interviewer bias		
8. Written an appropriate interview schedule, starting with the simplest questions		
9. Planned to check all recording equipment is working before the interviews		
10. Planned how to thank the respondents		

In its most basic form, observation means watching. In research situations, observation is watching in a very careful way with a particular purpose in mind.

Why use observation?

- Observation allows the study of people in their 'natural' setting rather than the artificial environment of, say, an interview.
- Observation makes it possible to study the relationships between members of a group or an organisation.
- Observation allows the study of groups, organisations and activities over time, whereas other research methods can only achieve a 'snapshot'.

Limitations of observation

- You may have to sacrifice a degree of representativeness as it is unlikely that you will be able to generalise from the number of people and situations you can observe.
- Observation relies heavily on the interpretations of the observer. The views and emotions of the researcher may affect the reliability of the data collected.
- If those involved in the activity are aware of the researcher's presence their behaviour may be affected – this is known as **researcher effect**.

Types of observation

Observation can be of two sorts although in reality most observation contains elements of both.

1. Direct observation

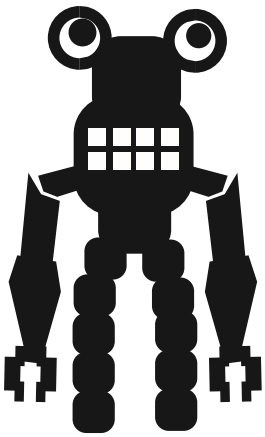
Here the researcher attempts to be a 'fly on the wall', observing what is happening but remaining unobtrusive. This may be possible at a large gathering of people such as at a sports fixture, exhibition, theatre production or in places where the public are admitted as observers such as Magistrates Courts. In many other situations, even if you are not participating directly, your presence may have an effect on the other participants. An obvious example of this is the presence of an observer in school classrooms. Although they may play no part in the lesson their very presence can cause alterations in the behaviour of both pupils and teacher.

2. Participant observation

The participant observer deliberately sets out to join in with the group or organisation they are observing – their observation takes place while they are participating. By actually participating in the activities of a group of people it is possible to see the world through their eyes and thus achieve an insight into their behaviour, beliefs and values.

? Which type of observation is most suitable for your project? Why?

Carrying out observation



Gaining entry

The first step is to gain access to the group, organisation or situation. You may have to seek permission by email or letter. Access is much easier if you already have some contact with the group or organisation.

Taking a role

Most observation involves taking a role of some kind.

Even in non-participant observation you are likely to be a 'member of an audience' or a 'football fan' for example. In participant observation you must attempt to negotiate a role in the group or organisation that will allow you to both observe and participate.

One of the first decisions you will need to make is whether to adopt an **overt** or **covert** role. An overt observer is completely open about their identity and research interests; a covert observer, on the other hand, does not reveal the fact that they are doing research. The

advantage of covert observation is that there is no chance of disturbing the environment being studied. However, covert observation presents serious ethical problems – is it right to observe people without their consent? You should consider all the alternatives and consult with your project supervisor before embarking on any form of covert observation. See 'Conforming to ethical guidelines' for more guidance.

As observation gets underway you will be faced with another important decision: to what extent should you participate in the activities of the group or organisation? This very much depends on the nature of the social situation being observed and your existing position in it. You may not have a great deal of choice, for instance if you are observing while participating in a part-time job or while undertaking work experience at a local playgroup. On occasions your negotiation of access may be dependent on your participation, for example you might be asked to help out while observing PE lessons at a local secondary school. In these circumstances a great deal of participation is unavoidable.

who dominated the games and what toys each child played with. In this way your observation notes will be easier to analyse and write up at a later date.

Observation can generate both quantitative and qualitative data. The number of times certain events occur can be counted – for example, the number of times questions are asked at a meeting. If you are planning to collect quantitative data, it is a good idea to draw up a checklist or a coding form in advance. You can leave some spaces free to add events during the observation if needed.

Recording data

Note taking is the usual method of recording data although there are occasions when it may be possible to make recordings. Note taking at the time is not always possible so you may have to remember impressions, conversations and incidents and note them down at the first opportunity available. If this is the case it is essential that you discipline yourself to write up your notes as soon as possible after the observation.

At the end of your period of observation you should thank all the individuals who have co-operated with you and helped the research.

summary…

Collecting data

Decide what you are looking for and devise headings or categories for your notes. If you were observing children's play activities in a playgroup as part of an investigation into gender differences, you might make notes on topics such as the games boys and girls played,

? How will you carry out your observation? What role will you take and how will you record data?

Observation involves careful watching of a group or situation for a particular purpose. It can be direct or involve participation. Observation makes it possible to observe 'natural' settings but the results rely on the interpretations of the observer. Carrying out observation involves gaining access, taking a role and the collection and recording of data.

If you can tick all these ten boxes, then it is likely that your observation has been well planned. If you are unsure or have put an 'x' by any of the statements, then it is worth talking the point over with your supervisor.

www.getrevising.co.uk

I have: ✓ or ✗

1. Considered why I wish to use observation. ☐ ☐
2. Identified the groups, organisations or situations I wish to observe. ☐ ☐
3. Devised a strategy for gaining access to the groups or situations I wish to observe. ☐ ☐
4. Contacted organisations well in advance to arrange a time for a visit. ☐ ☐
5. Decided whether to use primarily direct or participant observation. ☐ ☐
6. Decided whether my observation will be covert or overt and, if covert, considered the ethical issues involved and consulted my project supervisor. ☐ ☐
7. Devised headings or other categories to organise my note taking during the period of observation. ☐ ☐
8. If possible, anticipated what role I will take during the observation including to what extent I intend to participate in activities. ☐ ☐
9. Decided how I am going to record data, taking my role into account. ☐ ☐
10. Planned how to thank individuals and organisations who have helped my observation. ☐ ☐

Analysing quantitative data

Quantitative data must be prepared before it can be analysed and presented.

Preparing quantitative data for analysis

If you are taking a traditional scientific approach to the research, your hypotheses will generate categories or **variables** to use when organising the data collection. It is more difficult to analyse data later on if you don't plan these categories in advance. However, in project research without a guiding hypothesis it may be necessary to classify some of the data during analysis.

www.getrevising.co.uk

Each category or variable should be given a code (for easy labelling during analysis). To quantify questionnaire data, each possible answer is numerically coded. It is sensible to do this as you design the data collection materials, so that responses can be coded as they are recorded. Once coded, data can be entered into Microsoft Excel or other spreadsheet software for analysis.

Analysing quantitative data

Quantitative data analysis involves finding patterns in the data. For the majority of Extended Projects these patterns are likely to fall into one of three types:

1. Associations (**correlations**) between two variables
2. Differences in overall scores between two or more samples or situations
3. Trends – changes that occur over a period of time

To identify an association between two variables, you need to pair up individual scores from the two variables and calculate a **correlation co-efficient** to work out how close the association is. A **scattergraph** can also help to show the distribution of data.

If you need to identify differences between groups you will need to summarise the data for each group by calculating the **central tendency** and distribution of the scores. These will be presented in a table and/or a bar chart or histogram.

Measures of central tendency include the mean (or average), median and mode.

Each has its advantages and limitations. The mean takes into account all scores in the group, but it can be artificially skewed by a few anomalous scores. The median will not be as skewed but does not take into account the differences between scores. The mode tells us only about the most frequent score and nothing else.

Beware: Statistical statements possess an alluring appearance of certainty. However, it is easy to use quantitative data ineffectively and to misinterpret data. Your project objectives must guide the data analysis techniques that you choose. Think carefully about the objectives of your project and the way your data will be analysed before you start to collect it to ensure that you are collecting the data that you need in order to achieve your objectives.

Measures of distribution include the range and **standard deviation**. The range is the difference between the highest and lowest scores and can be calculated manually. The standard deviation takes into account the variation in all the scores but is a more complex calculation. Spreadsheet software can perform these calculations for you.

The simplest way to identify and present trends is to calculate overall measures of central tendency (and perhaps distribution) at different time points and plot these on a line graph.

There is more information on the different graphs in the section 'Presenting Quantitative Data'.

summary…

Decide in advance how your data will be analysed and what form it needs to take. Raw quantitative data needs to be classified and coded. Decide whether you want to look for associations, differences or trends. This decision will guide the type of analysis you undertake.

www.getrevising.co.uk

Q1. What factor most influences your choice of leisure pursuits?

The purpose of tables, graphs and charts is to clarify and summarise quantitative data once it has been prepared and analysed. They should help you to understand the 'big picture' – the patterns and trends. They must be clearly labelled with a written interpretation relating to the project objectives or hypothesis. Your choice of graph or table and its presentation and interpretation should all be guided by the objectives of your project. Some commonly used types are shown here, but there are many more.

Tables

The purpose of a table is to summarise data in categories. With larger sample sizes, you should convert numbers into percentages to illustrate findings more clearly. However, avoid this with sample sizes below 30, or if there are many categories with few responses. Always include a 'Total' column in order to show sample size.

Table 1: Responses to Q1 shown by gender and category of response.

	Partner	Finance	Job	Family	TOTAL
Male	4	6	6	2	18
Female	0	7	5	7	19
TOTAL	4	13	11	9	37

Histograms

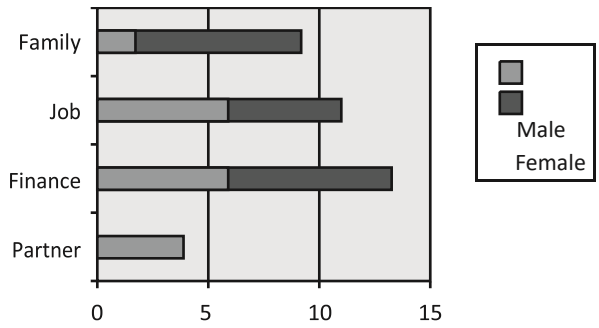
A histogram looks similar to a bar graph, and is also used to display frequencies. It is is used to present **interval data** which is collected on a continuous scale (such as time or distance) rather than the categories presented in a bar chart. Frequencies are counted and shown with bars in the same way, but the bars touch and the width of each bar corresponds to units on the scale.

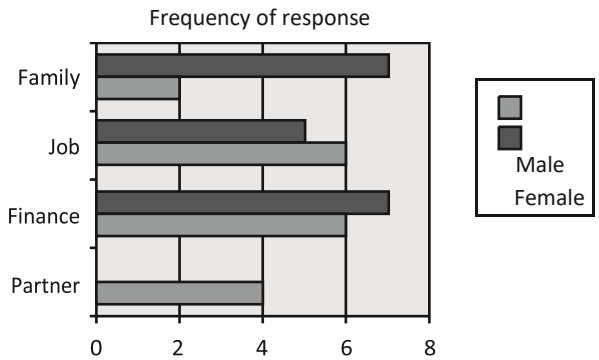
Bar graphs

Bar graphs or bar charts are used to show patterns in categories. Bars can be clustered for comparison of related categories, or they can be stacked to show how particular totals are made up. It is usually more useful to present data in a cluster or stacked bar chart rather than to construct lots of separate graphs.

The bar graphs below show the same data as in the table on the left. The stacked bars make it easier to see the differences in total responses for each category, while gender differences in responses are clearer in the clustered bars.

Figures 1 and 2: Factors influencing leisure choices by gender





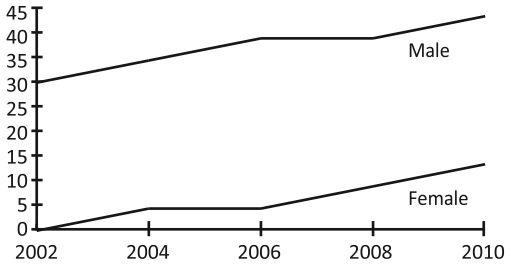
Line graphs

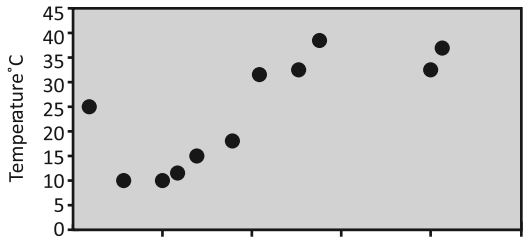
Scattergraphs

www.getrevising.co.uk

Line graphs are useful when it is necessary to illustrate trends – i.e. change over time. It is easy to follow lines up and down to see how something has changed and/or how two variables compare or relate to each other across time.

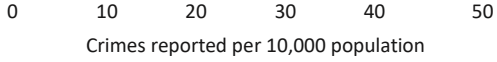
Figure 3: Line graph to show numbers of males and females studying A- level Physics at a school, 2002-2010





Scattergraphs are used to show how closely two variables are associated or correlated. A scattergraph is only used when both variables use interval data – that is, data on a continuous scale, such as temperature, time or distance.

Figure 4: Scattergraph to show the relationship between average daily temperature and crime rates



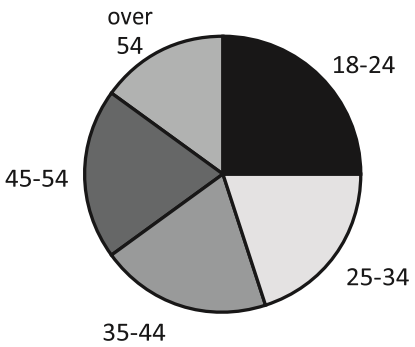
www.getrevising.co.uk

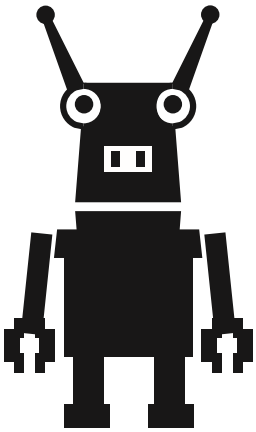
Pie charts

Pie charts are one of the simplest graphs as they are used for one purpose only: to show proportions relative to the whole, such as in the age category chart below. They are used when counting frequencies in categories, or nominal data. Pie charts do not allow a presentation of total sample size or comparison of more than one variable on the same chart.

? Which method of presenting quantitative data is most suitable for your data? Why?

Figure 5: Pie chart to show the age breakdown of a sample





summary…

Software packages such as Excel can be used to analyse data and generate graphical presentations of data such as bar charts and pie charts. Explain and analyse all graphs and tables in words – the visual presentation alone is not enough. Use the objectives of your quantitative data collection to guide this process.

The main problem you are likely to face when making decisions about the presentation of qualitative data concerns the volume of material collected. Because of their open ended and uncontrollable nature, qualitative methods of data collection are likely to produce data in very large quantities.

Editing data

You will need to find ways of selecting the most relevant data so that it can be presented clearly and concisely. The fundamental criteria for deciding whether or not data is relevant are the aims and objectives of your project. These should guide decision making at every stage. You will need sufficient confidence to reject substantial amounts of data if necessary.

A helpful technique is to use headings which refer specifically to aspects of your project's objectives. In this way there is no temptation to move off the point.

Most qualitative data is likely to be presented in a written form. However, graphical methods of presentation can still

www.getrevising.co.uk

Qualitative interview data

Transcribing is the term used to describe the process of transferring recorded dialogue into a written form. Transcribing is an extremely lengthy process so it is advisable to listen to the recording carefully in order to identify the sections of the interview that are directly relevant. Once located, you need only transcribe these sections of the interview.

If you have made notes on the interviews then, again, you will need to look carefully through your notes in order to identify the relevant parts.

The actual presentation of data drawn from unstructured interviews can be handled in one of two ways:

1. E ach interview can be presented in turn, possibly starting with a brief background biography of each respondent. Their responses can be organised using headings relevant to the project's objectives.
2. Overall headings can be used with the most relevant comments of each respondent included beneath them. It is often helpful to briefly describe each respondent at the start of the presentation, and possibly give each a number in order to differentiate between their responses and preserve their anonymity.

Whenever presenting data gathered from unstructured and semi-structured interviews try to use actual quotations from respondents wherever possible. This will give your presentation an authentic feel and avoid misinterpreting views by putting them into your own words. However, simply quoting respondents is not enough: you will need to analyse their responses in the light of your project's objectives.

?

Have you identified key quotations and linked them to your objectives?

?

How will you present your qualitative data?

be helpful. It may be possible to convert some of the data collected from methods such as unstructured interviews and participant observation into a quantitative form by using the content analysis technique (see 'Content analysis'), and presenting the findings in tables and graphs.

?

What are the objectives of your qualitative data collection?

Observational data

Hopefully a large quantity of field notes will have been generated during observation. These notes will probably be organised under headings of some sort and these should help organise and edit the material.

In writing accounts drawn from observation there is a temptation to 'tell a story': to simply give an account of what you saw and how it felt to you. In some circumstances this may be justifiable. However, if you are attempting to explain or analyse events or relationships then this should be addressed in the presentation and analysis of data.

Observational data will probably be presented under headings which relate to particular project or research objectives. However, in some circumstances it may be A common fault in the presentation and analysis of

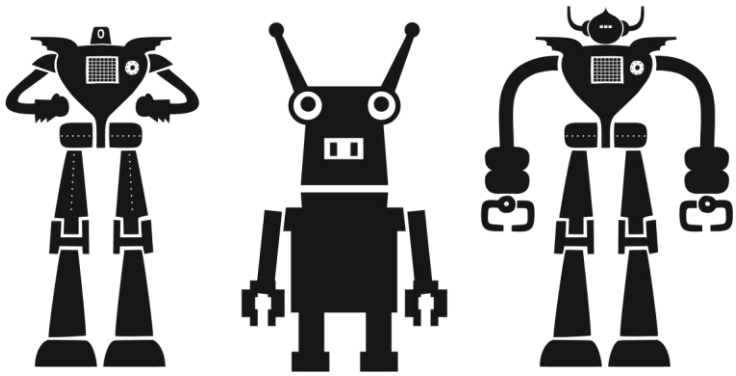
www.getrevising.co.uk

observational data is to make assertions without evidence to support them. You need to draw on actual examples to back up the points you wish to make.

preferable to present data chronologically as you observed it, or using particular events or activities observed as headings.

summary…

Use the aims of your qualitative research to help you select material for inclusion in your project. Transcribe key parts of interviews and use quotations to illustrate the points you wish to make. Use relevant headings for any qualitative observational data.



As your resources are very limited it is unlikely that your primary data is faultless so a discussion of the key problems is needed. This discussion will go towards your marks for the Review (AO4) section of the Extended Project mark scheme.

……..

There are three concepts which are particularly helpful when evaluating primary data collection and analysis: **validity**, **reliability** and **representativeness**.

www.getrevising.co.uk

Validity

Data is said to be valid if it is a truthful and accurate representation of what it claims to be.

It is fairly easy to collect data about people and situations. What is difficult is ensuring that data is an honest account of these people and situations. For example, measuring instruments and techniques can sometimes be inaccurate. Particularly when studying humans, how can any research method be sensitive enough to pick up the complexities and contradictions of a real human being's view of the world? What is more, interviewer bias may occur – for example, people will tell an interviewer that they have no prejudices but is this actually the case?

Then there is the issue of objectivity. If a researcher is objective, their own views and beliefs have had no influence on the collection or interpretation of data. This is fine in theory but difficult in practice. For example, you may have had an idea of what you wanted to find out. Might this unintentionally influence the way you interpret your data?

? How valid is your primary data?

Perhaps status differences between you and respondents based on your relative age, power or gender affected the responses you received. Might there have been reasons why respondents were unwilling to reveal their real views or behaviour? Might interviewer bias have occurred? Might your own views have influenced the way you collected and interpreted data?

This is not necessarily the case in more unstructured or semi-structured interviews. Here the interviewer attempts to create a rapport – a friendly relationship with the respondent – so that they feel comfortable and are willing to talk at length. Here, as in much observation, it is difficult to claim that data is reliable because it is a unique product of the relationship between researcher and respondent(s). In these cases the researcher chooses to sacrifice some reliability for greater validity.

Reliability

Reliability is all about consistency. Data is said to be reliable if different researchers using the same methods would obtain the same results.

For example, if a number of researchers observe the same event using a similar approach, they should all produce similar accounts. Reliability is particularly important in quantitative survey work where a large number of responses have to be compared.

One reason interviewing is such a skilled activity is that, in order to collect reliable data, the interviewer must ask each question to every respondent in exactly the same way. Prompts (further explanation of questions) must be the same in every case, as must facial expression, tone of voice, manner and method of recording the data. In survey work the interviewer must be a 'data collecting machine'.

? How reliable is your primary data?

What steps did you take to ensure the reliability of data? Would another researcher using the same method have produced similar data?

Representativeness

The issue of representativeness concerns the extent to which your sample is an accurate cross-section of the population you are interested in. The representativeness of your primary data will depend on two factors:

1. **How carefully the sample is chosen.** Does it contain the same proportion of the different ages, sexes and social classes as the whole population you're interested in for instance?
2. **The size of the sample.** The larger your sample the more representative it is likely to be. For example, it is difficult to claim that the results of interviews with one or two local shop owners represent the views of all local businesses.

www.getrevising.co.uk

No researcher in your position can be expected to produce really representative data. Nevertheless you must consider the issue in your evaluation of sample size and make-up, even if you have used only qualitative sources of data which do not emphasise representativeness. If you do not believe your data is representative then it will be difficult to justify statistical generalisations based on it.

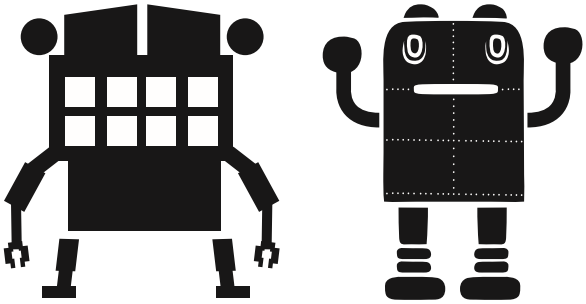
summary…

? How representative is your sample?

Did you make errors in selecting the sample? A common fault is to include too many people who are similar to you in age, gender and other social characteristics. Furthermore, the social setting of your research may be unrepresentative in terms of factors such as class and ethnicity, and this in turn may be unrepresentative of the national picture. It may be possible to check representativeness by referring to local census data.

Your primary data needs to be evaluated in terms of:

- Validity: the extent to which your data is truthful and accurate.
- Reliability: the extent to which other researchers using the same methods as you would have collected the same data.
- Representativeness: the extent to which your sample is an accurate cross-section of your sample population.



Anomalous score: a single value in a set of data which is much higher or lower than the rest of the set. Anomalous scores lead to misrepresentation of the central tendency of the data set by the mean (calculated average of all the scores).

Central tendency: the approximate mid-point of a set of scores – usually calculated as the mean or median. The mode (most frequent score) is sometimes used.

Closed question: question where respondents are given a limited number of choices.

Correlation: the extent to which two variables are associated. Correlational analysis involves the calculation of a correlation coefficient for the two sets of paired values.

Correlation co-efficient: a number between -1 and +1 which expresses the correlation between two variables. The closer the value is to zero, the weaker the correlation. +1 is a perfect positive correlation, -1 is a perfect negative correlation.

Covert role: role taken in observation where the observer does not reveal their identity as an observer.

www.getrevising.co.uk
searc share create

Direct observation: observing without participation. **Focus group:** discussion group set up for research.

Gatekeeper: individual who controls the researcher's access to an organisation or situation.

Generalisable: can be applied to the wider group.

Hypothesis (pl. hypotheses): a predictive statement of the expected outcome from an experiment or research study, which is accepted or rejected after data analysis.

Histogram: a graph with vertical bars of equal width along a continuous scale on the X axis to show frequencies on the Y axis.

Interval data: scores which are measured on a continuous scale of equal units, such as time, speed, distance or weight (as opposed to ranked scores or distinct categories).

Interview schedule: list of questions or headings used in an interview.

Interviewer bias: distortion of answers resulting from the presence of an interviewer.

Objectivity: the ability to ignore one's values and be completely neutral.

Observation: systematically watching a group or situation for the purposes of research.

Open question: question where the respondent can answer in any way they choose.

Operationalised hypothesis: an hypothesis which has been carefully phrased to make clear how the research variables are to be tested and measured.

Opportunity sampling: selecting the most convenient people.

Overt role: role taken in observation where the participants are aware that they are being observed.

Participant observation: joining in with the activities of a group or organisation while observing.

Piloting: trialling.

Primary data: data collected first-hand by the researcher.

Qualitative data: data expressed in a written form, usually concerning attitudes and opinions.

Quantitative data: data expressed in a numerical form.

Questionnaire: written list of questions.

Quota sampling: working out the proportions of different groups in the sample population and then selecting a sample using the same proportions.

Random sample: sample in which every individual in the sample population has an equal chance of selection.

Rapport: friendly, effective working relationship.

Reliability: quality of data that means different researchers using the same methods would get the same results.

Representative: a cross-section.

Researcher effect: bias caused by the presence or actions of the researcher.

Response rate: the number of responses received compared to the size of the sample.

Sample: a smaller group chosen to represent the sample population.

Sampling frame: a list of names of the sample population from which a sample can be selected.

Scattergraph: a graph which plots individual pairs of scores on two variables on the x and y axes. Used to demonstrate a correlation between the two variables.

Secondary data: information already in existence.

Self-completion questionnaire: questionnaire completed by the respondent without supervision.

Semi-structured interview: interview with some closed and some open questions.

Skewed mean: the misrepresented central tendency of a set of data, a mean which has been distorted by the inclusion of one or more anomalous scores.

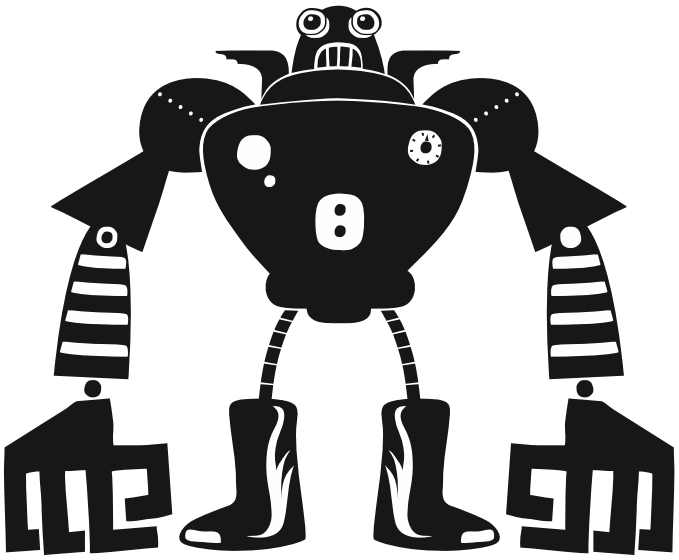
www.getrevising.co.uk

Snowball sampling: method of sampling where one individual suggests another and so on.

Standard deviation: a sensitive measure of the distribution of a data set, which uses every score in the set to calculate their average variation from the mean.

Structured interview: interview consisting of primarily closed questions.

Systematic sampling: selecting every n^{th} name from a sampling frame.



Transcribing: making a complete written record of an interview.

Unstructured interview: interview with few guidelines, resembling a normal conversation.

Validity: quality of data that is a true and accurate description or measurement.

www.getrevising.co.uk
searc share create

Chapter 5

Constructing logical arguments

Constructing logical arguments	86
Using argument maps	88
Structuring a discussion	89
Reasoning checklist	90
A glossary of reasoning	91

Arguments are made up of one or more reasons and a conclusion. Simple arguments may be linked together to form complex arguments with intermediate conclusions that lead to a main conclusion: the ultimate point which the arguer wants the reader to accept. The main conclusion is most often at the start or the end, but may appear at any point. Reasons are the foundation on which the conclusion rests. If the two fit precisely together, then the argument is strong.

Valid (strong) arguments

A valid argument is one in which there is a logical link between reasons and conclusion so that the first makes the second true. For example,

Argument A: *Smoke alarms can save lives in house fires (reason 1). I want to improve my chances of surviving a house fire (reason 2). Therefore I should fit a smoke alarm in my house (conclusion).*

Invalid (weak) arguments

Consider this similar argument.

Argument B: *Smoke alarms can save lives in house fires (reason 1). I want to stay alive for longer (reason 2). Therefore I should fit a smoke alarm in my house (conclusion).*

This version is weak because although a smoke alarm can help you to stay alive if your house catches fire, there are many circumstances in which it will not; for example, if you often walk in front of moving buses. Reason 2 is very broad, but the conclusion is precisely defined. There is not such a clear logical fit as in Argument A.

Assumptions

Weak arguments often contain assumptions. These are missing reasons which we would need to assume to be true in order to accept the conclusion. An assumption creates a gap in the logic. Some assumptions are reasonable, i.e. the argument will work if they are included, while others are not and will weaken an argument. For example:

Argument C: *Smoke alarms save lives in house fires (reason 1). I will fit a smoke alarm in my house (reason 2). Therefore I will have a better chance of surviving a fire (conclusion).*

There is an assumption in this argument, which is that I will keep the smoke alarm working properly once it is fitted. Is it reasonable to assume this? Not necessarily! Many people don't test their smoke alarms or change the battery regularly, as Fire Service warnings often seek to remind us. On balance, it's probably not a reasonable assumption, and the reasons aren't quite sufficient for us to accept the conclusion to be true, so it's not a very strong argument.

Argument flaws

Weak arguments may also contain common logical errors called argument flaws. Flawed arguments are very common in the media – particularly in tabloid newspapers.

For example, a causal flaw is a logical error that falsely assumes that x causes y, when x could be just one of many factors resulting in y, or perhaps y has actually caused x. It might even be that z has caused both x and y to happen at the same time.

A good example of this kind of flaw is the commonly assumed link between children playing violent computer games (x) and increased aggressive behaviour (y). In this case, z might be a decrease in parental supervision due to both parents working full time and allowing a computer in the child's bedroom. For more common argument flaws, see 'Glossary of reasoning'.

How to construct a logical argument

Identify the main conclusion that you want your reader to accept. Try to think of all the possible reasons which might support this conclusion. You could draw out an argument map to illustrate the structure of your reasoning. (See 'Using argument maps'). It may take some careful thought to get it right.

Examine the links between each statement. If any links are unclear, you could add words such as 'because' or 'as', 'therefore', 'so' or 'consequently' to indicate the link.

Check that the reasons support your conclusion as you intended. Try swapping the indicator words around i.e. change 'because' to 'therefore'. Do some of the reasons work better as conclusions? Do you have to assume anything in order to accept the conclusion?

Strengthening the logic of an argument To strengthen an argument, the logical fit between reasons and conclusion must be addressed. A precisely defined conclusion requires precisely defined reasons. A broad or vague conclusion requires less support from its reasons. So Argument C above could be strengthened by making the reasoning more specific and/or by making the conclusion less specific. Here are two possible examples:

Smoke alarms **can** *save lives in house fires (reason 1). I will fit a smoke alarm in my house (reason 2). Therefore I* **might** *have a better chance of surviving a fire (conclusion).*

Smoke alarms **that work properly can** *save lives in house fires (reason 1). I will fit a smoke alarm in my house* **and test it regularly** *(reason 2). Therefore I will have a better chance of surviving a fire (conclusion).*

More tips for effective arguments

Using evidence to support arguments

Logical reasoning alone is unlikely to convince your reader every time, and in your Extended Project you are expected to produce and use evidence to illustrate and support your arguments. You might use evidence of your achievements in your evaluation, evidence from research in your literature review, or evidence to support arguments in a discussion.

Evidence can therefore take many forms. The key questions to ask when using any form of evidence for any purpose are:

1. Is this evidence absolutely relevant to what I am trying to communicate? Is it representative of the population or situation I wish to draw conclusions about?
2. Is this evidence convincing: does it come from a credible, neutral source? Has data been collected using objective and systematic techniques? Has evidence been accurately interpreted without selective bias?

3. Have I given sufficient details about the way evidence has been collected and analysed to convince my reader that it is effective? This could go into a footnote.

4. If the evidence has come from another source, have I referenced it appropriately?

Arguing with balance

Sometimes a writer will attempt to give an impression of balance by referring to an alternative view before countering it with their own reasoning. However, it is not truly balanced unless the alternative is fully assessed. Showing that you have seriously considered a wide range of alternative solutions in reaching any conclusions will demonstrate the depth of thinking that is expected in an Extended Project. To do this, you will need to look at the pros and cons of each alternative option in turn, without pre-conceived ideas about which will be the best.

summary…

- Arguments are made up of reasons which support conclusions.
- To assess the strength of an argument, look at the logical links or 'fit' between each reason and the conclusion it is intended to support.
- Watch out for assumptions and argument flaws, which can weaken arguments.
- Use indicator words such as 'because' and 'therefore' if you want to make the links between reasons and conclusions clear.
- Use evidence carefully to support arguments and provide details of how it was collected.
- Argue with balance to get the best out of your project.

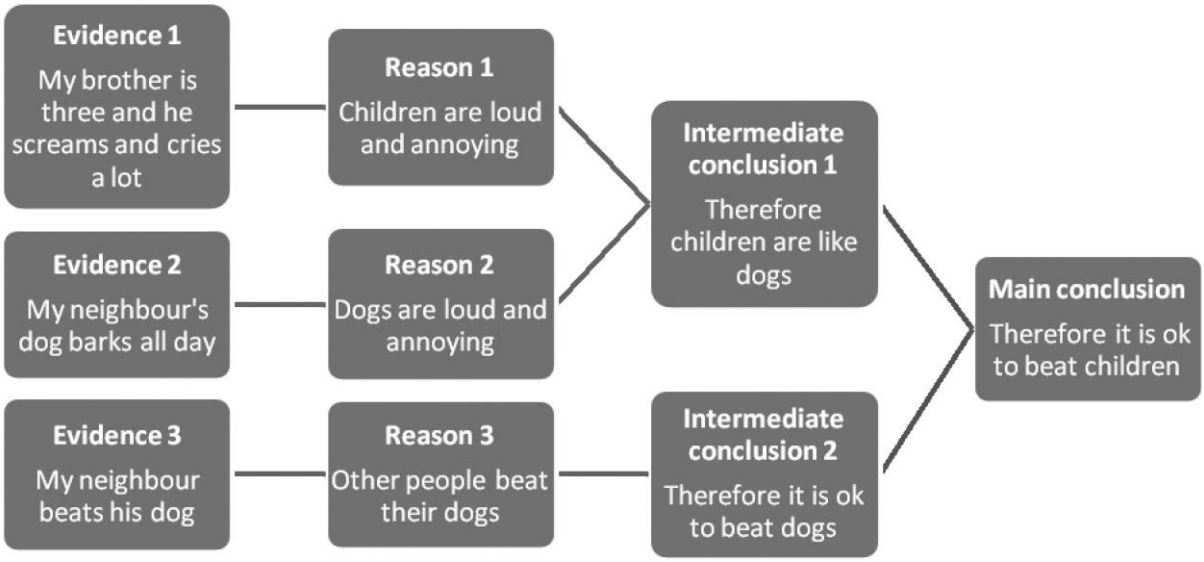
An argument map can help you to understand how the different points you want to make can link together to form a logical argument. It can also help you spot gaps or assumptions in an argument. When you are happy that you understand how your argument fits together, you can use the argument map to help you evaluate it systematically – that is, assess the strength of each piece of supporting evidence and the logical connections between each conclusion and its reasons.

……

Consider this short argument.

The noise I have to put up with! My brother is three and he screams and cries a lot. My neighbour's dog barks all day too. Small children are just like dogs: they are both loud and annoying. My neighbour beats his dog, so it must be ok to beat children too.

www.getrevising.co.uk



It is easier to see how the statements relate to each other when we can see them in the argument map. Now we can begin to examine each piece of evidence and each link in turn. (Note that the first statement is not included as it doesn't really add anything to the argument structure. The unstated assumed reasons 1, 2 and 3 have been included for clarity.)

Both intermediate conclusions rely on assumed or unstated reasons, which generalise from anecdotal evidence. To make sweeping generalisations from these individual examples to the majority of small children, dogs or people is unreasonable. This means that the reasons are unsound.

Intermediate conclusion 1 is based on the two superficial similarities given in reasons 1 and 2. However, even if being loud and annoying were universal characteristics of both dogs and small children, this isn't enough to outweigh the many differences, such as a child's ability to learn language and become responsible. The first argument (reasons and evidence 1 and 2, leading to intermediate conclusion 1) is therefore weak.

Evidence/reason 3 is used to justify intermediate conclusion 2: the principle that it is ok to beat dogs. However, again, this is an isolated case, and just because this particular man beats his dog does not mean that it is morally right to do so. This is an example of a 'Tu quoque' reasoning flaw (see Glossary of reasoning). Therefore, the second argument is invalid.

So, there are significant flaws in both lines of reasoning. It would therefore be illogical to accept the conclusion that it is ok to beat children. Unless the arguer can come up with some stronger evidence and more thorough reasoning, we should reject the conclusion.

www.getrevising.co.uk
searc share create

Structuring a discussion

A discussion is the interplay between two or more arguments. In your Extended Project it is likely that you will need to develop a discussion consisting of lines of reasoning – that is, complex arguments with multiple reasons and evidence leading to intermediate conclusions, which in turn provide logical support for a main conclusion.

One way to structure a discussion

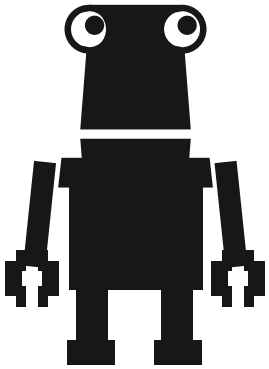
1. Define your terms.
2. State what you are about to discuss.
3. Set out a main conclusion to the question.
4. Write a few arguments (reasons and intermediate conclusion) which logically support this conclusion.
5. Write a few arguments which logically oppose this conclusion.
6. Summarise your main conclusion (the same one you started with).

You could do this, but it would be formulaic and a bit boring. To bring your discussion to life, you need the arguments to play off one another and expose weaknesses in order to build up to a logical conclusion. Some of the best projects are those in which a student starts out with certainty about how the project will conclude, but ends up completely re-evaluating their position. A shift in perspective such as this should be demonstrated in the structure and reasoning of the discussion.

You could imagine a discussion as a competition to build a house of cards. Each player starts to build their house with pieces of evidence: the vertical supports or foundation for a horizontal layer of reasons. Each layer of reasons supports conclusions. The intermediate conclusions combine to support the main conclusion at the top.

As you build, your opponent finds a flimsy piece of evidence and exposes its flaws. A hole appears in the foundation. Without credible evidence, the reason that rested on top is suddenly unsubstantiated and open to attack from counter-assertions and counter-arguments. A little push, and it falls. Another reason is attacked; the whole argument starts to wobble, then crash! The house

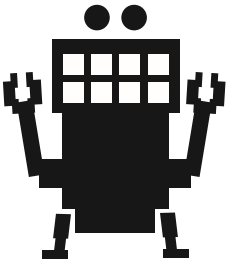
accept is that of the opposing argument.



of cards collapses. The only logical conclusion that we can

Building a discussion with argument maps

One successful discussion strategy is to outline and evaluate each argument in turn, starting with the weaker arguments and building up to the stronger arguments. To work out where to start in developing your discussion, try drawing an argument map for each one to help you assess and compare them (see 'Using argument maps').



As you examine each argument in turn, you might just discover a flawless argument with a perfectly logical conclusion to end your discussion. In practice however, discussions rarely end so neatly. It is more likely that you

www.getrevising.co.uk

will accept and reject some points from each argument, and will then need to weigh up the most convincing viewpoint or think of the most logical or acceptable conclusion that can be drawn from this reasoning.

Reasoning and Writing

All projects must involve a written report of some kind, which will involve some analysis of the sources that you have consulted. You will also need to develop your own reasoned arguments and justifications for the decisions you have made.

Questions to ask yourself when evaluating and re-drafting your writing:

1. What am I trying to achieve, or what is my main aim?

2. What is my main idea, concept, conclusion or theme?

3. What information or evidence have I got?

4. How have I interpreted this information?

5. A re there other ways in which this information could be interpreted?

6. What other information will I need to help me understand what I am aiming to do?

7. What am I taking for granted? (You may need help from a reader to identify assumptions as they are not always easy to spot yourself.)

8. What are the implications of my position/decision/conclusion?

9. Are there other points of view? Have I considered these fully before rejecting them?

10. What further questions does this outcome raise?

A glossary of reasoning

If you can understand and use correct terminology when constructing and evaluating arguments you will be able to think more clearly about those arguments. You will be able to identify logical problems in the arguments you encounter and to

www.getrevising.co.uk

develop your own powerful arguments.

Argument terms

Argument: in academic terms, this is a reasoned attempt to persuade a reader to accept a conclusion, rather than the common definition of a dispute or disagreement. Where different views are presented during the course of an argument, these are referred to as counter-assertions and counter-arguments.

Reasoning: the process of developing an argument with reasons that lead to a logical conclusion.

Reason (premise): a claim which aims to persuade you to support the conclusion of an argument.

Conclusion: a claim within an argument which is supported by reasons. It is the main point the author is trying to persuade you to accept. Also known as a **proposition**.

Main conclusion: a more complex argument has a chain of arguments with reasons and intermediate conclusions, which link together to support the main conclusion. The main conclusion may be at the beginning, in the middle or at the end of the argument.

Intermediate conclusion: a conclusion within a more complex argument which is supported by reasons and itself provides support to the main conclusion.

Assertion: a claim that does not form part of an argument. It may be fact, but could be opinion, belief or speculation. It does not have evidence or reasoning to support it.

Counter-assertion: an assertion or claim which counters the main conclusion of the argument. It is used in argument mainly to dismiss an opposing viewpoint. It may sometimes be used to give the illusion of a balanced argument.

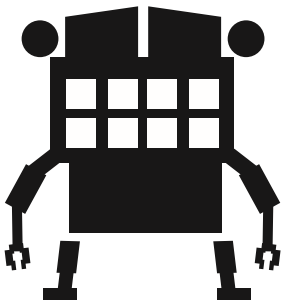
Counter-argument: a combination of reasons and conclusion which counters the main conclusion of the argument. If well developed it may provide balance to the argument.

Valid argument (strong argument): an argument in which the reasons logically support the conclusion. If the reasons are sound in a valid argument then the conclusion is true.

Invalid argument (weak argument): an argument in which the conclusion does not follow logically from the reasons. The conclusion may be too strong or irrelevant.

Strong conclusion: a conclusion which is very specific or clearly defined. If reasons are insufficiently relevant or do not precisely support the conclusion the argument is invalid.

Weak conclusion: a conclusion which is not very specific. It is easier to produce a valid argument with a weak conclusion because less precision is needed for the reasons to logically support the conclusion.



Assumption: a missing reason which is needed in order to accept a conclusion. An assumption means that there is a weakness in the argument.

www.getrevising.co.uk

Some common flaws in arguments

Sweeping generalisation: generalising from one example to many, creating a stereotype.

Causal flaw: confusing cause and effect, assuming a causeeffect relationship without good reason or over-simplifying a causal relationship.

Confusing correlation and cause: assuming that because two things are related or happen at around the same time, that one has caused the other to happen.

Slippery slope: reasoning which moves from a likely possibility to an extreme outcome. Sometimes referred to as the 'thin end of the wedge' argument.

Straw man/person: distorting the opposing view so that it can be dismissed more easily.

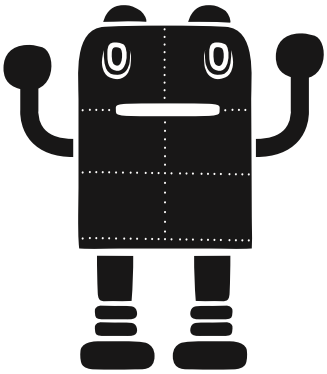
Tu quoque: justifying one morally wrong action by referring to another: 'you too'.

Types of claims

Claim: an umbrella term for any statement made in a text. It might be a judgement, a demand, a recommendation or a principle. It could be a statement of fact, opinion or speculation. In an argument, it may play the role of reason (premise), assertion or conclusion. The term implies that the statement could be (although may not be) challenged.

Speculation: guesswork or conjecture without a firm basis in fact. Speculation refers to a proposition that something could potentially be the case, rather than an assertion that it is true.

Example: A Christian **believes** that God exists, and may refer to subjective experiences to justify this belief. An atheist holds the belief that God does not exist, and may refer to evidence from evolution, physics and an absence of direct religious experience to justify that belief. An agnostic **speculates** about the existence of God. The Christian church does exist – this is a verifiable fact. All three people will probably hold **opinions** about the value of religion in society, but may disagree about what value it has.



Fact: a fact is objective, can be verified, and may be supported by evidence. Just because something is presented as fact however, does not mean that it is actually fact.

Opinion: an opinion is subjective and may not be generally agreed. It could arise from a value judgement. An opinion may be informed (developed on the basis of evidence or reason), or uninformed. It may be presented to the reader as a fact or belief, but usually the person expressing an opinion understands that their subjective view may not be accepted by everyone.

Belief: a belief is something which is held to be true by a person. It may or may not be based in fact or supported by evidence, although the term often refers to an acceptance without evidence. A belief may be presented as fact because the holder of that belief accepts it as true. It may also be presented as subjective, for example, 'you can believe what you like, but I believe it is true'.

Chapter 6

Writing and presenting the project

Writing coherently	94
Formatting your project	96
Editing your work	98
Suggested project structure: Essay or dissertation	99
Suggested project structure: Investigation	100
Suggested project structure: Artefact	101
Suggested project structure: Performance	102
Presenting your project checklist	103
Presenting work in an exhibition	105
Planning for an exhibition: guidance and checklist	106

www.getrevising.co.uk

All projects, no matter what their format, must include a written report of at least 1000 words. Projects which have only a written outcome should be around 5000 to 6000 words, depending on the examination board. Each examination board's assessment considers the way that this report or essay is written. It is no good just writing an introductory paragraph, a middle bit and then a conclusion which summarises the middle bit. You need to think as hard about the structure and style of your writing as you do about anything else you produce for the project. Projects need to be carefully organised into clear sections which make up a coherent whole, particularly if they consist of 5000 words or more.

Writing style

Students sometimes make the mistake of writing in an overly formal style to show off an extensive vocabulary. This just makes the writing feel stuffy and dull. It is often made worse by clumsy use of complicated words when a simpler word would have been more appropriate. At the other extreme, some students write in an informal speech-like style with slang and abbreviations more suitable for text messages to their friends. It's important to find a balance.

The ideal writing style is concise, clear and lively. This means it:

- is written in plain English, using short words whenever possible
- uses mostly active verbs such as 'we did' rather than passive such as 'it was done'
- has a personal tone, not an overly formal manner
- has a varied sentence structure – short is best for impact
- avoids jargon and clichés
- is not padded with adjectives, repetition and waffle
- is understated, not exaggerated
- assumes the reader is intelligent although uninformed about your topic.

More Guidance...

One of the best writing guides available is the Campaign for Plain English website (www.plainenglish.co.uk), from which we adapted some of the ideas here. They provide free guides with clear, comprehensive advice on all aspects of good writing style and grammar.

Proof reading

Proof-read each draft section after you complete it. You need to check for sense, meaning and flow of ideas between paragraphs and sections. Check through the whole project for formatting fluency of the writing consistency as well as spelling, punctuation and grammar.

www.getrevising.co.uk

Sense, meaning and fluency

Ask someone whose writing style you admire to read your work for fluency and to suggest changes. Have a dictionary and thesaurus alongside the dictionary to help you if you want to or find an alternative word with a subtle difference in meaning.

.co.uk address is British, **.com** is more likely to be American. Use a close to hand so you can check the meanings of ambiguous new words. If you use an online dictionary, please use a British one, not an American one. A website with a

Spelling and grammar

Don't just spell-check, because spell-checkers don't tell you when you have used a correct spelling of a word in an incorrect context. 'There spelling was appalling' looks fine to a spell-checker. Spell check your work manually, and if spelling is a problem for you, ask someone to check that for you. If you must use a spell-checker, please make sure it is set to UK English rather than US English spellings. Grammar checkers have some strange ideas, but can be useful for spotting errors such as multiple spaces, a sentence which isn't complete or a verb form which doesn't match the noun.

Paragraphing and flow of ideas

A very common error is to use paragraphs that are too long. Aim for no more than 100 words or 150 as an absolute maximum. Each paragraph should contain only one key point, with some explanation or an example – like this one. It is a good idea when reading through your work to distil each paragraph into one key point. If it contains more than one point, it should be split. Check that each point flows logically to the next and re-arrange them if necessary.

Read the paragraph in the box below and decide how many shorter paragraphs it should be split into.

Punctuation errors

Think before you stick in yet another comma. Is it really necessary? Proof-reading your work for fluency should show you where you have made your sentences too long, like this one, and where you should take out a few commas and shorten your sentences instead, to make it easier on your reader. It can also tell you, where you have put unnecessary commas, like the ones, in this sentence. Take out parentheses (which break up the flow of the writing) where possible. Sometimes a semi-colon can do a better job of creating a distinction between two related ideas; it could also give your writing more variety. A colon can create a slightly more significant pause, or prepare the reader for a list. When writing a list, use bullet points rather than listing the items with commas within a paragraph. This makes your list easier to read and take in, and will help to break up the text on the page further. Only use an apostrophe for a contraction (yes, it's a well written essay), or a possessive noun (singular - the girl's project; plural - the girls' projects). Do not use apostrophes for either possessive pronouns (give the dog its bone, not it's bone) or plural nouns (apples, not apple's). Use single quotation marks only for quotations, and double quotation marks when quoting within a quotation. When emphasising text, do not use multiple exclamation marks, continuous capital letters or excessive underlining. Too much emphasis only suggests a lack of restraint or subtlety. Less is more!

You would probably decide to split this into four paragraphs which could be summarised as:

- poor use of commas
- better alternatives to commas
- correct and incorrect use of apostrophes

www.getrevising.co.uk

- emphasising text appropriately.

You might find it helpful to read that box again now, to help you take in the advice given.

summary…

All projects will involve writing so the structure and style of your writing is important. Try to use a clear and lively style. Check each sectionfor consistency, fluency, spelling and grammar.

Make sure paragraphs are not longer than 150 words and contain only one key point.

Formatting is much more important in the Extended Project than many students realise. Research shows that clear, easy-to-read formatting makes readers feel that the message is easier to understand too – which increases their positive attitudes towards it.[1] A clear and consistently formatted project also shows a professional approach to your work.

……

Formatting a project with a muddle of different styles just before the deadline is stressful. Decide on a consistent formatting style from the start and check each section as you go. Even with regular checking, be kind to yourself and leave time to get the finishing touches right. You will need at least a day to do the final formatting check, pagination, contents, cover page, printing and binding.

The following points should help you format your project consistently but it is likely that your project supervisor will provide guidelines on formatting – be sure to follow these.

Sections, headings and subheadings

Dividing the project into sections helps you to plan and structure your writing and helps the reader to understand how each part relates to the whole. Each new section usually follows a page break. Make sure the size of headings is consistent, for example section headings may be 16 points. Headings may be left-aligned or centred. Within sections you might use 14 point subheadings without a page break. Subheadings should be left-aligned. Text should be left-aligned, as this is easier to read than if it is centred or justified.

Page layout

White space is important – it gives your reader 'breathing space' and is less intimidating than densely packed text. Consider using double or 1.5 line spacing and a further space between paragraphs. Leave more line space before a sub-heading than after it. Sentences should be separated by a single space.

Font

Use one font only, preferably one which is easy to read. Sans serif fonts such as Helvetica are a good choice. Arial and Verdana are sans serif fonts designed for reading on-screen. Traditionalists may prefer a serif font such as Times New Roman. Don't use Comic Sans: it looks childish. Body text should be 10 to 12 point. Dark font on a light background is easier to read than the opposite. Do not use clashing colours; mix bright with subtle to avoid headaches. Bold is better than italics for emphasis, but use with restraint. Use italics for titles and indented quotations.

Headers and footers

Every page should have a header (author, title, candidate and centre numbers) and footer (page numbers, which can be added automatically in most word-processing software).

www.getrevising.co.uk
search share create

Font size should be two points smaller than the main body text, and lines can be single spaced.

Quotations

Quotations should normally be in single quotation marks. If the quotation is longer than forty words or so and does not fit into the preceding sentence it should be set as a separate indented paragraph. In this case, use either italicised text or quotation marks – not both. Titles should be italicised rather than put in quotation marks. Reference quotations fully, giving page numbers.

Images

Images can be used to illustrate specific points and to break up the text. If an image relates to a specific point, place it with text wrapping by this point. If the image is large, consider positioning it on a separate page to avoid distracting from the flow of the text. All images should be captioned and fully referenced if sourced from elsewhere. See the 'Using sources' chapter for more information.

References

You can use footnotes or endnotes for references. Footnotes appear at the bottom of each page that they are referred to. Endnotes are in a separate section at the end of a chapter or document. The superscript reference number should appear within the text. To refer to a word in the middle of a sentence, put it immediately after the word. To refer to a sentence, put it after the full stop. To refer to a paragraph, put it after the last full stop.

For most Extended Projects, footnotes are probably simpler to use. If you use footnotes for referencing, the reader can spot the source immediately and move on. An idea many students have found useful is to add a brief assessment of the reliability of the source to the footnote. This should be sufficient to show your critical use of sources to the examiner and allows you to assess every source individually without breaking up the flow of your argument.

Alternatively, if you use endnotes for references, you should put the name and date of the source in brackets in the text, with a numbered reference to the relevant endnote section. You should then include an assessment of the reliability of this source in the endnote. With this system you can use footnotes for other points of interest or background when you do not want to disrupt the flow of the main text.

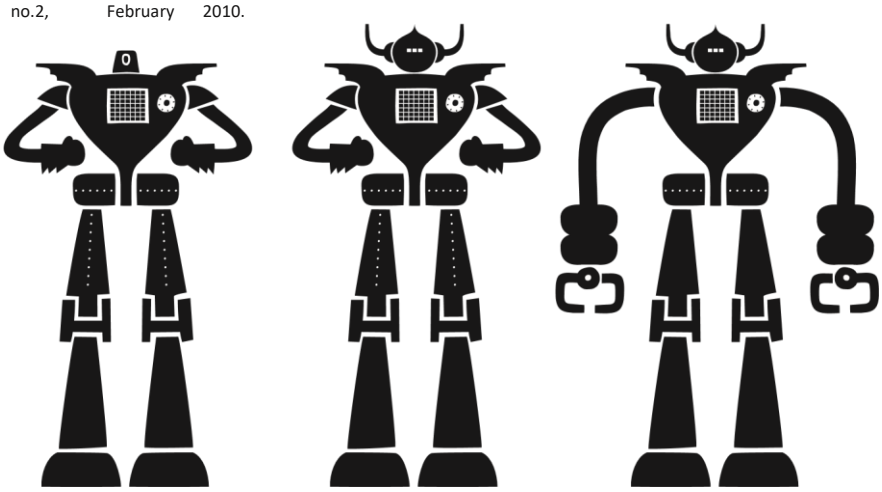
Capitalised names

A capitalised first letter is used for proper nouns e.g. the name of a person, an institution or a place. This also applies with words named after a person such as Marxism or Thatcherism.

Acronyms

Acronyms like NGO or NATO should be capitalised without full stops. For plurals, add a small *s* with no apostrophe: NGOs. For possessives, insert the apostrophe: *NATO's policy*.

Song, H. and Schwartz N. (2010), If it's easy to read, it's easy to do, pretty, good and true. The Psychologist vol 23, no.2, February 2010.



Finishing touches

Don't forget to do a final formatting check for the whole document and bibliography, and check every page break. If a heading or first/last line of a paragraph runs onto another

www.getrevising.co.uk

page, insert a manual page break at the appropriate point before it so that the paragraph is not split across pages. Then check to see whether this has had a knock-on effect on any other page breaks.

Add pagination, contents page and cover page. The bibliography, references, contents and pagination can be automatically produced by Microsoft Word, but will only be as good as the information you have inputted so check these carefully if you decide to use this facility.

www.getrevising.co.uk
search share create

[redacted]

Word limits for the Extended Project are flexible, with recommendations between 1000 and 6000 words, depending on the nature of the project. The length of each section is therefore up to you to plan within a suggested range. As a rule of thumb, divide up the suggested word count in proportion to the percentage weighting for each assessment objective. Decide what sections you want and identify which assessment objective each contributes to. Then allocate word counts as a proportion of the allocation for each assessment objective. This is a rough and ready approach, but you do not need to be precise.

Tips for working to a word count

Even with guideline word counts, you might still find it a challenge to keep your work to an appropriate length.

Here's a good strategy:

- Clearly identify sections and an aim for each section (such as the above structure) and allocate rough word counts. Try to keep to these, but don't worry if the first draft is over.
- On a large sheet of paper for each section, write down all your thoughts so far and identify themes or questions. Draw connections between them, or create a concept map.[2]
- Flesh out answers to these questions, or explanations of the themes. Refer to your notes, sources and research further material if necessary. Use your concept map to help you put these into a logical order. You could cut up the sections and physically move them around if you find this stage difficult. Do this for each section.
- Read through the section. Remove any sente don't directly contribute to its aim. Some may be more relevant to a different section, so move them.
- Summarise the section by distilling each paragraph into one point on a separate sheet. (if you find two points, split the paragraph). Remove any waffle, unnecessary adjectives or repetition from the original text. Be ruthless.
- Check for logical flow of ideas betweenthe points you have distilled out of your essay. Go back to the text and remove or merge any paragraphs which seem to say similar things.
- R e-order the paragraphs in your original text if necessary.
- Proof-read each section and when finished, proof-read the whole project again. Specify actual word counts for each section and a total word count at the end.
- Don't count the bibliography and appendices in your word count. Do count footnotes if they contain material which counts towards the AO2 assessment objective, such as assessment of sources.

? How are you managing your word count?

www.getrevising.co.uk

Submitting the final project

Your final project should be printed and bound, with a title page and an examination board cover sheet, completed and signed. The cover page should state your name, candidate number, centre number, date and your title in a large bold font. You could include an image. At the bottom of the title page it is good practice to include an abstract. This is an approximately 150 word summary of the project, which is written after it is completed.

2 To create a concept map, think of all the concepts related to the issue, lay them out visually and draw lines to link them together. Describe the nature of the link on the line between the two concepts. Vary line length to show the closeness of two concepts. Create hierarchies and categories, whatever is helpful. Wikipedia has a useful explanation.

www.getrevising.co.uk
search share create

[redacted]

There are many different types of dissertation essay, and this is just one suggested structure. Don't follow it blindly, but use it as a guide and adapt to suit your own project. See the section on 'Constructing arguments' for more guidance on structuring discursive essays.

1. T itle page & abstract

An approximately 150 word summary of the whole essay. This should include your question, key issues and theories relating to the question, different perspectives explored in the answer and your conclusion/ recommendations. Write this last.

2. I ntroduction

Describe the background to your choice of title and explain how you developed your ideas. Briefly describe the arguments which you plan to explore in the essay. Define any key terms.

3. L iterature review

This is an overview of the information that is necessary for understanding the different arguments relating to your question. Try to draw information from different sources together to create a coherent narrative, for example, identify themes and compare and contrast the way they are addressed by different sources. Alternatively, you could construct a visual timeline by using information from different sources. Remember that you need to integrate information from different types of source (e.g. books, websites, news media) to show a deep understanding of the issues around your topic. You must also critically assess the sources you have used.

4. D iscussion

Present different arguments, explore the reasoning behind each perspective and show how they complement or oppose each other. This helps to build up an overview of the debates around the issue. Focus here on constructing logical arguments along several different viewpoints.

5. C onclusions

It is essential that you can communicate your own ideas about the issues. You must also show how you have developed these ideas through careful examination of sources. A common error with conclusions is to simply summarise the arguments presented. Instead, the conclusion should be your final answer to the question you set yourself. It must follow as a logical consequence of your systematic analysis of the arguments. For example, which is the most convincing argument? Why?

Try to reach a definite conclusion. Rather than saying weakly that 'both arguments have their good points'; decide which points and how you might combine them to create a stronger conclusion. Finally, be prepared to shift your perspective if you find sound evidence or logical reasoning where you didn't expect to find it. Acknowledging that there are convincing reasons to change your original viewpoint is a sign of academic rigour, not weakness.

6. B ibliography

List all the sources used in the project. Every idea used or adapted from another source must be referenced, whether cited directly or not.

7. Appendices

Include any information which does not fit into the flow of ideas in the essay but shows how you have developed your answer to the question. You will also need to attach any paperwork required by your exam board, such as a project proposal, record of review meetings, production or activity log and your evaluation of the project process and your learning.

? How could this structure fulfil the assessment objectives for the EPQ?

- AO1: Manage the project
- AO2: Use resources

[redacted]

AO3: Develop and realise
AO4: Review

STRUCTURE OF A WRITTEN REPORT

There are many different types of report, and this is just one. It is a widely accepted structure for a piece of scientific or social research. Do not follow the structure blindly but adapt it as appropriate to your own project.

……..

1. Title page & abstract

An approximately 150 word summary of the whole investigation. This should include key issues and theories relating to the research question, your hypothesis, research design and method(s), data analysis techniques, findings and conclusions. Write this last.

2. I ntroduction

Briefly describe the topic which you plan to explore. Describe the background to your choice of title and explain how you developed your ideas. Define any key terms.

3. Research review (secondary sources) Review the previous literature on your topic, paying attention to the methods used, the analysis of data and conclusions. Compare and contrast differing conclusions and draw them together to build a rationale for your research question or a hypothesis. State this hypothesis precisely and clearly.

4. D ata collection (methods)

Outline the design of your research, including data collection methods to be used, sampling and how you will deal with potential problems relating to the reliability and validity of data. Outline step by step procedures. (See 'Collecting primary data' chapter for more guidance on data collection.)

5. Data analysis (results)

Analyse the data using appropriate techniques: for quantitative data you would probably use descriptive statistics such as measures of central tendency (mean, median, mode) and distribution (standard deviation, range). You will need to use appropriate graphs, charts and tables to display trends and patterns in your data. You might also want to use inferential statistical techniques such as a correlation coefficient or a test of difference. With qualitative data, you will need to carry out appropriate qualitative analysis techniques, e.g. content analysis. (See 'Collecting primary data' chapter for more guidance on data analysis.) Statistical analysis is beyond the scope of this book but it is easy to find step by step guides to statistical testing on the internet.)

6. Discussion and conclusions

Draw conclusions from your data in answer to your research question or hypothesis. Compare these to conclusions from the previous studies that you outlined in your research review. Consider possible reasons for any conflicting findings.

7. Evaluation

Assess the validity and reliability of the methods used and comment on any resulting limitations of the conclusions that can be drawn from your data. Suggest possible improvements and further avenues for research.

8. Bibliography

List all the sources used in the project. Every idea used or adapted from another source must be referenced, whether cited directly or not.

9. Appendices

Include any information which does not fit into the flow of ideas in the report but shows how you have developed your answer to the question. This includes

a. Raw data and examples of any materials used to collect data; calculations for statistical tests etc.

b. You will also need to attach any paperwork required by your exam board, such as a project proposal, record of review meetings, production or activity log and your evaluation of the project process and your learning.

www.getrevising.co.uk
searc share create

[redacted]

? How could this structure fulfil the assessment objectives for the EPQ? AO1: Manage the project
AO2: Use resources
AO3: Develop and realise
AO4: Review

Most artefact projects will probably be exhibited, but a written report of at least 1000 words (AQA, OCR) or 1500-3000 words (Edexcel) is also required. There is no one correct way to structure the report, but some ideas are given below.

……

A. If you have created an artwork or design, you could fulfil the assessment objectives with:

1. A **project brief**, **work plan** and **reflective diary**.
2. A **sketchbook** to show the research process.
3. You could model your project report on a catalogue or **exhibition guide**. This could include:
4. Y ou will also need to include an appendix to the exhibition guide in which you present any paperwork required by your exam board, such as a project proposal, written account of the process. record of review meetings, production or activity log.

a. An illustrated cover with a title for the work.
b. A sequence of images of work in progress, with a
c. A n image of the finished artwork, with an Artist's Statement about your inspirations for the work and the impressions and interpretations you hope to convey.
d. A n evaluation/critical analysis of how well the piece has achieved the aims you started out with and, if any change of direction, how and why that happened.

……

B. Alternatively, you could write a report incorporating all of these processes. This might be more suitable if you have produced an ICT based artefact or a design for a product rather than an artwork; if you did not use a sketchbook to develop ideas, or if your work is not to be exhibited.

1. **Title page and abstract:** an approximately 150 word 6. summary of the whole report, including key features of the artefact, its design and production process, audience and evaluation. Write this last.

2. **Fully developed project brief**, or
a) A n introduction including the original inspirations and rationale for the project, and
b) A research report: the collection, selection and interpretation of ideas relating to the form and function of the artefact, such as materials, shapes, influences, purpose etc.

3. **Design and production report:** an illustrated account of the process of designing, testing and refining the artefact, with an image of the finished artefact and full specifications.

4. **Evaluation** of the artefact, which might include results of trials or consumer feedback.

5. **Bibliography:** list all the sources used in the project. Every idea used or adapted from another source must be referenced, whether cited directly or not.

Appendices: include any information which does not fit into the flow of ideas in the

www.getrevising.co.uk

Hint: be flexible and think how each evidence you can produce would best show your work towards each objective.

For example, when fulfilling *Assessment objective 3: Develop and realise*, an original script or musical manuscript might be evidence of **developing** a performance if it includes directions and annotations that you have written during rehearsal. You could then include a video of the actual performance for the **realisation** of the project outcome.

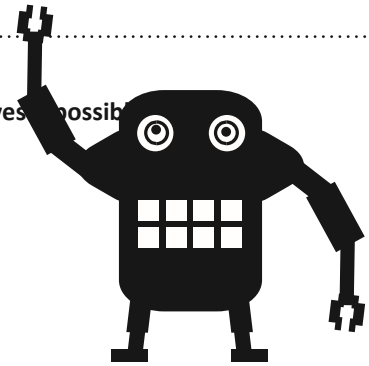
Alternatively, if you have written the script or composed the music, then this would be evidence for the **realisation** of the project outcome within AO3, and any previous drafts would be evidence of its **development**

? How can you structure your work to fulfil the four assessment objectives?

n one of them in depth.

.....

nent objectives possib



essay but shows how you have developed your answer to the question. This includes

a. Raw data and examples of any materials used to collect data, calculations etc.

b. You will also need to attach any paperwork required by your exam board, such as a project proposal, record of review meetings, production or activity log and your evaluation of the project process and your learning.

? How could this structure fulfil the assessment objectives for the EPQ? AO1: Manage the project
AO2: Use resources
AO3: Develop and realise
AO4: Review

Title page and abstract: an approximately 150 word summary of the whole project. It should include key features of the performance and any theoretical influences, its audience, contributors and a brief evaluation of the outcome. Write this last.

Assessment objective 1: Manage
Your written report should include evidence of planning and project management skills. Planning and development can also be shown using a storyboard, a production and rehearsal schedule, a set design and building schedule etc.

Assessment objective 2: Use resources You should also include evidence of research for AO2. This could include exploration and analysis of theoretical approaches to inform the performance, and watching other performances in order to develop ideas.

Assessment objective 3: Develop and realise The performance itself can provide evidence for both AO3 and AO4 (the presentation), but you should also include evidence of how you developed the project and, in a group project, you must provide clear evidence of your own role or contribution towards realising the project's aims.

Assessment objective 4: Review
Your performance should be followed by a live question and answer session for AO4 (review). You will also need to submit a written evaluation of the project outcome and

www.getrevising.co.uk

[redacted]

what you have achieved and learned from carrying out your project.

Have you: ✓ or ✗

1. F ollowed all the advice on presentation provided by your supervisor.
2. U sed an appropriate structure for your project with sections, headings and subheadings?
3. I ncluded an evaluation of the project either at the end of the report/essay or in an appendix?
4. I ncluded evidence of your presentation to an audience either at the end of the report or in an appendix?
5. F ormatted the document with a consistent size and style of font for headings, subheadings, body text, headers, footers and captions?
6. F ormatted the page layout appropriately with double or 1.5 line spacing and appropriate margins, section and page breaks?

(Note: keep all headings and subheadings with the paragraph that they refer to. Do not allow one line of a paragraph to be split so it is on a separate page.) 7. Proof-read and edited the whole document for

www.getrevising.co.uk

[redacted]

a. Sense, meaning and fluency?

b. Spelling, punctuation and grammar?

c. Flow of ideas between paragraphs and sections?

8. I ncluded any relevant materials in numbered and labelled appendices, listed separately to the main contents and crossreferenced at the appropriate points in the main document?

9. E dited each section to an appropriate length and checked your word count?

(Note: bibliography, footnotes and appendices are not usually included in the word count.

Do include footnotes in the word count if you have used them for assessing sources.

Do include your project evaluation in the word count, whether it is in an appendix or in the main body of the report.)

www.getrevising.co.uk
searc share create

✓ or ✗

10. Completed and formatted the bibliography appropriately, using a recognised system and checked that all footnote references, images used and sources referred to are included in alphabetical order (and in sections if appropriate)?

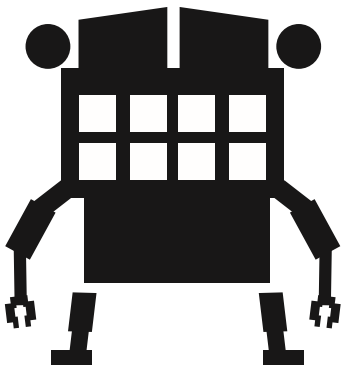
11. Included a title page with name, candidate and centre details and if appropriate, an abstract?

12. Checked the page numbering and included a contents page?

13. Completed all paperwork required by your examination board, signed, dated and included it either before the main project or in a labelled appendix? (This might include: candidate cover sheet, project proposal, planning and production log/activity log, record of review meetings.)

14. Printed and bound every page together with a treasury tag or comb binder?

    (Note: moderators ask you not to submit work in plastic wallets.)



Your school or college may organise a group exhibition space for Extended Project displays. Alternatively, you might need to find a space and organise the whole event yourself or with a group. If you can organise your own exhibition, this will mean more work, but you will have much more freedom to decide what to show and how to show it.

……..

An exhibition of work for an Extended Project will be different from some public exhibitions. Firstly, the body of work for an Extended Project will normally be smaller – perhaps only one or a few finished items by any individual student. Secondly, it is important to display the process separately from the finished piece, so that the assessor can see how the project has been researched and developed. Apart from this, however, any exhibition will have a similar planning process.

The four elements to planning an exhibition are:

- Curating the exhibition
- Catalogue/exhibition guide design
- Exhibition design
- Publicity and promotion.

If working alone, you will of course need to take on all of the roles. If working in a smaller group, each individual in the group could design their own exhibition guide or catalogue as part of the project report; or this responsibility could be included in one of the other roles.

Curating an exhibition

A curator plans the theme or focus of an exhibition and gives it a title which reflects the nature of the work. The curator also selects pieces to be shown and writes any accompanying explanations for the work, including the catalogue text and title cards for each piece. For an Extended Project, you would be expected to do this for your own work. If you are presenting an artefact as part of your project, you will need to write a critical analysis of the work and review of the project, which should be around 1000-1500 words. This is the equivalent of the 'catalogue' in a professional exhibition.

Designing a catalogue or exhibition guide and promotional materials

Whilst a curator would normally write the content of the catalogue or exhibition guide, the catalogue designer will make sure it is laid out on the pages effectively, and that the text style and overall design is sympathetic to the images being displayed. There should be a cover page with a carefully chosen image and the title of the show. This image should also be used for any other promotional materials. Well-designed promotional materials can do a lot to give the displayed work a professional 'edge'. The catalogue should also include acknowledgements of all the people who have contributed to the exhibition.

Designing the exhibition space

Exhibition spaces need to be planned carefully to make the most of the work to be displayed, and to bring the separate pieces into a coherent whole. An exhibition designer works out the layout, the background wall space and plans how work will be framed/mounted and lit to show it at its best.

Publicising and promoting the exhibition

Publicity and promotion is hugely important – what is an exhibition which has been organised for you by a teacher, in an exhibition without an audience? Even if you are participating you can do a lot to ensure that your work is seen and noticed.

Planning for an exhibition: guidance and checklist

You will need to allow several weeks to plan, publicise and put up your exhibition. It might be helpful to produce a timeline. Start at the exhibition start date and

work backwards. Identify what needs to be completed before each task can start. Work out the time from latest possible start date to completion. This is called **critical path analysis**, as it allows you to work out the critical (i.e. minimum) time needed. If you are working as a team, plan for regular meetings to keep everyone updated on progress.

Hint: time passes quickly when organising a project like this. If you think something will take an hour to organise, it will probably take three.

How to use the checklist

The example checklist here can take you through some of the main tasks in a suggested order, but you will probably want to adapt this list for your own circumstances, for example, if you have help from a member of staff or if you are contributing to an exhibition which is organised by someone else. You could cut up the statements, select those that apply and re-arrange them into the best order for your project. Then tick them off as they are completed.

ignore these. If you are working in a group, the four roles are:

C: Curator
ED: Exhibition Designer P:
Publicity and Promotion Manager
CD: Catalogue and Publicity Designer.

C: Decide on a theme or a title for the exhibition. Your theme might influence your choice of exhibition space, if you have the opportunity to choose.
& ED: Look for suitable exhibition space. You may need to consider cost and accessibility. Measure up wall and/or floor space. Assess whether the space is sufficient/too big and whether it can be adapted to suit.
& ED: When you have identified an appropriate exhibition space, confirm the start and end dates of the show.
ED: Make notes on the lighting, architectural features and any other characteristics of the space. Consider lighting needs. If necessary, figure out how the space could be adapted with temporary display units, boards or walls.
C, CD & P: Choose the artwork to be used for the promotion and publicity materials. It should ideally represent the theme and title of the show. Choose an image which will work on different scales, such as poster and postcard. Decide who your audience are and what you want to communicate to them about the show. Decide what publicity and promotion materials you want.
C: Think about the theme of your work, and decide how the different pieces of work fit together. Consider how to present the research and planning stages of the work in relation to the finished piece(s). It is important for the work to be seen as a coherent whole. If there is more than one finished piece, think about whether there is a way to link them or whether each piece and its preparatory work should be seen separately from each other.

Checklist

The letters before each task refer to possible group roles. If you are planning the exhibition by yourself,

P: Start work on publicity materials, leaving plenty of time for printing and distribution to start a few weeks before the show. A postcard with an image on one side and the details of the show on the reverse can be useful, as it can be handed out or put in the post for invitations, then made available at the exhibition for guests to take away with them. Make sure all publicity materials highlight the name, venue and opening date.
C: Prepare the text of the exhibition guide/catalogue. Introduce each piece with some background – the inspiration for the piece, its context, materials, development process and a critical analysis. You could work with a partner to critique each other's work.
CD: Design the layout of the exhibition guide/catalogue, including photographs or digitally produced images of the work. Print copies for display at the exhibition. Bound copies will look professional. Do keep a copy for yourself.
ED: Decide how each piece will be arranged in the exhibition space to show the coherent whole as planned by the curator. Consider how work might be safely and effectively mounted to the wall, floor, display units or shelves. Prepare mounts and display fixtures.
P: Look around for local listings websites and free listings magazines. You will probably need to submit the listing for your exhibition one or two months in advance for monthly magazines or leaflets.
P: Compile an invitation/mailing list. Invite everyone, including any media contacts you have, to the exhibition launch. If you are planning a creative career, start an exhibition mailing list now, and keep it updated regularly. Send out invitations.
P: In the few weeks before the exhibition, deliver flyers, posters and postcards to local community centres, cafes, libraries etc. Ask friends to help you by handing out cards or flyers to their friends and families.
P: If your work has relevance to your local area and community, you might want to get the media interested in your exhibition. In the week before the exhibition starts, write a press release and send it to the local media's news desks. Try to find an interesting angle to write about the work. Emphasise the links with your local community. You might even consider a paid advertisement in the local media for the week before the exhibition.
C: Prepare the title card for each piece of work. Prepare an introductory statement to explain the whole set of work on show. Mount these on cards to be fixed to the display.
C or P: Optional– drinks could be served at a launch event if you have funding or can charge to cover costs. Arrange for someone to be responsible for this, so you can focus on presenting your work.
C & ED: Transport all the work to the exhibition space. You may need to get hold of bubble wrap or other packing materials for this. Don't forget any tools you might need, such as screwdrivers, spirit level, hammer etc. Make sure you know how to use these safely.
C & ED: Hang or install the exhibition, at least the day before the launch. Enjoy your achievements!
All: Who is responsible for looking after the show and taking it down?

Chapter 7

Evaluating the project

Evaluating your project 110
Evaluation checklist 112

Chapter 7

Your evaluation should be balanced. It is, of course, important to reflect on what you have achieved. This is not enough however: there are always things you can improve on. The ability to critically analyse your own work is the key to improvement and success.

It is a good idea to structure your project evaluation before around the skills needed to fulfil the four assessment reviewing the objectives. You may wish to follow the order suggested you have developed here, which will encourage you to think first about the (AO4). successes and limitations of the outcome (AO3) and then to look at the reasons for these (AO2 and 1), finally evaluating the presentation and skills, knowledge and understanding throughout the whole process

……..

AO3: the development and outcome of the project

Successes and limitations in developing your project

- *In a written essay:* any difficulties you encountered in formulating a structured and reasoned argument in your discussion.
- *In an investigation report:* any difficulties you encountered in formulating your hypothesis, designing your research and collecting and analysing your data.
- *In an artefact report:* any difficulties you encountered in designing and producing your artefact, considering form, function, materials, safety, cost and structural issues.
- *For a performance:* any difficulties you encountered in translating a script into performance or a musical idea into a composition – such as technical difficulties in representing a particular mood, ambience, impression or object.
- *In a written essay:* any limitations of your arguments and your conclusions, including any issues which you had to exclude in order to maintain a manageable focus. Explain your justification for this judgement.
- *In an investigation report:* any limitations in the conclusions you can draw from the data as a result of difficulties in the research process and any modifications you would make if you were to do the same piece of research again. Explain your justification for this judgement.
- *In an artefact:* how effective you judge the outcome of your project to be and your justification for this judgement (e.g. do you have any audience or consumer feedback?)
- *For a performance:* how effective you judge the performance to be and your justification for this judgement (e.g. have you analysed a recording of the performance or received any feedback?)

……..

AO2: Your research skills

- Discuss any difficulties you encountered in researching your question or brief and any limitations of the research skills you used which might have caused these difficulties. For example, if it was difficult to find appropriate internet sources, how did you search for them? Are there alternative ways of searching which might have produced better results?
- Explain how you made judgements about the sources you used, including how you decided whether to trust or use the information in them and whether authors of textual **How far you achieved the aim and objectives you set for yourself at the beginning** information were presenting fact, subjective opinion or speculation. No matter how far you researched the background to each source, it is very unlikely that your assessments of sources were perfect. Consider how you might have improved them, for example, being more thorough in checking the references given in a source or researching the reputation of an author.
- For an investigation, artefact or performance, you should also consider how well you researched any materials or equipment you used in developing your project.

Chapter 7

AO1: Your planning, project management and self-monitoring skills

- Consider how well you kept to your original plan and if not, why not. Was the plan realistic or not? In what ways could it have been improved? Did you plan your time carefully as well as planning what you needed to achieve? How were your time-management, self-motivation and discipline in meeting the targets you set yourself? Were there any high or low points in your motivation? What caused these? What might help you to maintain motivation over the course of a project in future?
- Consider the records you kept of your progress. How detailed are they? Were they useful in monitoring your progress against your targets? What could you do to improve the way you keep track of your progress in future?
- *If you worked in a group:* how well did the group work together in planning, managing and recording progress? Did all group members pull their weight equally? Were the responsibilities divided equally? Did working in a group have a positive or negative impact on your motivation or on organisation? What do you think are the advantages and disadvantages of working in groups rather than individually? What actions can you take in future to maximise the advantages and minimise the disadvantages of working in groups?

.....

AO4: Your presentation and reviewing skills

The effectiveness of the presentation

- How effective do you judge your presentation to have been in communicating the key features and outcome of your project to your particular audience? How might you have improved your presentation through clearer visual aids, more thorough preparation and rehearsal, more careful timing and structure, better voice projection, better use of display space and lighting, better labelling or selection of display items etc.? How well did you handle any difficult questions about your project, and how might you prepare for answering questions more effectively in future?

Reviewing your learning and development

How might you approach things differently next time?

- A good way to sum up what you have learned about doing a project is to write some advice or guidance for new students who are about to embark on an Extended Project. If you were in their shoes, how would you approach the project to ensure success?
- Of course, in reality, these skills will be used in combination throughout life. What do you think will be most useful in helping you prepare for your future studies or career?
- Finally, how have your knowledge, attitudes and understanding changed as a result of completing this project?
- Taking into account the rest of your evaluation, what have you learned about planning, managing, researching, developing, completing, presenting and reviewing a project?

www.getrevising.co.uk

summary…

Remember to give a balanced evaluation which considers not just what you have learned and achieved, but also the difficulties you have experienced and limitations of your work and learning. Structure your evaluation around the four assessment objectives: developing and realising the outcome, using resources, managing the project, presentation and review. Consider what you would do differently if you were to do this project again and how you will apply the skills and knowledge you have developed in your future career, studies and personal life.

Use this table to plan the evaluation of your project.

Name
……
……

Aspects of the project	Successes and achievements	Limitations and difficulties
1. The development of the project		
2. The outcome of the project		
3. Researching the project		
4. Planning the project		
5. M anaging time and monitoring progress on the project		

www.getrevising.co.uk
searc share create

6. P reparing and giving the presentation		
7. Answering questions on the presentation		
8. R eviewing your learning and development		
How have your knowledge, understanding and attitudes changed as a result of completing the project?		

Chapter 7

www.getrevising.co.uk

Chapter 8

Giving an oral presentation

What makes a good oral presentation? 114
Planning an oral presentation 115
Oral presentation planning form 116
Using visual aids 117
Preparing the presentation 119
Giving the presentation and dealing with questions 120
Presentation checklist 121

A good presentation is...

☺ Obviously well prepared and thoroughly rehearsed

☺ Clear and easy for a non-specialist audience to understand

☺ Sensitive to the needs and interests of the audience

☺ Engaging and stimulating

☺ Concise and clearly structured with an introduction, main section, conclusion and 'take-home message'

☺ Clearly argued lines of reasoning leading to a logical conclusion

☺ Well-paced, with polished, confident, clearly audible delivery

☺ Delivered in a relaxed manner, maintaining rapport and eye contact with the audience

☺ Supported by well prepared and relevant visual aids which support the presentation rather than leading it.

[redacted]

A good presentation isn't...

☹ Prepared on the back of an envelope in ten minutes

☹ Run through for the first time in front of its audience

☹ Too technical or complex, assuming that the audience are experts

☹ Irrelevant, dull or patronising towards the audience

☹ Muddled, with no clear structure to distinguish or link the parts together ☹ An inconsistent, illogical or unsubstantiated rant

☹ Gabbled breathlessly to get it over with as quickly as possible☹ Stumbled through painfully with lots of errs... and umms...

☹ Read from notes without any audience contact

☹ Read through from a screen filled with lots of densely packed text.

summary…

Five hints for successful presentations:

1. Plan, prepare and rehearse thoroughly.
2. Keep it simple.
3. Your screen is not your script; use images to support what you say.
4. You need an introduction, main section and conclusion or take-home message.
5. Engage with your audience.

What format should the presentation take?

The presentation must have an audience. It is acceptable to produce a poster, video or visual display instead of an oral presentation, although you must complete a 'live' question and answer session with your assessor(s). It is likely that your centre will decide on the way that presentations and audiences are organised.

When should you start planning the presentation?

You should start thinking about the format of the presentation while you are developing and writing the project. Plan to complete the essay, artefact etc. in plenty of time to prepare and rehearse the oral presentation. It might take you a couple of weeks to summarise the key features of the project, prepare visual aids and rehearse your presentation.

How long should the presentation be?

Check the guidance from your supervisor, but around ten minutes should give you enough time to outline the key features of your project, conclusions and a brief evaluation of the outcome. You will also need to allow time for a question and answer session, so twenty minutes in total would be a reasonable guide.

What should you include?

Keep it simple and provide visual aids to help people follow the structure of your presentation. At a minimum, the presentation should include an introduction, main section and a conclusion/evaluation of learning. A more detailed structure for a ten-minute presentation might have five sections:

1 minute: **Introduction** – your topic/question/brief; rationale or inspiration; the key issues or concepts.

4 minutes: **Development or discussion** – the key features of your project. For example, how you

2 minutes: **Research** – the techniques and skills you used and a couple of points of research.

created the artefact; the arguments and counter arguments of your essay; the methods and findings of your investigation; the development of your performance ideas. This should be the longest section.

1 minute: **Conclusions** – the outcome of your project: your answer, conclusions or product.

2 minutes: **Evaluation** – of the outcome and of your learning from the project. Try to keep a balance between the content of your project and an evaluation of your learning, as this is a required part of the presentation.

What else do you need to consider when planning the presentation?

Check the venue and equipment in advance: find out whether what you need can be provided. Will you need a visual display screen, a computer, a pointer or remote mouse, audio equipment, a white/blackboard? How will you store and access any electronic files? Will the necessary software be available?

Don't assume that anything you need will be available – ask, and give plenty of notice, so that equipment can be organised or so you have time to adapt your plans if necessary.

Consider the nature and diversity of the audience: you should aim your presentation at a non-specialist audience, even if there are experts in your chosen field in the audience. Also consider the cultural backgrounds of your audience. Are these relevant to the content of your presentation? Do any members of the audience have sensory impairments? How do you need to adjust the presentation to meet their needs?

me

[redacted]

	Your notes	Supervisor comments
presentation mat I will use:	*Is it a live speech to an audience? Video recording?*	
time I will have present:	*Consider the length of time for presenting and for questions*	
outline cture for my sentation is: lude timing overview of tent)		
audience needs ude:		
format I will for my notes:		
v I will present visual aids:		
equipment I d is:	*Consider all IT, AV, display and other equipment including furniture, stands etc.*	
es any of this ipment need king or advance paration?	*Who will set up any audio-visual equipment? Will it be set up as I need it? How do I know? What furniture or display equipment do I need?*	

www.getrevising.co.uk

am using ctronically stored s, how will I ess them quickly the day?	*Will there be network access, do I have to email my materials or can I use a USB storage device? What software and hardware do I need?*	

start a presentation:

computer

ur 50 slide Powerpoint file

g your 50 densely packed text slides to your audience

n fall asleep before you reach slide three.

ly, you could try a more engaging approach!

The purpose of visual aids

Visual aids should support the oral presentation rather than leading it, so display images to illustrate what you are saying rather than endless lists of bullet points.

If you have designed a product or made an artwork, then scale diagrams, photographs, video recordings or actual working models will tell your audience much more about your work than a verbal description alone. Likewise, if you have been involved in an event or performance, a well prepared image or video recording might be the centrepiece of your presentation, while you provide the narration and analysis as a voice over.

If you have conducted an investigation and collected quantitative data, it will be much easier for your audience to grasp the findings if you show them graphs and tables from your analysis. Even for a discursive essay or a piece of creative writing, illustrations can help to stimulate the audience's interest and provide a focal point to structure the talk.

Another benefit of using visual aids in your talk is to give the audience a focal point that is not the end of your nose! If you are nervous, having something to take the audience's gaze away from your face can do wonders to help you relax.

……

The role of presentation and visual display software

You don't have to use Microsoft Powerpoint or other talk. presentation software – in fact, you might be better easier to present your images seamlessly as you

If your school or college has interactive whiteboards, off without it. However, used with care and creativity, you may want to experiment with the software to presentation software is a useful tool for displaying clear produce visual diagrams and models that you can

www.getrevising.co.uk
searc share create

[redacted]

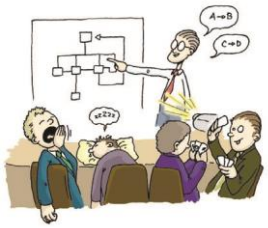
images in a consistent format. For example, you can embed manipulate while you talk. This can make it much digital video and audio clips as well as objects from other easier for your audience to understand processes and software applications within a presentation file, making it abstract concepts.

Bad slide

Lots of writing on slides is not a good idea. You may well just end up reading them out which is not effective communication of your ideas and may involve you establishing eye contact with the slide rather than the audience. It also takes attention away from what you are actually saying as the audience will be trying to read it all rather than listen to you. And of course, the more you write the smaller the writing will be.

Better slide

- **Very little text**
- **Supporting image**
- **Easy to read**
- **Can help your audience understand**



www.getrevising.co.uk
searc share create

[redacted]

The role of text

Text does have a role to play in your visual aids, but it should be a supporting rather than a starring role. Labels to help your audience understand images and put them in context; titles, section headings and summary points to structure your talk; defining key technical terms as you use them – these are all useful ways to use text. A good guideline is to aim for one or maybe two brief phrases per image, and to have some images with no text at all if possible. Minimise your use of text on its own without a relevant image. Avoid animated text at all costs. People tend to use animation just because they can, or in the hope that it will liven up a dull text-based presentation. Its actual effect is usually to distract the eye and irritate the audience rather than enhance the message.

If you do use text on screen, follow these guidelines:

1. Dark text on a light background is easier to read, although images look better on a dark background, so light text on dark may be better for captions.
2. Don't use bright clashing colours for text and background.
3. Keep fonts simple and easy to read. Avoid over-stylised fonts and 'Word-Art'.
4. Font sizes between 28 and 44 points are best. Don't go below 24 points.
5. Use animation sparingly, if at all.
6. Break up chunks of text and summarise it in key words and short phrases.
7. Don't put more than five bullet points or lines of text on a slide.
8. Only use bullet points if they serve a purpose.
9. Support text-based slides with images where possible.
10. L ess content and faster slide transition is better than more content at a slower pace.

……

Handouts

There is no need to produce handouts for an oral presentation unless you want people to take them home. You can usually provide the information you need to with a screen or in a demonstration. An exception to this rule is when the handout takes the place of the oral presentation in an exhibition or visual display.

……

Alternatives to on-screen visuals

If you prefer, you could use a good old-fashioned white/ black board or flipchart to draw on, or produce posters instead of on-screen displays. It is a good idea to think how you might make use of these methods in case of an irretrievable IT-related problem!

You might find it useful to use props, for example, if you want to demonstrate a process in a presentation of a scientific investigation or engineering project. You could make an oral presentation to a small audience whilst they take turns to demonstrate a working model. You could also use the cookery programme approach of 'here's one I made earlier' to show the production process for an artefact. For an historical study or a presentation about a performance, you could present in period costume or in character.

summary…

- Use visuals to enhance not distract from an oral presentation.
- Minimise use of text in visual aids.
- Ensure text is simple and easy to read.
- Consider alternatives to Powerpoint.

Preparation

Preparation for your presentation is likely to involve the following.

- W riting an interesting, logically structured presentation script.
- C reating engaging visual aids to stimulate, demonstrate, entertain and provide structure for the presentation.
- R ehearsing your timing and delivery.
- P lanning for any foreseeable problems with the venue and equipment so you can remain unruffled.
- P lanning what you will wear for a smart, professional appearance. This is not essential but is a good idea as it can help you to feel more confident.

Knowing that you have prepared thoroughly will help you to feel confident. The more confident your delivery, the better you can engage your audience.
Preparation = success.

Good communication can also make the difference between an interested and a bored audience. Are your visual aids/displays legible, easy to understand and interesting to look at? Props, demonstrations, audience participation and performance techniques can turn a good presentation into a great presentation, but only if used confidently and to enhance rather than distract from your project. Practise speaking to an audience – your voice needs to be both clear and audible.

Rehearsal is vital. Your supervisor or fellow students might be able to give feedback on a practice presentation before the real thing. Otherwise, rehearse at home in front of a sympathetic audience of parents or friends – anyone who will give you some feedback on the clarity of your verbal and non-verbal communication. At a pinch, even a pet can

Timing is an important skill. Some centres may impose a time limit. Until you are well practised, it is difficult to translate notes on a page into minutes of speech. Presentations which go on too long lose the audience's interest, whilst those that are too short could leave the audience confused or unconvinced by the extent of your preparation. You need to rehearse the presentation, time yourself and edit accordingly.

Planning for all eventualities will help you to remain calm. Here are some common but foreseeable problems that students experience when giving their presentations.

- F orgetting to check whether the software and equipment they need will be available

www.getrevising.co.uk

[redacted]

- B ringing materials which are not in a useable format for the available computer

help you practice maintaining eye contact with an audience

- Not saving or losing the final version of the presentation

until you are confident in what you have to say without

- Forgetting notes

looking at your notes. To check your eye contact, rehearse

- Missing out a section of their presentation. in a mirror.

summary…

- Preparation = success
- Create materials, time yourself, edit, rehearse, plan what to wear, plan for eventualities.

www.getrevising.co.uk
search share create

Giving the presentation and dealing with questions

Get ready: Take your time, and don't start until you are sure you are ready. Make a note of the time that you start so you can keep an eye on your timing.

Engage the audience: Take a deep breath and lift your chin to speak in a loud, clear voice. Smile and say hello to get your audience's attention, and don't start until you have absolute quiet. Introduce yourself and the project, making eye contact around the room. Speak to the people in the furthest corners of the room, not just those in front of you or the assessor.

Set the scene: Give the audience some idea of what to expect – what you are going to tell them, how long it will take, and whether you would welcome questions throughout or if you would prefer them to wait until the end.

Keep momentum: Keep a good pace – don't gabble, but keep it lively. If you lose your place, stop, take a breath and find it again. If you miss out slides or visuals, just flip through them without comment as soon as you remember. Try not to panic.

Maintain contact: Scan the audience and make regular eyecontact with people in all areas of the room to make them feel included. Avoid looking at your notes or screen unless a quick check is necessary, but flip through as you go to stay in the right place in case you need a prompt. Being less reliant on your notes will boost your confidence and help you to keep your audience interested and attentive.

Explain visuals where necessary: A graph or chart may need to be put in context or given further explanation. Do not read bullet points out but do use them to structure your speech. Images can be shown without comment unless there is good reason to explain them. If you see your audience looking confused, you can provide a further explanation.

Check your timing: if you are making slower progress than planned, skip through some points with a quick summary. If you are going too quickly, check that you have explained each point and visual fully before moving on.

Conclude with a brief summary: Outline the key 'take home' message of your presentation and thank your audience. Ask if anyone has any questions.

Dealing with questions

- G ive the audience time to think of questions. Reassure them that they can ask about any aspect of the presentation or project.
- It is not cheating to 'plant' a few questions beforehand with friends in the audience. Prepare a couple in advance that you feel confident in answering. This can avoid a 'tumbleweed moment', will give the rest of the audience time to think, and your answers may stimulate further questions.
- T ake each question as a compliment, even if it comes across as a challenge – it shows that your audience is engaged by your presentation and thinking deeply about the topic.
- Try not to be panicked by difficult questions from your assessors. They are trying to gauge how well you can handle the unexpected and remain calm in the face of a challenge. It is fine to say that you don't know the answer to a question and thank them for pointing out the issue.

www.getrevising.co.uk

[redacted]

summary…

Giving the presentation: Deep breath; clear voice; eye contact; engage audience; set the scene; keep momentum; maintain contact; explain if necessary; check timing; conclude and summarise.

Dealing with questions: Give your audience time to think; plant questions in advance; think positive; stay calm; admit it if you don't know the answer.

Have I: ✓ or ✗

www.getrevising.co.uk
search share create

Organised the venue and equipment?	☐	☐
Found out who my audience will be and whether there are any particular needs or interests I should take into account?	☐	☐
Planned the presentation structure?	☐	☐
Decided how I will deliver the presentation?	☐	☐
Written and created the presentation content?	☐	☐
Checked that the equipment available is compatible (e.g. software)?	☐	☐
Printed any posters or materials that need to be given out?	☐	☐
Rehearsed the presentation, checking for timing?	☐	☐
Edited the presentation to the time limit?	☐	☐
Made note cards?	☐	☐
Saved any electronic files in a useable and portable format and checked that I can open them?	☐	☐
Rehearsed the presentation in front of an audience to practise good diction and eye contact?	☐	☐
Prepared answers to likely questions?	☐	☐
Prepared some starting questions to plant in the audience?	☐	☐

www.getrevising.co.uk