

Research Skills

- Module 3
- Planning your research question
(PART 2)

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Watch these six modules online and then take the Study Smart quiz.



Study Smart
research and study skills tutorial

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The logo consists of a teal rectangular background. On the left, the words "Study Smart" are written in a large, white, sans-serif font. Below this, the text "research and study skills tutorial" is written in a smaller, white, sans-serif font. On the right side of the teal background, there is a white silhouette of a group of seven people standing in a line. The first person on the left is taller and appears to be speaking or gesturing towards the others. The remaining six people are of varying heights and are holding briefcases or bags. Below the teal background is a dark grey horizontal bar containing the text "Created by the Queensland University of Technology" and "Link <http://studysmart.library.qut.edu.au/>".

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Module 1: *Understand your assignment task* (45 minutes)

Define your topic, identify key concepts, map your ideas, find known items, understand call numbers, judge the quantity of information required, differentiate between types of information sources, judge the suitability of sources for different tasks.

Module 2: *Identify and find information* (30 minutes)

Develop effective search strategies, select the most appropriate tools for finding information, find information in a variety of formats, keep up to date with literature.

Module 3: *Evaluate your information* (20 minutes)

Assess the suitability of your search results, revise your search strategy, apply criteria for evaluating information.

Module 4: *Manage your information* (20 minutes)

Recognise the importance of managing information, create a strategy for managing your information, understand why and how to start referencing.

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Module 5: *Synthesise and communicate your ideas* (20 minutes)

Summarise main ideas, recognise relationships between concepts, draw conclusions based upon information gathered, choose the best way to communicate your work.

Module 6: *Use your information appropriately* (20 minutes)

Concepts related to online privacy and security, concepts related to censorship and freedom of speech, acceptable online conduct, what information you can legally copy, concepts of fair use and intellectual property, what constitutes plagiarism and how to avoid it.

Take the Study Smart Quiz. Print and scan or snip and paste your results and post on the submission page of your learning website (Scholaris, the Portal, SEQTA etc.)

Additional Product Design Checklist: things you will need to research if you are designing a product/physical item, to solve or explore a research question

1. Examine the competition or examine what has already been done before (You will need to research this.)

Review 2-3 competitors' products (if applicable).

Observe a broad range of un-related products for inspirational design, materials, [packaging](#) and more.

2. Describe your product or service

Write a clear and concise description of your product or service. This should be easily understood by a person unfamiliar with the concept and demonstrates the features and benefits of your product or service.

3. Make a Visual Representation

Make a visual representation of your product. Programs like PSD Covers turn flat images into 3-D Renderings.

4. Select Materials (You will need to research this.)

Make a list of all the [materials](#) needed for your product.

Research available materials and their 'technical names' by visiting sourcing websites, requesting supplier catalogues, going to wholesale stores, or looking at other products in the marketplace.

Get materials for a rough sample. They don't need to be exact, but should function similarly to what you ultimately plan to use.

5. Make a Rough Sample

Test the function, construction, durability, and style of the sample.

6. Create Working Specs

Start a working Spec Sheet for your project. The purpose of a working Spec Sheet is to identify the ideal materials you want for your product. This includes the style, size, colour, finish, and any other relevant details about the material. It's okay to leave things like finish and costs blank when you begin. As you research and move further along with the design and sourcing process, you'll continue to fill in the document until it's complete.

7. Make a Professional Prototype

Assess your working sample and make changes to the design.

Gather additional materials for your prototype. They should be as close to your final selection as possible.

Make a prototype by doing it yourself.

8. Gather Feedback (You will need to conduct your own research to decide how you will do this.)

Host a feedback circle or sit one-on-one with people in your target demographic and request input about your product.

Make design/material adjustments as needed.

Source: How to Make a Product: Product Design Checklist. Available from: <http://www.printmag.com/editors-picks/how-to-make-a-product-product-design-checklist/>

9. Add Colours, Prints & Finishes (if applicable)

- Create a colour mood board using Pinterest, Evernote, or a good old-fashioned homemade collage. A mood board is an arrangement of images, materials, pieces of text, etc. intended to evoke or project a particular style or concept.
- Make a list of items to be designed. Examples include fabric patterns/graphics, colour of plastics, metals and other materials, sewn labels/tags, interior care labels, and colours/imprints on zippers, buttons, snaps etc.
- Using your mood board as a guide, execute the design for these items.

10. Create a Tech Pack and other design documents for your product.

A Tech Pack is a set of technical documents that act as a guide for how to make your own product.

Facilitate any supplementary items you'll need. For example, garments require a pattern, marking, and grading. Plastic or metal items may need CAD (Computer Aided Design) Drawings.

Source: How to Make a Product: Product Design Checklist. Available from: <http://www.printmag.com/editors-picks/how-to-make-a-product-product-design-checklist/>

Very helpful resource:

http://www.business.vic.gov.au/_data/assets/word_doc/0016/1026430/Business-Victoria-Writing-a-Business-Plan-Guide-2.docx

Formulating a good research question

Your research question sets out what you hope to learn about the topic. It guides and centres your research.

This question, together with your approach, will guide and structure the choice of data to be collected and analysed.

The following guidelines highlight some of the features of good questions. *Tick each box as you meet each criteria.*

- **Relevant.** You should be able to establish a clear purpose for your research.
- **Manageable** in terms of research and in terms of your own academic abilities. You need to be realistic about the scope and scale of the project. The question you ask must be within your ability to tackle.
- **Substantial** and with original dimensions. Your question should not just copy things that have already been done. It should show your own imagination and your ability to construct and develop research issues.
- **Consistent** with the requirements of the assessment. The question must allow you the scope to satisfy the learning outcomes of the Research Project course.
- **Clear and simple.** Your research question needs to be clear and thought-through. Having one key question with several sub-components will guide your research.
- **Interesting.** The question needs to intrigue you and maintain your interest throughout the project. Avoid choosing questions that are based on fads or convenience as you can easily become bored with them.

Adapted from: Formulating the Research Question. Available from: <http://www.socscidiss.bham.ac.uk/research-question.html>

While a good research question allows the writer to take an arguable position, it DOES NOT leave room for ambiguity.

Checklist for potential research questions (from the Vanderbilt University Writing Centre):

(Tick each box that applies to your question.)

1. Is the research question something I/others care about? Is it arguable? []
2. Is the research question a new spin on an old idea, or does it solve a problem? []
3. Is it too broad or too narrow? []
4. Is the research question researchable within the given time frame and location? []
5. What information is needed? []

Research questions in the Sciences and Social Sciences

The research question should address what the variables of the experiment are, their relationship, and state something about the testing of those relationships. You need to have repeatable data. Unreliable data does not allow for a strong or arguable research question. You need to consider what kind of problem you want to address. Is your research trying to accomplish one of these four goals?

(Tick each box that applies to your question.)

- Define or measure a specific fact or gather facts about a specific phenomenon. []
- Match facts and theory. []
- Evaluate and compare two theories, models, or hypotheses. []
- Prove that a certain method is more effective than other methods. []

Adapted from: What Makes a Good Research Question? Duke University Writing Studio. Available from: http://twp.duke.edu/uploads/media_items/research-questions.original.pdf

Research question: _____

Rationale: _____

