

Inquiring and Analyzing

Constructs a

detailed research plan
(Construct - Display
information in a
diagrammatic or logical
form.)

You need to be able to
identify:

- the relevant data that needs to be collected
- where the data will be sourced from
- whether sources are primary or secondary

You might do any of the following for product analysis:

- identification of and interaction with similar products when out shopping
- attribute listing of existing products
- SWOT analysis (strengths, weaknesses, opportunities and threats)
- functional analysis
- aesthetic analysis
- graphical disassembly analysis
- performance testing of products
- evaluation of past student projects
- secondary research through product reviews on consumer websites, buying guides or magazines
- summary of customer reviews on commercial websites.

You need to be able to identify the questions that need to be answered to solve the problem:

Which sources on the following pages are essential and which are desirable?

<p>Identifies the primary research needed to develop a solution to the problem independently <i>(Identify - Provide an answer from a number of possibilities. Recognize and state briefly a distinguishing fact or feature.)</i></p> <p>Prioritizes the primary research – Which is best? You can rank it <i>(Prioritize - Give relative importance to, or put in an order of preference.)</i></p> <p>This could include:</p> <ul style="list-style-type: none"> • conducting interviews, surveys and polls with a target audience and/or client • interviewing experts over the telephone • writing letters or emails asking for specific information about a product from a client • observing users interacting within the situation and making notes • analysing products that have things in common with the problem • investigating the work of other designers of existing products • conducting market research such as surveys, questionnaires and interviews through focus groups • experimenting with materials, tools and processes. 	Primary Research (You did this research yourself)	Rank
	Primary Research (You did this research yourself)	
	Primary Research (You did this research yourself)	
	Primary Research (You did this research yourself)	

<p>Identifies the secondary research needed to develop a solution to the problem independently</p> <p>Prioritizes the secondary research – Rank it</p> <p>Examples of secondary research include:</p> <ul style="list-style-type: none"> • analysing data from a website or book • reading accounts of a problem written by another person • analysing articles in magazines, journals and newspapers • downloading data from a marketing website • viewing videos about how to use materials, tools and processes. 	Secondary Research (You found someone else’s research) – (Citation needed)	Rank
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	Secondary Research (You found someone else’s research) – (Citation needed)	

EXAMPLE Research Plans

Phnom Penh EXAMPLE Research Plan:

What tourism means to Phnom Penh- I need to do this first because I also need to know why the tourism industry is important in Phnom Penh. Why would we bother with the project if tourism was not important or if we did not know its importance? Therefore, this needs to be done. This information can be found in the ministry of tourism, the internet, books, or some travel agents.

What is and why do we use scale models- I need to find this out secondly mainly because it would be more beneficial to know why we use these models and what they look like, and to find examples and know what I will be creating before I actually do the research about what to do in Phnom Penh. This would be because I would be able start formulating ideas in my head once I do my research. I will also get an idea of what I am creating. To find this information I can use the internet or ask advertising companies.

Read the article as to why Phnom Penh is the second worst city in the world- I need to do this thirdly so that I know what was wrong in the first place so I get a clearer idea of what I am doing and what I should not include. I can find the article in the Phnom Penh Post and at the National Geographic website.

Find out what there is to do and see in and around Phnom Penh- I need to find this out fourth, so that I know what I will be dealing with, and what I can use in my display, since I would have researched about it already. Knowing what a display area should look like, I can begin formulating some ideas in my head as to what I can do. I can find this information at travel agents, the internet, hotels, tourists, and some tourist magazines.

Looking at examples of booths and other countries advertisements- With all my main research being done at this stage, I can derive further ideas from real life examples. This will provide me with inspiration as to what my final product can look like. This will also be a great transition to the design stage because this will give me my final boost of inspiration. I can find examples on the television, walking around, travel agents, and the internet.

Language Learning Tool EXAMPLE Research Plan:

Learning a New Language – Creating a Language Learning Tool

To what extent can I enhance the learning experience of others?

Language considered teaching: Spanish

Options for the Subjects and categories to be taught

Parts of the body, Culture, Colours, Shapes, Dialogues, Numbers, Vowels (works well for Spanish), Greetings, Simple Phrases, Basic Vocabulary, Higher leveled vocabulary

Preliminary Questions that come to mind:

- How does the learning process vary between different groups or targeted audiences?
- How will I have to alter the product to fit with the different groups or targeted audiences?
- How will the attention span of different target audience vary? How will this alter my product, will I need special animations or features?
- How will the skill level of the target audience affect the product?
- Can I possibly use one product that can be advantageous to two targeted audiences?
- How will information vary from different sources such as internet versus people versus textbooks
- How do people learn second languages best?

Ways of Gathering Information

- Through interviews who specialize in teaching people languages, such as the teachers at the school or private tutors of translators outside of the school.
- Through papers and different websites advertised on EBSCO
- Interviews with people who many not necessarily teach a language, but deal with the selected targeted audience.
- Through Internet sources and research studies, for example on how people learn best etc.
- Translators (though this may not be a reliable enough source, since translators are often erroneous grammatically)
- Vocabulary and phrase books
- People who speak the language, such as teachers or outside sources.
- Second Language textbooks

Different options for a targeted audience.

Elementary Students, High school students (completely new to the language), High school students (with basics down), Adults and Seniors (completely new to the language), Adults and seniors (with basics down)

Anything else that will help guide people and get them started:

Animations, Videos, Images, Different activities, Music and catchy songs and music videos.

Instructional Video EXAMPLE Research Plan

Area of research	Priority and reason
Function	1 – Highest. When doing research, I will see if there are specific things my video must include. This may be comments from viewers, who demand for something specific, like an explanation for one of the hand or cup movements.
Quality	2 – High. The quality of my video will depend on that camera or filming object/ camera I will use. This is because if I film my video with a professional film camera or a DSLR camera, the quality of the movie will be greatly enriched. Further I rather prefer not using one of the smaller cameras, as they are not as ideal for filming.
Materials and components	3 – High. Which cup will I be using? Which colour has it? What size? What will its form be? This I should ask my end user in the form of an interview, so I can make easily a decision on what cup I should use. I will have a short interview in person and ask them the question on which cup they would prefer.
Length	4 – Medium. Additionally I will be looking at the length of the video, by seeing how long the other videos are that were uploaded on to you tube. This will make the decision of mine easier, but it will also depend on the context of my video and how long it takes me to explain individual hand movements.
Performance requirements	5 – Medium. My video needs to be saved and exported in the form of a video file, so my end user is able to open it up as a movie clip, which is similar to the YouTube videos. Instead of making a slideshow or diashow, which wouldn't be as practical for my video, my end user is able to move back a few seconds of the video to watch one hand movement over.
Original	6 – Medium/low. I will also maybe include a small video clip of the actual movie scene with the main character of the movie “Anna Kendrick” who performs her original cup song in front of an audience. This will show my end user how it should look and sound like in the end, once they learned how to do it themselves.
User requirements	7 - Low. As I already know for whom I will create and design this product – a video tutorial, I will be able to plan in advance how the video and its design should look. For example could I have a pink background for my introduction slide, if my end user wishes for pink.

Jewelry Box EXAMPLE Research Plan

What will I research?	How will I gather the information? PRIMARY SOURCE	How will I gather the information? SECONDARY SOURCE	Why will I research this information?	When will I do this?
End user (My Cousin)	INTERVIEW I will interview my cousin to find out what colours she likes and what kind of drawings or graphics she wants on the jewellery box. What shapes does she want it to be and what features or any other extra things does she want on there.		I want to find out what items are to be stored in the jewellery box, how many of each items does she want and drawers, hanging space, mirrors etc. I also want to find out her preferred design ideas and colours so I know how to make it for her.	Sept 22nd
Existing designs (field research)	PHOTOS I will go to the shopping malls to take photos of existing jewellery boxes. This will help me by seeing different designs to help me with some ideas for my own design.		This will help me to get better ideas of the designs on the market. I can compare designs, colours, finishes, materials etc. I will also look at the sizes and interior of the box to see what is inside, and how they function – doors opening, drawers etc.	Sept 22nd
Wood joints		INTERNET After researching the types of jewellery boxes and the materials that were used for making it. I will look on the internet to research what kind of joints are best to use for making my own jewellery box and make sure that it is strong enough to hold all the pieces together.	I need to find suitable joints which are practical, easy to create, functional, serves its purpose, and look good. The joints are important as it will hold my box together. It will need to have special joints to make the drawers work, shelves fit, etc.	Sept 28th
Measuring	MEASURING I will measure my cousin's items of jewellery she wants to put into the jewellery box so I can be sure that the final design fits into the required space.	ANTHROPOMETRICS – internet I am also going to find some anthropometric data from the Internet. I will focus on the size of a 13 year old girl's hands and fingers.	I will measure the jewellery to be able to work out the size I need it to be. If I measure the biggest items then this will allow all sized items to fit into the box. I also need to find out the average size of a 13 yr old girls hands and fingers to allow me to design the compartments and drawers which she will be placing her jewellery into. This will help her to remove and place the jewellery easily.	Sept 28th
Materials (Field research)	PHOTOS I will have to research and find out what material I will use to make this project. I will check the workshop if those materials are available there or not, otherwise, I will have to go to stores like IKEA or other hardware stores to get the materials ready.		I need to find the appropriate materials. They need to be the right size and look good. I need to choose suitable material which I know my cousin likes, but I am also able to make the correct joints from. This is important as I want it to be fully functional, but also look great.	Oct 1st
Finishes (Handles, hinges & locks)		MAGAZINES I am going to buy a range of magazines to find pictures of handles and locks I can use for my design. I will also collect free magazines from furniture shops to see a variety of pictures.	This is so I can compare designs of the handles to see which will look best on my box design. It is also to find out which will have the most suitable style of locks so it can lock as she wants it to.	Oct 6th
Target market	QUESTIONNAIRE I will hand out a questionnaire to a suitable		This will allow me to get good feedback on what the majority of people think is the best size, colour,	Oct 8th

	<p>range of people similar to who I am making it for. I am going to make this for my cousin who is 13, so I am going to hand out my questionnaire to 20 female students at school between the ages of 12-14.</p>		<p>design etc. for my design. It may even give me good ideas I had not thought of. I will summarise this data to find definite results to my research.</p>	
Disassembly	<p>EXISTING DESIGNS AND/OR SIMILAR PRODUCTS I am going to disassemble existing jewellery boxes. My little sister has one, so I will use this. I also have an old one which I do not use anymore, so will take it apart to observe and analyse. I am also going to disassemble a garden chair to research the collapsible mechanisms used.</p>		<p>I will disassemble to be able to clearly see all of the parts to the jewellery box. I want to see how the drawers are joined together, how the handles are attached, how the hinge works, what joints have been used to construct all of the different parts. By disassembling the garden chair, I will see how I can design the collapsible shelves in my design.</p>	Oct 10th