RESEARCH GUIDE

How to Use the Internet for University Work

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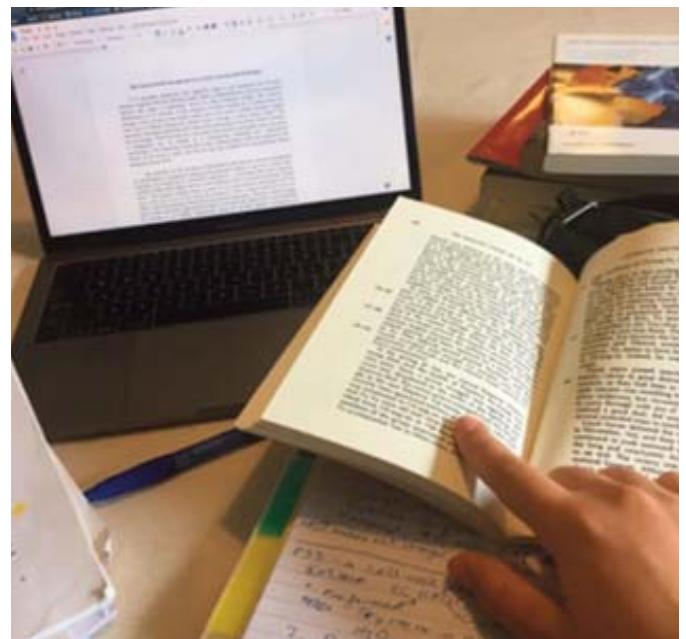
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Spanish version available

The internet. You enter a dense jungle that makes the Amazon Rainforest resemble nothing more than a humble garden; its magnitude is as impressive as it is overwhelming. Your professor, an exploration guide, hands you your task: «I need you to bring me seven cacao seeds, three aloe vera stems, and one handful of gold from the lost city of El Dorado.» Millions of ideas run through your head, every single one of them related to the fundamental question: how will I be able to find everything, and where do I start? Many of us have found ourselves in this situation, moments before beginning a research project through the expanses of the most gargantuan platform to date – the internet. Through a detailed, step-by-step walkthrough of the process, those cacao seeds and aloe vera stems will be much easier to find! It's all about learning how to navigate the vastness of the web, something that, by the end of this article, we hope you will have learned. And if you never find that lost city, you will have a report that is worth all of the gold that it was known for.

The task of investigating successfully through the web can initially present itself as being a near-impossible mission. It is known that, in recent years, access to information has been democratized almost everywhere, providing the general public with an overflow of information. While this represents a positive change in our world, it can also be overwhelming: it is

not hard to feel lost in a sea of data and information that seems to approach an infinite horizon. And as the student researcher goes deeper into this sea, the contradictions, unfounded claims, and irrelevant information increase. Therefore, it is necessary to have a navigation guide - a clear action plan for the project, which can be broken down into the eight steps below. By focusing on each aspect of the research process with due attention, not only will you produce quality work, but you will do so effectively so that when the deadline approaches, you'll be choosing the right movie to watch rather than the right words for an extension request.

1. Positioning your research

When dealing with university-related academic work, positioning your research objectives is of paramount importance. Although it may seem obvious to think that any project starts with familiarizing yourself with the topic before focusing on the content, we can sometimes get carried away with elaborating unripe ideas. Often, this occurs either from a particular affinity to the prompt, or lack of enough time dedicated to the task at hand. More than working only to check off a task from your to-do list, we should be looking at the project as a lear-

ning experience. Therefore, your journey towards completion starts with asking yourself the following question:

What do I already know about the topic?

From there, you might also care to think about how previous investigators have tackled your research question: not only will this help you avoid redundancy and unoriginality, but it can aid you in thinking about new ways to provide a creative outlook both in terms of ideas and reasoning to your final project. Of course, you will also need to consider whether this is an individual or a group project, and likewise, if the prompt is handed to you or can be chosen under certain parameters. All of these questions directly implicate the planning part of the process, which coincidentally (or not!) happens to be the next step.

2. Planning ahead

Once you have a concrete idea of your research project, it is time to make a personal decision:

How will I work on it?

While this question can have a plethora of answers, it is suggested to focus on two possible routes to take: the marathonist vs. the sprinter mindset. A maratho-

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Using the Internet as a Platform for Academic Work:
A proposal from Nicolas Vergara

While it is true that our lives have been increasingly digitalized in recent years, our experiences through confinement and the eventual post-pandemic society that we are currently striving towards have truly highlighted the importance of the wide range of technological platforms available today.

We must be mindful that, not long ago, the access to information was restricted to those who had the means to receive a university education. Through the democratization of knowledge, a great majority of society is now able to benefit from the plethora of information readily available in the Web. Despite this, we are still unfortunately able to find regions in the world which have limited or no access to the internet, a harrowing fact from a time when we have seemingly moved from advocating for network access to the efficient use of it.

For university students, the inefficient use of technology can often be seen through the indiscriminatory use of sources in the production of a research paper. This not only worsens the quality of the final work, but it also results in a loss of the time devoted to organizing and preparing material which fails to meet the set objectives for the project.

When considering digital skills, it is essential to mention the correct management of resources found in the internet. Through this, it is important to understand the effective management of information gathered – which goes along with taking into account the proper measures needed to engage in the respectful use of all sources.

As per the magazine's spirit, we aim to give our students space to share their work, reflections, and opinions. In this proposal, Nicolas Vergara, from the University of Toronto in Canada,

writes a proposal regarding the efficient use of the web in the creation of university-level research papers. Both an interesting and pertinent read when considering the large implications of technology in our day-to-day lives during the pandemic, it addresses the academic, personal, and emotional aspects tied ramifications of a high-pressure, high-stakes university assignment.

nist will look to separate the project into short, recurring periods of time, whereas a sprinter is comfortable with allotting a couple of nights solely to the project. Think about your usual work habits: are you someone who leaves everything to the last moment voluntarily, or is it from the struggles of procrastination and inefficient time management? If you are confident in your abilities to focus on projects in concentrated chunks of time, you would be known as a sprinter. On the other hand, if you feel most comfortable with a gradual process towards completing a long project, in order to avoid the stress of a looming deadline, then you have a clear marathonist mindset.

Keep in mind that most people are not purely marathonists or sprinters, though. Your work habits can be adjusted to the type of work you might have in front of you, as there will be tasks which you'll be more willing to complete, and thus be happy dedicating more time to. This is why it is important to first think about the project, and then separate the time that you feel is necessary to complete it in the most comfortable and productive way possible.

One of the most important aspects of planning in group projects lies in organizing the workload. In this case, creating a common agenda as well as a shared document in sites such as *Dropbox* or *Google Drive* is highly recommended. It is vital that all team members are equally implicated in the production of the work, and for this, communication is quintessential.

3. Searching for sources

Finding reliable online sources can be your first pitfall when writing a research paper. To be able to correctly filter out untrustworthy documents, it is essential to get rid of the notion that 'everything on the web is useful and true'. It is not far-fetched for students to see the Google search bar as a sort of universal consultant: while convenient, basing your report from the first page of results is not always fit for academic work. A significant quantity of information that is on the internet can be unsupported or superficial, therefore inhibiting the final product from being one of high academic value. This is why it is recommended to opt instead for repositories such as Google Scholar, JSTOR, PubMed, Scopus, Psicodoc, PsycINFO, WoS (Web of Science), and Cochrane Library Plus, among others. Each of these data bases are specialized in distinct academic fields, so it is important to familiarize yourself with those that are most adjusted to your particular discipline.

Another upside to using repositories is that they are, more often than not, compatible with reference management software like Mendeley, EndNote, or Refworks, which help with managing your bibliography. Learning how to use these tools will be a gradual process through your time in university. Do keep in mind, however, that it will most likely not be needed for the first years of university but will definitely become useful for postgraduate study.

When starting to look for sources, Google Scholar is a solid first step, as it not only restricts your search results to academic material, but it also has the option of providing references for your chosen sources, through clicking on the 'speech marks' (") icon under articles shown in search results. When conducting a search, it is also important to be descriptive: placing key words in between speech marks can further filter your results.

Considering sources outside the world's most popular search engine, it is increasingly common for universities to have their own repositories. In them, you'll be able to find a great deal of information, including publications created by researchers from your institution. Not only is it a great opportunity to learn more about what your professors do outside of the lecture halls (you could find ongoing investigations which you'd like to participate in, and familiarizing your knowledge of a professor's work before reaching out never hurts!), but it also adds a more personalized touch to your work when presenting your ideas.

4. Setting-up

Once you've chosen your framework, modus ope-

randi, and have your list of sources ready, it is time to start heading towards the finish line. Remember that, while a marathonist will normally take more days to complete a project relative to a sprinter, the time dedicated will essentially be the same. That being said, we need to be aware that, in both cases, there should be ample time allotted to each step of the process in order to produce a solid piece of work. Taking the 'express route' is never recommended, not only because the end result tends to be little more than a copying and pasting of information, but also because you would be missing out on the learning experience of the process, which goes hand in hand with the opportunity to produce an elaborate, creative, and thoughtful piece of work.

That is why, in both cases, it is important to schedule your time, which makes creating or having an agenda rather useful. With it, not only will you be able to devise blocks during the following days for the sole purpose of the research project, but it will also aid in keeping track of the other obligations that you may have during that time. We need to be pragmatic, and honest with ourselves – as much as we may want to be, we're not superhumans! In those days which are most packed with lectures and obligations, be considerate with yourself, and schedule time for exercise and mindfulness instead of an evening of research.

Setting up also represents creating the document(s) which you'll be writing the investigation on. When

considering where to make it, keep in mind the platforms that work best for what you have in mind. For example, Microsoft Excel and Google Sheets are best for compiling lists of information, making tables or graphs, and for working with the reference management software mentioned above. And while we often work with programs which we are most familiar with, if you have time on your side, it would be a good idea to try to find new platforms to use, as a great way to jump out of one's comfort zone while expanding your digital skills. Part of the responsibilities of being in the academic sphere is to be up to date with the technology at our disposal!

5. Organization

Once your document is created, it is necessary to prepare it for whatever purpose it may need to serve. In other words, if you'll be needing tables as part of your investigation, have them ready. Fill in your headings, separate the document into different sections, and generate all of the formulas that you'll consider useful. Now's the time for an outline of your work, and make sure that you do it in a way that benefits you personally! If you already have key points in mind, write them down under the section that is relevant. And if you're working with more than one document, it is recommendable that you have all of them grouped in a folder which is easily accessible, to avoid misplacing files.

Here, you should also be analysing the sources selected from the search made in step three. Try and have a list of sources which comple-

Read.
One of the key factors in producing your best piece of work, which has also been made easier through online means, is reading. The act of reading, and re-reading for that matter, should be present in every step of the production process, as it provides constant revision to your work. Keeping this in mind for your notes, sources, and writing itself will make it easier to organize, create, and develop clear points.

ment themselves at hand, and which, above all, sustain your paper's main idea, as they will be supporting your theoretical framework.

6. Starting your report

This is usually the most difficult step. You have already outlined your work, created the necessary documents, and organized them so that now you can dedicate your time solely to the research and development of your work. There is nothing more to be done but to start your report.

It's a good idea to incentivize your progress! Before you start, set a realistic and feasible goal for yourself, and avoid getting sidetracked until you accomplish it. If you feel like you need some sort of supervision to stay focused, try using website blockers such as StayFocusd, WasteNoTime, and Leechblock, as these are add-ons which temporarily block access to irrelevant websites, as well as social media networks on the internet. You should be doing everything you can to help yourself stay focused on your task and, ultimately, reach your goal. Every university student has a busy schedule packed with courses, extracurriculars, and other obligations, so it would be a shame that due to procras-

tination, you end up working for three hours on a task that could have been done in less than an hour and a half.

7. Developing your project

Moving forward also means constantly revising your progress, both regarding the writing itself and the quality of information that has been found and analyzed. If working with scientific data, for example, try comparing it to other credible sources in order to see if they showcase the same result or fact. In addition, it is important to always document the information that one plans on using! Save the link and write a short description of the source. This will make it easier when creating your bibliography at the end of your work.

Moreover, you could even choose to cite your work whilst writing, instead of only focusing on it when finishing the core of your work. For example, if you use an article written by an author, «Vargas», who has a theory about the topic your work is about, you could add the citation on the same page, to have a record of where you used his argument throughout your paper. By doing this, you would already have the arguments and contributions taken from your sources localized and

Controlling mental fatigue

We need to be aware that, after a given amount of time, our productivity will gradually diminish. Then, it is a good idea to take a break: get up, have a snack, or exercise! It's preferable to leave the workplace when taking a break, so that your brain is able to solely associate that space as one for work. You should also try to avoid the use of electronics during your resting period, as your eyes need time off from the LED screens and artificial light. Keep in mind, though, that before leaving for a break, you should make sure that your work is saved digitally. Many platforms such as Google Drive save your process automatically!

It is also important to respect your rest, A good rest is as important as a good working period, because the quality of both depend on their counterpart. The university student needs anywhere from 7 to 9 hours of sleep; without proper rest, your academic productivity and health will worsen.

organized within your work. Make sure to properly cite all of your texts, even if you will go back and reorganize them later! Once finished with your writing, you should meticulously go through all of your in-page citations and bibliography, to catch any typos or formatting errors. Remember that all of the references that appear in the bibliography must be used within the text or work.

8. Wrapping up

You will eventually reach a point where you'll consider your work to be done. In this case, review the research prompts: have you completed all of the objectives? If you believe so, congratulations! A worthy next step could be to share your paper with a university librarian or a person of trust that is familiar with the topic (such as your laboratory PI, for example), in order to get a second opinion on the clarity and robustness of your arguments, as well as your referencing. Keep in mind, however, that we should be careful when sharing our work, as it is usually not a good idea to have a classmate look over it: it could even be considered as an academic offense! Always be mindful of the course indications to see what is and isn't permitted.

Scan the document one last time to make sure there are no formatting or grammatical errors. In the case that the project has a word limit, be careful not to be outside the permitted range; Microsoft Word and Google docs have automatic Word counters as part of their program. After saving your document, you might need to convert it into a PDF or export it in a different format: change the file name to make sure you can recognize which one you have to turn in! And make sure that your work is given in the right place and at the right time. Many professors will subtract points from a work that is not correctly submitted, so do your best to avoid losing unnecessary points.

It is recommended that, in order to build your foundations as a researcher, that you should try whenever possible to center your work around a focused topic of interest. This will build familiarity for your potential future specialization, and can be worthwhile evidence of early commitment to your field. Make the most out of university assignments that you can't opt out of, and take advantage of the learning component that they provide.

Well done! You finally finished your work. As long as you put in all of your efforts during the creation process, feel proud, because a university-level research paper is never easy, and it probably won't be your last. So, keep trekking onwards and upwards, because your next professor won't just be asking for seven cacao seeds, but rather a culinary-grade chocolate bar!