Writing a Literature Review and/or Need for Research Statement

Part of writing a full and detailed project proposal.
Why explore the past?

Before undertaking a new project, it is often important to perform a literature review and/or write a need for research statement in order to:

- Avoid doing something that’s already been done.
- Learn from the experiences of those who have already worked in the area.
- Look for gaps in existing work that you can help fill.
- Better define what you will be doing and why.
- Start to think about targets for disseminating your results.
How broad and deep to search?

• There are times when you will want a very broad review of previous work in an area.

• There are times when you will want to dig down deep on a very narrow aspect of a domain.

• There are times when you want a little of both.

  – For your project proposals, you should try to explore both. Start with a broad search of your area of concern. Give a “big picture” overview of things. Then, select the works that are most related to yours and dig a little deeper.
Relating Previous Work to Your Project

Let’s say that you have found a paper by John Smith that talks about something related to your project. Don’t just say that Smith did XYZ.

– Yes, say what Smith did.
– Also, explain how Smith’s work directly or indirectly relates to your intended work.
– Say whether Smith’s work left something undone that your work looks to address.

• Hint: If Smith’s work left something open and your project isn’t going to address it, you should be thinking about how your project could address it.
Learning from the work of others.

- Aside from making sure what you want to do hasn’t already been done, reading what others have done can help you plan out your project.
- What methods and tools did others use that you can apply to your project?
- What techniques did others use to analyze and assess the quality or impact of their project that you could use?
- Did you see any paper-writing styles and structures that you felt were effective and could use as models?
Give credit to the work of others.

• If you make a statement such as “It has been shown that XYZ is true.” make sure you cite your source for this claim.

• Any time you refer to the work of others, users the words of others, or summarize the work and words of others, GIVE THEM CREDIT!

• Proper citations are about more than using the correct style guide. Proper citations includes making sure that you cite all resources used.
What, why, who, why, why, why, what, how?

Some of the biggest take-away answers that your project proposal document should provide towards the start of this semester are:

– What is the context of this project?
– Why is this project interesting?
– Who has worked in this domain before you?
– Why have you decided to take the project in the specified direction given the different directions available?
– Why do you feel you are qualified the person to be exploring this direction?
– What skills will you need to gain to accomplish this project?
– How will you accomplish your project?
Thanks...

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