

A Ph.D. Degree – So Far, Yet So Near

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Let us begin with some good news! There exists a consensus that the pains of obtaining a Ph.D. degree are really worth it. But this consensus is based on the condition that we must take into account the views of only those who have already obtained a Ph.D. degree! The Ph.D. candidates must draw some comfort from this consensus. A day would definitely come when they would be a part of this consensus. How soon would that be? To answer this question for those who know how to play *cricket*, let me quote from the cricket *gurus*: “One must stay at the *crease* and the *runs* would come by”. Let me now also translate this for those who find *cricket* more difficult than earning a Ph.D. degree! We have to simply stand our ground and the breakthroughs would definitely come our way. Progress in Ph.D. is a highly non-linear function when plotted against time. Breakthrough is more of a thing that happens when certain threshold is reached. It may not happen for very good reasons, yet it may happen for no good reason at all. So, “keeping *patience* while remaining *focused*” appears to be the key to success.

After having completed my Ph.D. with all its usual ups and downs, let me say the following with my own experience to back it up. Even if I were forewarned that I would never be awarded a Ph.D. degree, I would have still gone after it just for the experience that it has given me in return. In fact, if there were no reason other than just gaining the experience of it, going for a Ph.D. is still worth it.

Having said that, let us now discuss the ways that might possibly make easier the way to one’s Ph.D. The very first step of choosing a Ph.D. problem is the most crucial one. There are two ways to go about it. Look for the easiest possible problem. But then you would be expected to give the best solution to it. On the contrary, if you choose a difficult problem, you may get away with any reasonable solution. It is like choosing between crossing a 2 feet hurdle or another one which is as high as 10 feet. With a 2 feet hurdle, you need to show rhythm, poise, speed, grace, style and everything. But, in case of a 10 feet high hurdle, if you just cross it somehow, you are done. In essence, this first step is going to test your love for challenges. However, a proper balance must be maintained. Don’t choose too difficult a problem either. Did I tell you to choose crossing a 100 feet hurdle? We must remember that “Ph.D. is not about doing research; rather it is learning how to do research”. I have heard that the Ph.D. degree from some of the best schools in the world reads something like “Alice is admitted to do research”! So, choose a problem which is just good to earn a degree. Rest of the research problems we can afford to tackle during the rest of our life.

After having chosen our problem, we need to go about solving it. I cannot provide the solution as such, but I can give out some tips that I found useful for myself. Some of these tips might appear pretty straightforward, but then we have still been neglecting them. In that sense, we want to put in proper perspective what appears to be sheer common sense. After all, isn’t common sense the sense which is most uncommon!

Never give up on any line of action too soon. Never discard an approach until you have exhausted its chances completely. Quite amazingly, the interdisciplinary

research is the easiest one. Very often, the techniques of one area give surprisingly good results in the other area. You have to learn to use things to your advantage. So, go through any literature that might seem even remotely related. After all, reading never hurts. Learn to read research papers just as we read the most interesting novels. This may even go to the extent that you may keep aside a research paper every day for your bed time reading too! We must also understand that digesting a good research paper in one go is almost impossible. It takes several iterations of reading it, which at times, may even make inevitable a pen and a paper to work through it. The best understanding takes place when you prepare to present the paper in front of some audience. It would also be a good idea if you write a good survey paper towards the end of your literature survey. Quite often, people do get recognized with their survey papers. That would not only give you a good background understanding but also provide you with that extra confidence to work in that area.

Maintain a notebook for each and every thing that you do and is related to your research. In other words, never use loose papers for anything that has something to do with your research. You never know when you are going to need that again. Each session with your advisor must also be properly documented. At times, even the jokes they crack, no matter how cruel or dumb it might appear, have something to learn from.

We have to learn to take things into our stride. For instance, there cannot be anything worse than that of your advisor quitting his job midway leaving you hanging in between. Even in such trying times, try to look for the pluses in it. Who knows you might be able to communicate a few research papers on your own before you hook up with the next advisor. You can also learn to be on your own then. The expertise of the new advisor would be useful for the furtherance of your research. These are some of the many possible blessings in disguise.

Also, do not forget to keep writing whatever you do. Don't wait for it to mature before you pick up your pens (or keyboards now!). The least it is going to give you would be that writing your thesis would just be a cut-and-paste job from your own archive. Everything from what you have been writing may not be included in your thesis. But then, it would give you the much needed writing practice, possibly coupled with some extra research papers too.

When to say that you are done with your Ph.D.? This is not an easy question to answer. Here are some clues. As soon as you start telling your advisor "what we can do next", you can start sensing that sweet smell of "I am done". Some of the experienced lots also say that as soon as you learn how to make 25 hours out of the 24 hours, you are done with your Ph.D. So, in that sense, Ph.D. is about learning the time management skill. Ironically, the best ideas start coming when you are nearing the conclusion of your Ph.D. So, the rate of generation of novel ideas could also be taken as a measure of the quanta of your Ph.D. work. However, practically speaking, you can try putting your original work in writing. If you are able to get some three chapters of 20-22 pages in double space, you can call it a day.

To conclude, let me give the following interesting fact that I read somewhere long back. "When we study and we realize we know everything, they give us the Bachelors degree. If we study further, and as soon as we realize that we know nothing, they give us the Masters degree. We keep working and as soon as we realize that neither we know anything nor does anyone else, we should be given the much awaited Ph.D. degree!" So, here you go now.