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HOW TO READ AND GET THE MOST OUT OF A JOURNAL ARTICLE



Journal articles are read by researchers or students for various reasons, but mainly, for reviewing for conferences, classes, research projects, or simply to keep up with the latest developments in one's field of interest. However, effective reading skills are rarely taught or brought up for discussion as a prominent issue that needs more attention. Thus, many of us spend hundreds of useless hours trying to mas-

ter this skill. Why not to save ourselves time and effort by following just few simple steps?

First of all, before you start to read anything, think about why you are doing so. This is quite important as your intentions determine the effectiveness of your reading, so your needs influence how you will read an article, book – literally anything. However, if you just need to have an overview in order to get an idea of what you can use for your own research a quick skim–through will suffice. But, if you are planning to present certain findings from journal articles you might need to dig into it more deeply. Take into account that maximizing what you read isn't just about adjusting the surrounding environment that allows you to concentrate better. You need to learn how to react to what you read to become a mindful and active reader! How to achieve this? Each of us may develop certain techniques from scratch. Also, we might find mentors who can guide us how to read in such a way that we might benefit from our readings the most. However, we may as well

try to save ourselves lots of time. How? By learning how to react to what we read so acquiring certain techniques and adapting them into our everyday life (Hanson & McNamee, 2000).

When focusing on an issue of effective reading, an approach outlined by Keshav (2012) might come to one's mind. He presents the effectiveness of a "three-pass" approach which can be applied not only in article reading, but also when doing a literature review. The main idea centers on going through three passes that reach the purpose of your reading. By using this method, the common approach that one should read a paper from top-to-bottom is not carried out here. Specifically, the first pass gives a reader a general idea about the paper and the second one helps to grasp its content. It is only the third pass that allows one to understand an article in depth. This approach is not only helpful for estimating the time required to read a set of papers, but also for deciding on how much in-depth you want to research the paper (Keshav, 2012). Thus, thanks to implementing this approach one can become a mindful and active reader by spending less effort and time on one's readings. Sounds good, doesn't it? Now, let us go through each pass carefully in order to have a guick glance at the process itself.

Let's focus on the first pass at the moment. It centers on getting a bird's-eye view of the read paper so performing a quick scan that takes up to 5–10 minutes. Moreover, it helps to determine whether the paper will be useful or of interest and make it easier for you to validate some of the author(s)' claims. At the same time, simply skimming through the paper allows you to gauge the level of knowledge you require to fully understand it. It is worth noting that reviewers use this method quite often to decide whether they should accept or decline a manuscript in a review process. That is why, it is commonly emphasized that one should pay extra attention on preparing a clear, concise and comprehensive abstract as well as choosing good titles for sections and subsections in one's manuscript. With this in mind, let's follow the five simple steps of the first pass:

- 1. Read the title, abstract, and introduction with care.
- 2. Ignore everything apart from the section and sub-section headings.
- 3. Go through all the available mathematical/statistical content to determine the underlying theoretical foundations of the paper.
- 4. Go through the conclusions.
- 5. Browse over the references and mentally tick the ones you've read already.

Now try to answer five C's when you are done (Keshav, 2012, p.1).

■ Category: What type of paper is this? Is it an experimental study? A combined analysis of previous studies? An introduction of a new methodology?

- **Context**: Which other literature papers is it related to? What were the theoretical bases that were used to analyze the problem?
- Correctness: Are the assumptions valid?
- **Contributions**: How does the paper contribute to the existing scientific understanding?
- Clarity: Is the paper well-written and easy to understand?

Now that we have gone through the first pass, let's have a look at the second one. Here, we dig into the paper more in-depth but omit details such as proofs. It is helpful to mentally summarize the text into key points and make notes as we read. But do not forget to write down terms you do not fully understand or some inquiries you would want to ask the author himself. At this stage, it is important to (Keshav, 2012):

- 1. Examine presented figures, diagrams and other illustrations, by paying special attention to graphs. Answer these questions: Are the axes properly labeled? Are the results shown with error bars, so that conclusions are statistically significant? (Keshav, 2012, p. 1–2). This will help you to distinguish good work from those that are poorly done.
- 2. Do not forget to mark references you find relevant. It is important for later readings and a great way to learn the backgrounds of the studied paper.

Now, we should be able to summarize the paper into a few short key points along with some supporting evidence. The depth of reading during the second pass is appropriate for someone who may or may not be familiar with the field of the paper in question, but is interested in a paper to some extent and finds it useful. This process can take up to one hour of work and requires a moderately high level of concentration (Keshav, 2012).

The third and final pass is helpful for readers who need to fully apprehend the contents of the paper, as is in the case of manuscript reviewers. What is the most important here is to make an effort to "virtually re-implement" the paper – that means to re-create the work and assumptions of the authors. This pass requires a huge attention to details as innovations and assumptions. Moreover, some hidden authors' failures may be identified here. Through the process of virtually re-implementing the work you challenge your thoughts and redirect them to approach the paper proactively. Here, you are also focusing your attention on writing down possible ideas or recommendations for future research. The third pass can take from three to five hours for beginners and up to one hour for an experienced reader (Keshav, 2012).

What should be noted is that the three-pass approach can also be considered as a really helpful method to use when doing literature research. Usually, we focus our search in the field of our specialization or interest, but not always. The facts are that in order to find the right papers for

our projects, we need to dig through tons of research articles. How do we go about using this approach in literature research?

- 1. Search using an academic search engine (e.g. Google Scholar) by typing in specific keywords you have found from three to five recent papers on the topic. How do you find the keywords? Use the first pass here get the gist of the paper, then go to the list of referenced papers presenting latest works in the field. If they direct you to recent literature paper you can just search for it, read it, and congratulate yourself for being lucky.
- 2. If you have no access to such a paper, look for repeating author names and shared citations in the text (usually the main researchers or papers in the area). Find their articles, set them aside and go to the authors' websites to see what they have published recently or where they have done so. These steps are useful not only for acquiring needed data, but also for identifying top conferences in the field.
- 3. Next, go to the conferences websites and browse through their latest proceedings which will allow you to identify latest, high-quality work in the field. Do a first pass and identify the most relevant works for you now. Then, along with those papers which have been set aside previously, perform the first and the second pass now.

Thus, as we can see, this approach is not only useful to help us out in becoming mindful and effective readers, but also when doing literature research. For those who are interested in indexing read articles in order to quickly refresh them later, a Literature Review Matrix created by Ian H. McLean (n.d.) should be considered here. It is a short report sheet created on the basis of the three-pass approach. Additionally, to broaden our horizons in the process of becoming mindful readers, you can refer to works of Jones' (n.d.), Roscoe's (2007), Hanson and McNamee's (2000), and Whitesides' (n.d.). These papers and/or websites are devoted not only to increasing our effective reading ability, but also to know more about various research skills. You get useful tips on not only how to read, but also how to write good papers. So why wait? I am starting my journey right away. Will you join me?

References

Hanson, M. J., & McNamee, D. J. (January, 2000). Efficient reading of papers in science and technology. Retrieved from http://www-bac.esi.umontreal.ca/~dbin1001/h04/notes/how-to-read1.pdf

Jones, S. P. (n.d.). Research Skills. Retrieved from http://research.microsoft.com/enus/um/people

/simonpj/papers/giving-a-talk/giving-a-talk.htm

Keshav, S. (June, 2012). How to read a paper. Retrieved from http://blizzard.cs.uwaterloo.ca/ke-shav/home/Papers/data/07/paper-reading.pdf

McLean, I. H. (n.d.). Literature review matrix. Retrieved from http://pl.scribd.com/doc/98246252 /Lit-Review-Matrix

Roscoe, T. (March, 2007). Writing reviews for systems conferences. Retrieved from http://peo-ple.inf.ethz.ch/troscoe/pubs/review-writing.pdf

Whitesides, G. M. (n.d.). Whitesides' Group: Writing a paper. Retrieved from http://www.che.iitm.ac.in/misc/dd/writepaper.pdf