The peer review process is one of the cornerstones of academic writing, and is a way of ensuring that the information in any academic publication is verifiable and of a good quality. The basis of the peer review process is that any research paper is forwarded to a group of experts in the field, and they assess its quality, accuracy and, often, novelty. Whilst most people are aware of peer review processes for scientific journals, they are also used for grant applications, conference papers and textbooks for University Press-publishers.

With the amount of poor quality research available on the internet at the moment, it is vital to ensure that any sources that you use are from a peer-reviewed publication. It is also handy to understand the process, providing you with another tool to assess the quality and validity of information. This is extremely important because of the way in which research is built up, with all research relying upon the findings of previous researchers in the field. If a piece of research is later found to be inaccurate, flawed or a fraud, then the viability of all the research built upon it is brought into question.

How the Peer Review Process Works

Whilst every journal or grant application process has its own protocols, they all follow the same basic structure. The editor reviews a stack of papers for submission. This editor usually has some expertise in the field, so can filter out the very poor quality papers, to avoid cluttering the peer review process with substandard research. The remaining papers are sent to referees for further approval, usually to two leading experts in the field. They approve, reject or send back the paper to the editor, with recommendations for improvements. The vast majority of papers require some degree of modification before publication. The editor, usually with a good knowledge in the field, although not as in depth as the referees, will pass the paper, along with the comments, back to the author for amendment. Usually, when the author returns the paper for the second time, the editor will make the decision himself, without re-referring to the peers. Generally speaking, the editor's word is final, and the referees are there on a purely consultation basis. Ideally, all stages of the process are independent, and the referees do not consult with each other, nor are they even aware of each other's work.