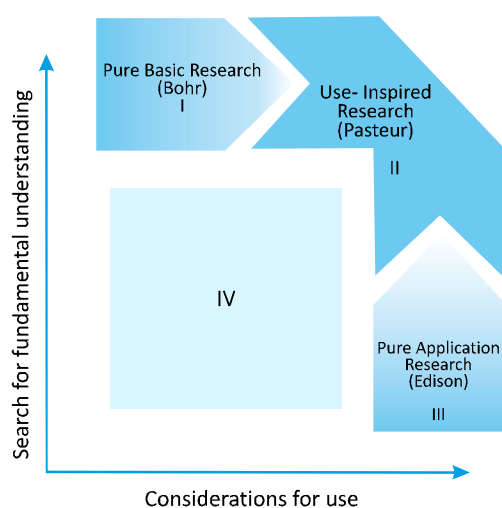




Stokes separated this plane into four quadrants. The top left quadrant represents the classic notion of basic research and the bottom right quadrant refers to purely applied research. This first quadrant is called Bohr's quadrant because it has much in common with the early work of Niels Bohr on atomic structure.

Quadrant III is named after the work of Edison that deals with traditional applied research. Researchers under this quadrant are more interested in making something work and solving a practical problem; and less concerned with connecting research to a larger theoretical heuristic.



The second and most significant quadrant is Pasteur's Quadrant. Pasteur's work was devoted to solving problems—to finding solutions that improved the lives of the people around him. Past studies have also emphasized the increased use of the 'use-inspired research' in order to address policy concerns, further helping with the translation of research into policy.

### Why do we need to evaluate research?

Research investigates ideas and uncovers useful knowledge. It helps communities to understand themselves and the world around them. But however personally rewarding and socially beneficial, research can be abused. Poor research can often use accurate data but manipulates and misrepresents the information to support a particular conclusion. Biased research is sometimes misrepresented as objective research, which is harmful to people who unknowingly use such information. It is therefore

helpful to have standardized guidelines for evaluating research quality. Before any research findings can be used, knowing the seriousness with which the findings can be taken is important. Acknowledged scientific fields provide professional guidance to help maintain the quality of research but there is no framework to assess the quality of use-inspired research.

Use-inspired research is concerned with applicability of research findings to local realities and is expected to have consequences on social and political realities. Assessing and testing use-inspired research is important and vitally influences the decision making of the policy makers. The intended outcome of use-inspired research is an improved understanding what is being done.

In an era of scarcity of resources, ensuring that policy making is evidence-based means that we would use the resources wisely. Accountability, good governance and management have led to increased demand for evaluating research quality internationally. There are several examples of Indian research providing evidence for the formulation of strategies, policies and programs, including Vitamin A prophylaxis, Vector Borne Diseases Control Program, National Immunization Days, and the DOTS regimen for treatment of tuberculosis. The contributions made by these essentially Indian discoveries to national welfare are unquestionable.

In May 2013, the International Development Research Centre, Canada completed a study on Strategic Evaluation on Research Excellence that aimed to define and articulate what research excellence means in a research for development context. A sub-study of the Strategic Evaluation carried out by Amaltas, examined perspectives of researchers across the Global South on research excellence in their contexts. Southern researchers felt that the notion of research excellence encompasses a wide range of meanings that is drawn from its utility to various stakeholders. Aspects which constitute research excellence include research merit, influence and impact relevance originality, stakeholder involvement among some others. Strikingly, Southern researchers were as concerned about the context in which research was being carried out and

its eventual influence and impact on real world situations, as the research process itself.

Southern researchers were of the view that impact is critical to the notion of research excellence, and that results ought to be relevant to policy making or to change community practices. But they felt that the description of such impact must be 'liberal' and that all possible kinds of influence that research has on practice and/or policy needs to be taken into account in a discussion of research excellence. They also emphasized the need to account for real world complexity and suggested that evaluation frameworks could build in proxies through modern-day forums such as social networking sites.



#### **Contrasting Research Quality with Research Excellence**

Research Quality is a characteristic of the methodology and focuses on the process of research, study rigor and scientific merit.

Research Excellence focuses on the wider horizon of influence and impact of the research and is concerned with the applicability of research findings to the problem being addressed

### **How do we assess research excellence?**

Research quality is a multidimensional concept that cannot be easily defined or measured. Although several disciplines have established research quality standards, there is no universally accepted criteria, indicators, parameters or frameworks.

Assessment of high quality use-inspired research can be related to various factors. Several studies have discussed high quality research in terms of the framing of the research question, the level of rigor in research methodology and the originality of ideas. Classical research rigor is located in appropriateness of research design, quality of the study tools, rigor of analysis, and accuracy of the conclusions drawn. Within such frameworks that are used for evaluation of use-inspired research, there must be room to acknowledge the wide range of issues addressed by development research and the emergent nature of methodologies that are used to investigate development problems.

The assessment of use-inspired research differs from classical measurement of research quality by its focus

on relevance, influence and impact. Studies suggest that good quality research needs to be relevant to topical concerns, to users of the research, and to the communities in whose lives change is to be effected. Use-inspired research must be concerned with the applicability of findings of study to the local realities. Research should emerge from the expressed needs of the communities, and it is the researcher's responsibility to frame the research questions in a manner through which issues of the community are answered and solutions are materialized. Relevance is therefore a matter which should be considered while evaluating excellence of research.

Influence and impact of research can take place at various levels and through various interlocutors. A high quality use-inspired research must make plans for influence and impact. Researchers can and should be held accountable for developing and executing pre-determined plans for dissemination and influence. However, the absorption of evidence into policy or for behavioral change that is the hallmark of social change cannot be the responsibility of development researchers. Application of research findings is expected to have an influence on social and political realities. Yet it is extremely difficult to measure the impact of a research study, especially a non-academic impact. The socio-economic impact of a given research study often takes a long time to become evident enough to be measurable and therefore the time factor should be kept in mind while constructing frameworks for assessing research quality.

Each of these issues - relevance, influence and impact - needs to be assessed in different phases of research. Relevance can be assessed while reviewing the proposal made by the researcher, whereas influence and impact can be assessed only when the research findings are discovered and made public through various means, and further when they are translated to policy and implementation.

Similarly the various phases of research will require information on different aspects of research. The definition of quality at the start of a research process cannot be the same as that measured at the close of the process. For example, research design, framing of the research question, and data collection and analysis methods must be assessed at the

