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A reach/significance cross-over: a strategy for demonstrating the impact of our research

Andrew K. Shenton

Abstract

It is expected in many different areas of professional and academic life that an individual can prove to others the impact of their research and, in recent years, the criteria of reach and significance have become common means of demonstrating the value of one's work. In highlighting the former, there may be an inclination to concentrate on statistical measurement. Yet, as this paper reveals, another option lies in emphasising the variety of citing material that has come to light as part of the individual's efforts to showcase the significance of their impact. The article outlines ten ways in which the diversity of the documents – and their authors – can be shown. Insights relating to separate criteria can be used in concert so as to strengthen an overall claim and thus provide a more compelling argument that one's research has had a substantial effect on others.

Introduction

The need to demonstrate the impact of one's research has long been recognised in a range of situations. It is perhaps most fundamental in Higher Education, where the evaluation of

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Author

Andrew K. Shenton works part-time in the resources centre of a high school in northern England.

Email: ashenton1@outlook.com

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research outputs through structures such as the Research Assessment Exercise (RAE) and, latterly, the Research Excellence Framework (REF) is well established. On a personal, rather than institutional level, an individual may seek to show the use that has been made of their research (in addition to its quantity), with their own purposes as varied as attracting funding for a proposed study, securing a new contract for their post at their university, establishing a case for professional advancement or supporting an application for a prestigious qualification such as a Higher Doctorate (if they are an academic) or Fellowship status of CILIP (if they are a practitioner).

The concepts of "significance" and "reach" are key criteria in Higher Education for gauging the impact of research. In short, significance may be defined as the difference that the work has made to beneficiaries, whilst reach refers to how widely the benefits have been felt (Hannaford, 2012). These measures are pertinent for use in a personal, as well as institutional capacity, and it is in this context that they will be considered here. There may be a temptation to employ quantitative indicators, especially citation counts and related figures, in order to convey the reach of one's research. Indeed, drawing on the work of Douthwaite and colleagues and Research England, Reed et al. (2021) explain quite specifically that reach includes the *number* of individuals who benefit from research. In contrast to this emphasis on breadth, we may believe that demonstrations of the significance of our research are best achieved by highlighting via individual cases depth of impact and here more qualitative insights are attractive. As Pickard (2013) notes, a qualitative approach typically leads to a "textual, descriptive narrative" (p. 325). Perhaps because of their contrasting nature and differences in the methods typically adopted to assess research against them, reach and significance are frequently regarded as separate, albeit

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complementary, criteria. Nevertheless, this paper will show how, through pointing to diversity in the documents employed to demonstrate significance, an individual may also give some impression of the reach of their research's impact.

Demonstrating Diversity: Ten Forms

The following paragraphs outline ten ways in which we may go beyond numerical evidence so as to emphasise the reach of our work and reflect instead on the varied nature of documents we have highlighted. It should be assumed here that the focus is that of the individual's contribution as a whole but, in order to stress the impact of one important article, the author may choose to concentrate on documents by others which cite that particular piece. Some situations addressed below demand that the person makes a reasonably detailed examination of the papers in question. In other instances, no more than a cursory investigation is necessary.

a) An appreciation of the temporal reach of the work may be gained by exploring the range of *dates* when the citing material has appeared. Clearly, in order to present an impressive chronological sweep, much depends on the individual having begun their writing career many years earlier. It can also be useful to consider the dates of the citations against the age of the actual work. If a paper was written long ago and is still being cited today, this says much for its ongoing relevance, although not necessarily in the context that was originally intended, and continuing citations depend to a major degree on the matters about which the individual is writing. Where these relate to science or technology, we would expect most users to value the latest research and give much more limited attention to work that is appreciably older.

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b) The geographical reach of one's research can be emphasised in various ways. It may mean noting the *countries/continents* where the citing writers are based, the *nationalities* of the authors (assuming these can be ascertained) or, in broad terms, the *places* where their research happened. If steps have been taken to anonymise the names of data providers and the organisations in which they are based, the reader may be unable to determine the precise locations where fieldwork has been carried out.

c) Citing documents written in *languages* other than English offer further evidence of the international importance of the original writer. An individual may struggle, however, to identify the languages involved and if they have no access to skilled translators or reliable translation computer software it may be difficult to uncover how exactly a citing author has used the work and thus how fundamental their own contribution has been to the research at hand. Ironically in such a situation, a document that was initially being examined with the purpose of highlighting the significance of one's research may ultimately prove more helpful as evidence of reach.

d) Determining the *nature of the citing authors* can give some perspective on the contexts in which the research has been employed. Typically, five categories of users tend to emerge:

- students (who here may be defined as anyone whose work is aimed at the acquisition of a formal qualification, ranging from a first degree to a PhD);
- academics (who in this sense may include readers, lecturers and contract researchers);
- practitioners (who are "information professionals" of some kind);
- consultants (who offer professional or academic advice to those who engage them);

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- policy makers (the scope of whose deliberations may be limited in their effect to a single organisation or extend as far as the stance of a national government or major international body). They may be individual managers/leaders or form part of a wider consultative or steering committee.

e) Understanding the *general motivations* of the authors in using their work is worthwhile but sometimes problematic. Occasionally, such motivations can only be inferred from contextual clues within the document, although in most instances we can at least make logical assumptions at a superficial level on the basis of what we have learnt in terms of (d) above. Whilst as an overall body, students are intent on acquiring a qualification, the work citing the individual may be as varied as an assignment on an imposed matter or a document resulting from an endeavour where the individual has chosen the area entirely as a result of personal interest. Academics are likely to be motivated by a love of the subject itself and they may be either experts in the topic of the research being cited or specialists in peripheral areas. In the latter case, expanding a study of their usual territory may see them encroach into other provinces, such as those covered by the original author. Practitioners, meanwhile, concentrate largely on real-world relevance and their own workplace concerns. The material prepared by consultants will offer ways forward to meet their clients' needs. Policy makers are involved in determining vision and strategy at one of several levels.

f) If the individual has written extensively on various matters and for a multiplicity of purposes and different readerships, citing authors may refer to their work in a range of *sources*, notably

- monographs/essays within books;

- reports by reputable individuals and organisations;

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- articles in professional periodicals;

- papers in scholarly journals;

- theses and dissertations;

- conference presentations;

- outlines of modules of university courses, where the item appears as recommended
  reading.

Close attention to the different source types can shed further light on the nature of the users of

the individual's work. The backgrounds of contributors to professional periodicals usually lie

in the realm of practice, whilst papers for scholarly journals and lists of recommended reading

are generally prepared by academics; theses and dissertations are, of course, produced by

students. When assessing the use that has been made of their research, the individual may

impose certain quality criteria, rather than warmly embrace any sources in which they are

cited. They may, for example, choose to accept Masters dissertations and Doctoral theses but

not undergraduate projects and, in terms of Web materials, blogs may be rejected on the basis

that, in the absence of any editorial control, many will doubtless be of poor calibre and have

limited credibility. An alternative view would claim that an individual who points to as much

diversity as possible in the citing material is better placed to show how their work is relevant

at a range of levels.

g) In terms of the *use* made of cited work, we can broadly group these situations into two

categories – those in which the author is simply striving for illumination, as is likely to be the

case where a student is writing an assignment paper or where an academic is doing no more

than constructing a review of the literature, and those in which what has been learnt informs a

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higher level purpose, such as the formulation of new research or the improvement of one's

own practice in the workplace. With respect to the former, the original material may be in

some way fundamental to the development of the envisaged study, with the author perhaps

- repeating the design of an existing research project in a fresh context, like that of a familiar

  organisation or another setting of special interest;

- adopting an outcome from the individual's work as a focus for their own, maybe to

  ascertain how accurately an existing abstraction (frequently a model or theory) represents a

  different situation;

- explicitly aiming to build on the efforts of the predecessor, often by seeking to answer

  some of the questions raised by them at the conclusion of their study.

h) The *agenda* that the user brings to their work may well vary enormously. In many instances,

there will be none that is obvious. Here, an agenda can be regarded as a case that the

individual is seeking to establish, probably to realise some desired outcome. Sometimes, an

agenda can, again, be inferred from either the nature of the piece overall or the more specific

context in which the citation of the work is embedded. Occasionally, it may be clear that the

user is most concerned with self-justification, citing others to add weight to their decision to

adopt a particular research method, for example, or they may be intent on furthering their own

situation in some other way. I, myself, have seen research on the information behaviour of

young people reported in a budget proposal in order to convince fund-providers of the need

for an extensive non-fiction physical collection in the school library (Jiang et al., 2011). The

author's use may more esoteric, with the individual citing evidence to advance a favoured

theory or philosophical argument. In extreme cases, this may see them interpreting the

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original writer's ideas in ways that they never envisaged. For example, Scimeca and Larabee (2015), consider that my own work with Hay-Gibson on trandisciplinarity (i.e. Shenton and Hay-Gibson, 2011) perhaps brings "us closest to exploring the utility of synoptic reasoning applied to library practice" (p. 471). In truth, the authors' intentions when writing their paper were by no means so workplace-oriented – their concerns lay merely with generic features associated with the people-oriented areas of information literacy and information behaviour, rather than with their implications for service provision.

i) Where the writer's work is very varied in terms of the topics they cover and the treatments they provide, the *issues* embraced by the citing authors – either methodological or subject-specific – and indeed the wider *disciplines* within which they write are likely to be similarly wide ranging. Still, diversity in use does not always reflect diversity in the areas that have been addressed by the cited author. A writer may deal with a subject of general interest that will appeal to readers from a range of fields. For example, a commentator on qualitative inquiry could well find that their work attracts users from a range of backgrounds who intend to adopt this form of investigation.

j) Consideration should be given to that *sector* of the information world in which the work is being applied. In terms of libraries, we may think at once of the traditional types – public, academic, school and special. Where the cited work is referred to beyond LIS, other divisions may be introduced. For instance, work on information literacy may have relevance in schools of the primary or secondary phase, and material dealing with more advanced skills may attract writers on Further or Higher Education. Where we have published ideas associated with records management or knowledge management that readers have subsequently related to

business settings, so as to demonstrate diversity we may be interested in the nature of the company (e.g. whether it is concerned with manufacturing or services) and its size. As some issues are sector-specific, discussion of this area may emerge naturally from any preceding coverage of (i) above.

Conclusions

The separation of the matters outlined above perhaps implies that each of the variables should be considered in isolation. Yet, the interrelationships of different criteria are important because, when examined in concert, this combining can add greater weight to a more general argument. In research methods terms, it can ensure a measure of triangulation (Patton, 1990), here by shedding light on the matter under scrutiny from multiple directions. For example, an individual who is intent on demonstrating the global reach of the work may well not only take the obvious step of drawing on discoveries pertaining to (b) and (c) but they may also highlight interest in their work from international bodies (d), the places where scholarly journals citing the person were published and the locations of the universities addressed in (f). We may consider that in these circumstances the analysis will be especially strong as so many factors have been brought into play; not only have different types of documents been examined – attention is also given to both the backgrounds of the authors and the languages of the sources.

No claim is made in this article that an individual should explain the reach of the impact of their research purely by pointing to diversity in the documents they have used to reveal the significance of their work. If of a sufficient magnitude, statistics still have a major role – they can convince through their sheer scale and, where appropriately employed, they can offer a

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"wow" factor that is unique. Moreover, in many of the situations outlined above, the would-be user needs to be able to see the citing material themselves. This may be unavailable and if the individual is repeatedly thwarted they may have to fall back on numerical measures, provided they can be made to look at all compelling. It may be argued, though, that any analysis of impact which is concerned purely with citations can be no more than partial at best. The ideas of others may be used by practitioners, for example, without ever setting down in any published form the inspiration for what they have done.

This article has been written from an entirely LIS perspective and the tactics discussed are chiefly intended for use by Higher Doctoral and CILIP Fellowship candidates. They could, however, easily be adopted by comparable academics and practitioners active in other fields, as long as they have a sufficiently large and heterogeneous body of work behind them.

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