Working across disciplines: Robust debate in a context of trust

Search through the pages of the South African Journal of Science, and you will find hundreds of articles using the word ‘interdisciplinary’ and its variants, and the references to interdisciplinarity are almost invariably positive. Indeed, in the mission of the Journal (https://sajs.co.za/about) we describe the Journal as ‘multidisciplinary’ in its nature, and we have often in editorials and elsewhere referred to scientists from a range of disciplines working together.

Leaving aside the complex (and, paradoxically, often abstruse) arguments about the differences between interdisciplinarity, multidisciplinarity, and transdisciplinarity, our Journal is part of a large consensus in which we need many ways of tackling difficult and complex problems, and none of us can provide the single ‘right’ answer to any of these. Especially in a fraught, divided and very unequal society, there is almost inevitably a social component to every technical problem, for example.

Our commitment to working and communicating across disciplines can be frustrating to potential authors and reviewers. We do not publish excellent work which is accessible only to a small disciplinary section of our readership. A number of emerging scholars have been, we fear, disheartened when their high-quality work is rejected, not because of concerns about the quality of the science, but because of the lack of accessibility to a non-specialist educated audience. Some authors have been trained to express their work using rather abstruse phraseology and syntax that is difficult to understand. Our Journal is certainly not the only one internationally committed to clear, plain, language usage (see https://sajs.co.za/inclusive-language-policy), but with an interdisciplinary journal, the bar is probably higher than with other journals, because words and usage conventions which are common currency in one discipline may not be familiar to readers in other disciplines.

Working across disciplines is also challenging for our editorial team. Each editor-in-chief comes from a particular disciplinary background, and it is not possible for this person, however competent, to assess fully the scientific quality of every submission. We are fortunate to have a team of very well-qualified associate editors and associate editor mentees, all of whom are subject specialists, and it is common on our Journal for the editor-in-chief to ask the appropriate associate editor for advice about whether to send a submission for review. Sometimes this process is even more complicated when we involve two or more associate editors in discussion before taking a decision about how best to handle a submission. This requires teamwork and coordination, and on reasonably rare occasions we have to ask for help from experts outside our small team if we do not have all the expertise. This takes effort -- including anonymisation of submissions, confidentiality agreements, and so on, even before we decide on peer reviewers. It is simply not possible to have an editorial team which is expert in every possible sub-discipline which may be the home sub-discipline of a potential contributor.

At our Journal, we are fortunate to have good relationships within our team, so we are able to consult one another. This includes notionally less ‘senior’ colleagues, such as associate editors, informing notionally more ‘senior’ colleagues, such as the editor-in-chief, that they are wrong. In an ideal world, robust and open debate is at the heart of good science -- we move forward as scientists and as a scientific community by changing our minds, adjusting to new evidence and techniques. But there is an interpersonal element to this, and this is the element of trust. In order to differ openly with a colleague, one has to have the confidence that this expression of difference will not be seen as vexatious, undermining, rude, or inappropriate.

This need for trust in interdisciplinary relationships and research is not just a question for a journal like ours -- it is essential for all research partnerships across disciplines. It is easy to speak about interdisciplinary respect and trust, but there can be challenges in attaining it. Many researchers have been trained to lionise their own disciplines and to denigrate others. For example, there are quantitative researchers who have been trained to consider all qualitative data as ‘mere anecdote’, just as there are qualitative researchers who have been trained to see their own work as ‘deep’ and ‘careful’, with the implication being that the work of quantitative researchers is of necessity superficial and conducted without due care. It is unfortunately the case that there are indeed many qualitative researchers whose work could fairly be characterised as merely anecdotal, just as there are many quantitative researchers who conduct superficial and slapdash work. There are bad researchers in all disciplines. But stereotyping researchers from other disciplines as the ‘other’ is not helpful.

But there are other, perhaps less obvious, dangers. Just as it is not helpful a priori to decide that work from Discipline X is inferior or useless, it can be equally problematic for interdisciplinary research to take the opposite view -- that work from Discipline X is inevitably good and helpful. Interdisciplinary respect is much more challenging than simply declaring that the work of colleagues in other disciplines is good, even when, and possibly especially when, one does not fully understand the methods used by those from other disciplines. There has to be space both for challenging interdisciplinary questions and for frank discussions about methods and conclusions. In the end, it may not be fully possible to understand what a colleague from another discipline has done, as it may take full academic training in that discipline to understand the colleague’s assumptions and methods. But asking questions across disciplines is important, and being prepared to try to answer questions across disciplines is equally important. It is not respectful simply to take for granted that another researcher must be right just because their work is not immediately understandable across disciplines. Disciplinary defensiveness may be more common in disciplines of ‘lower status’ than others, although I am unaware of good data to support this supposition, but disciplinary defensiveness (as opposed to standing up for and explaining the strengths of an approach one is taking) may close down debate and may well be bad for interdisciplinarity.

In an academic world in which competition across disciplines and amongst scientists is commonly encouraged, in a world in which many of us compete for the same resources, the temptation either unfairly to denigrate the other or to praise the other without robustly interrogating their work, are two sides of an unhelpful coin. Academic conflict, furthermore, can both flourish and be inappropriately avoided in a divided and high-conflict society. We believe that it is the collective responsibility of all researchers to keep real, robust, debate going. This takes trust both in others and in the academic system which sustains us all.

HOW TO CITE: