Disseminating research through high impact journals: *some challenges and strategies*

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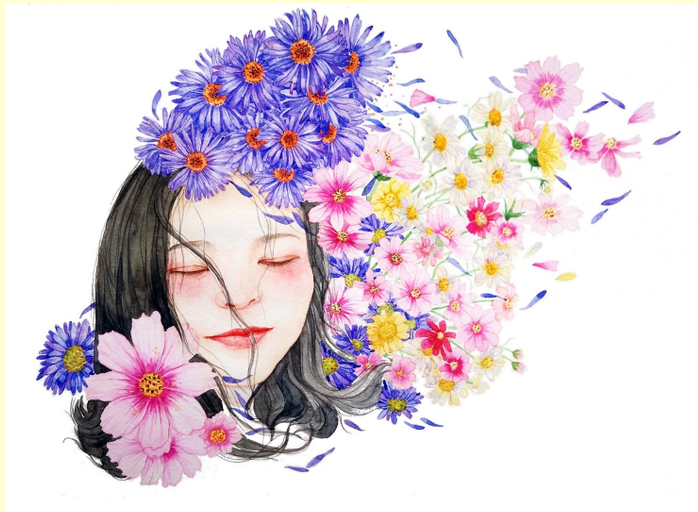
This document includes ***active links*** to more detailed information
(*click somewhere inside the box indicated by the symbol*
- internet connection needed)

Publish…

or perish!

Today's theme: How can individual scholars and groups maximise the chances of getting their work published *without compromising…?*

without compromising?



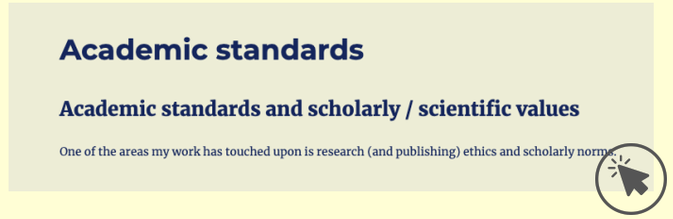
- You should not need to pay extortionate **fees** to predatory journals (which will often anyway not be listed among those recognised for institutional review)

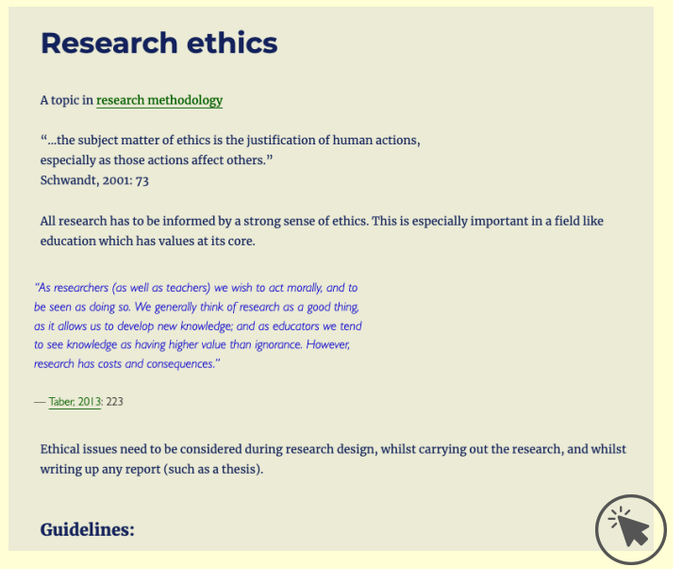
- You should not need to compromise your principles - there is an ethical imperative for **honesty** in academic matters

- You should not need to give up your **dreams** - a scholar should have academic freedom to follow their interests (up to a point!)

An assumption…
(that we will all agree to)

- Whilst the scholar should seek to maximise their chances of publication in prestigious journals…
- …this is always done with absolute regard for high academic standards
  - ethical dealings with potential and actual research participants
  - fair and respectful behaviour within research collaborations
  - every effort to offer honest and full reporting





Key message:
Success in publication is only *partially* about the writing

Successful publication depends upon:

- good quality (often *English*) writing
- matching work to outlet (choice of journal for a particular study)
- execution of study (data collection, data analysis)
- design of study (methodology, choice of techniques, sampling…)
- conceptualisation of study (e.g., choice and justification of a research question)
  - *so perhaps* location of a study in a research programme

How do (quality) research journals usually work? (initial submission stage)

- **Initial screening** - a decision whether to reject or send for peer review (may be made by an editor or an administrator)

- **Peer review** - evaluation by two or more scholars in the field of the journal selected (usually) by an editor

- **Editorial decision**, e.g. - reject; reject by invite resubmission; send for major or minor revisions; (accept)

Submitting to a research journal

A topic in research methodology

Research journals are very diverse, so it is only possible to offer general guidance, but the information here is widely applicable.

This page discusses the general process of submitting to a ***research journal*** (***academic journal***) (which may be different from the process for a practitioner or professional journal – see below *) , and how the journal usually handles the submission. It is assumed that you have already carefully chosen the journal to submit the work to, and have prepared the submission according to the needs of that journal. ⚗

On submission

Most academic journals now have an on-line submission system. At the end of the submission process you will often be asked to download the file with the manuscript you have uploaded (sometimes along with other files) to confirm that it meets the journal requirements and is ready for submission. Once you have submitted you will normally get an email (virtually instantaneously, often) confirming submission. Usually the submission will be given a code (e.g., JOR-2020-00015C) that you should use if you later contact the journal.

Editorial screening

Usually new submissions are screened,either by an editor or an administrator. The screening may relate to three areas:

Readiness of submission

There may be checks on things like – are the figures missing/tables (where cited) included, is the paper 'blinded' for review (where that is a required), have required declarations been made (about research ethics, or funding sources, etc)?

If journals have specific requirements about such matters as forms of headings (not to use 'Introduction'; to have a section called 'Results') or subsections in an abstract and so forth, this may be checked. Some journals are very fussy about the precise wording and placement of particular information in a manuscript.

Papers with missing or non-compliant aspects may be returned for correction!

Within journal scope

Most journals accept work in a discipline or field. Some journals are very broad but most high quality journals are about 'education' or 'science education' or 'chemistry education' or some other specified domain.

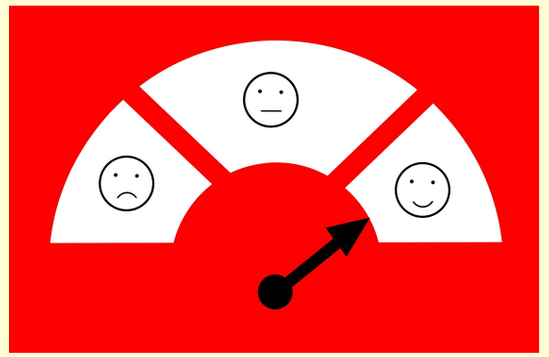
Some may only invite certain types of work – only experimental studies; only case studies; only work undertaken form a sociological perspective; only work form a feminist standpoint; or whatever.

Rejection on quality grounds

Work that is judged ***not*** to be within the scope of that journal will be rejected at this stage. (This is disappointing, but saves time waiting for peer review.) Rejection on scope grounds at screening stage can usually be avoided by reading the available journal information and exploring some issues. However, that is not fool-proof as I know from experience!

Time-scale for screening

One *should* expect any rejection on screening, or request for changes to a submission prior to peer review to be received within a matter of days. If the manuscript passes screening it moves to peer review



3 core journal criteria

remit - journal's field of interest

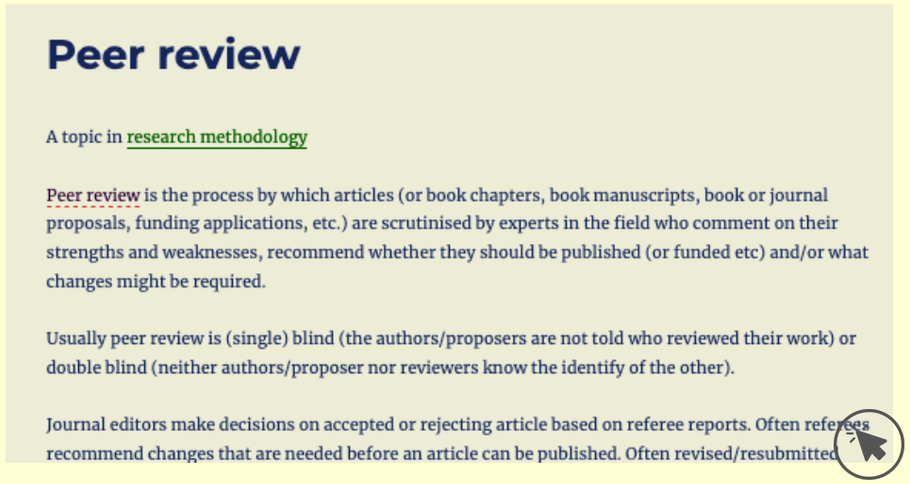
usually tested at **editorial screening**

quality - only high quality work will be published

often subject to **editorial screening**, then *peer review*

novelty - only 'original' work will be published

evaluated in *peer review*



Peer review

A topic in research methodology

Peer review is the process by which articles (or book chapters, book manuscripts, book or journal proposals, funding applications, etc.) are scrutinised by experts in the field who comment on their strengths and weaknesses, recommend whether they should be published (or funded etc) and/or what changes might be required.

Usually peer review is (single) blind (the authors/proposers are not told who reviewed their work) or double blind (neither authors/proposer nor reviewers know the identify of the other).

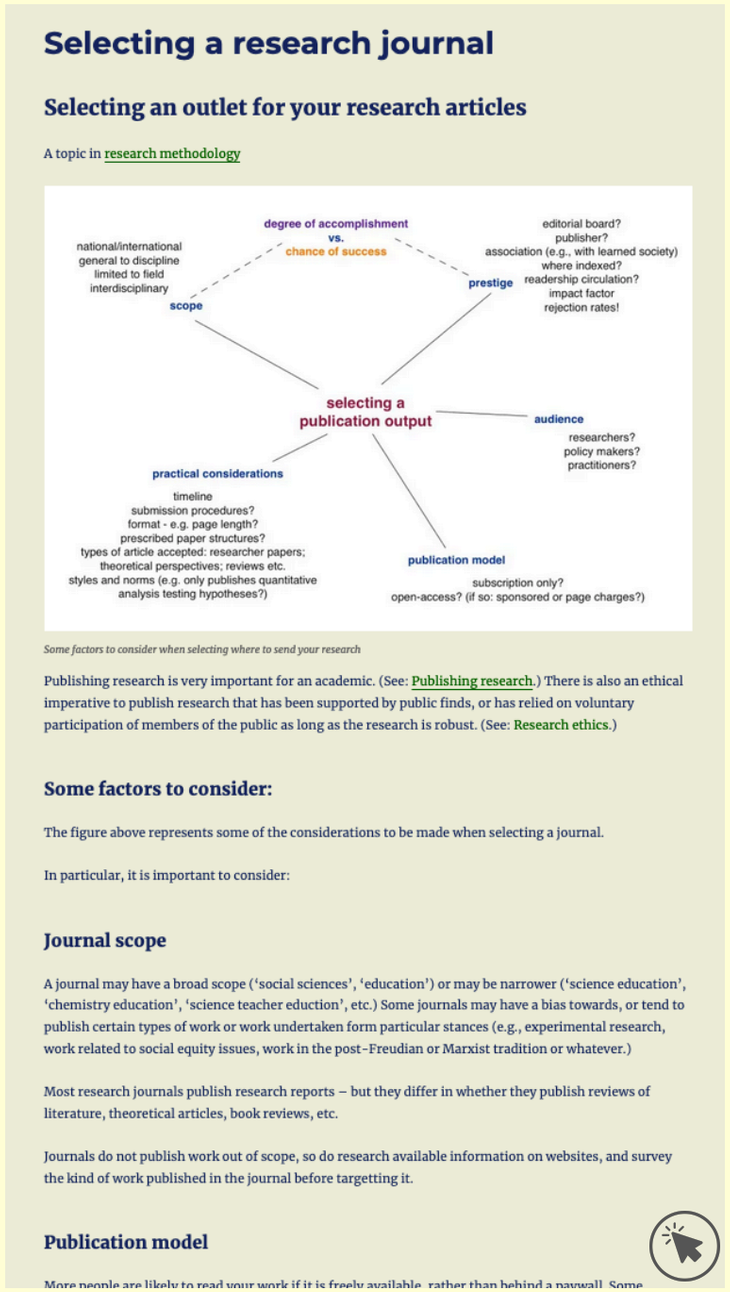
Journal editors make decisions on accepted or rejecting article based on referee reports. Often referees recommend changes that are needed before an article can be published. Often revised/resubmitted

Selecting a journal

- Scope
  - breadth vs. specialism
    - (word limits?)
- Publication model
  - access vs. cost; hard copy; speed
- **Journal quality**
- (Contingency?)

‘do not put all your eggs in one basket’

?



Selecting a research journal

Selecting an outlet for your research articles

A topic in research methodology

Some factors to consider when selecting where to send your research

Publishing research is very important for an academic. (See: Publishing research.) There is also an ethical imperative to publish research that has been supported by public finds, or has relied on voluntary participation of members of the public as long as the research is robust. (See: Research ethics.)

Some factors to consider:

The figure above represents some of the considerations to be made when selecting a journal.

In particular, it is important to consider:

Journal scope

A journal may have a broad scope (‘social sciences’, ‘education’) or may be narrower (‘science education’, ‘chemistry education’, ‘science teacher eduction’, etc.) Some journals may have a bias towards, or tend to publish certain types of work or work undertaken form particular stances (e.g., experimental research, work related to social equity issues, work in the post-Freudian or Marxist tradition or whatever.)

Most research journals publish research reports – but they differ in whether they publish reviews of literature, theoretical articles, book reviews, etc.

Journals do not publish work out of scope, so do research available information on websites, and survey the kind of work published in the journal before targetting it.

Publication model

More people are likely to read your work if it is freely available, rather than behind a paywall. Some

Advance planning

- **authorship** issues should have been discussed *earlier* in the project

- identify intended outputs ***before*** writing

- consider journal ***instructions*** before setting out to write

Authorship

A topic in research methodology

In everyday life, authorship is usually a fairly straightforward matter: the author is the person, or the authors are the people, who wrote something. However, that is not how authorship is usually understood in research:

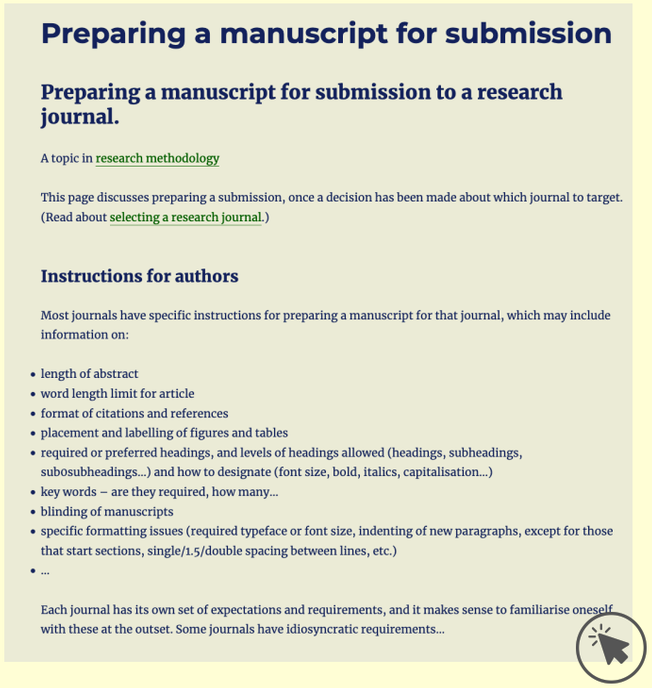
Authorship in research

In research it is normal for results to be reported in research journals. Sometimes the research reported has been carried out by one person, who wrote the article. However many research studies are team efforts, and in these cases it may be that not all the team were directly involved in the writing up.

Most journals see authorship as belonging to those people who made substantial intellectual contributions to the study being reported. That might include (depending upon the form of research) such involvement as contributions to conceptualisation and planning of a study, developing and carrying out analyses, even if by people who did not write-up the final study.

Ethics of authorship

Journals normally require that the authorship of a submission should include all those who have made



Preparing a manuscript for submission

Preparing a manuscript for submission to a research journal.

A topic in research methodology

This page discusses preparing a submission, once a decision has been made about which journal to target. (Read about selecting a research journal.)

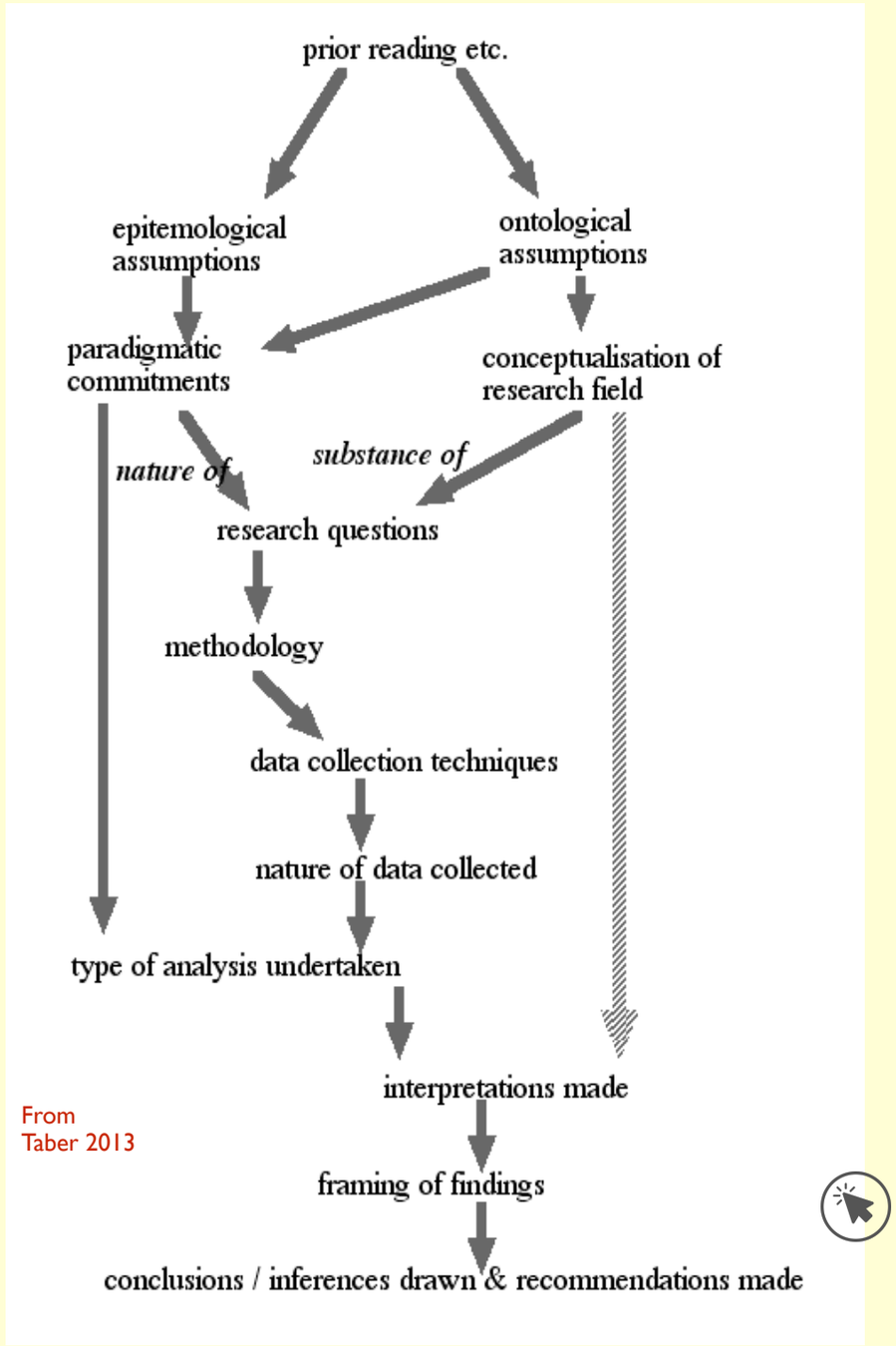
Instructions for authors

Most journals have specific instructions for preparing a manuscript for that journal, which may include information on:

- length of abstract
- word length limit for article
- format of citations and references
- placement and labelling of figures and tables
- required or preferred headings, and levels of headings allowed (headings, subheadings, subosubheadings…) and how to designate (font size, bold, italics, capitalisation…)
- key words – are they required, how many…
- blinding of manuscripts
- specific formatting issues (required typeface or font size, indenting of new paragraphs, except for those that start sections, single/1.5/double spacing between lines, etc.)
- …

Each journal has its own set of expectations and requirements, and it makes sense to familiarise oneself with these at the outset. Some journals have idiosyncratic requirements…

Quality of the work?



From Taber 2013

Research coherence

A well-planned study *can* be well or poorly reported…

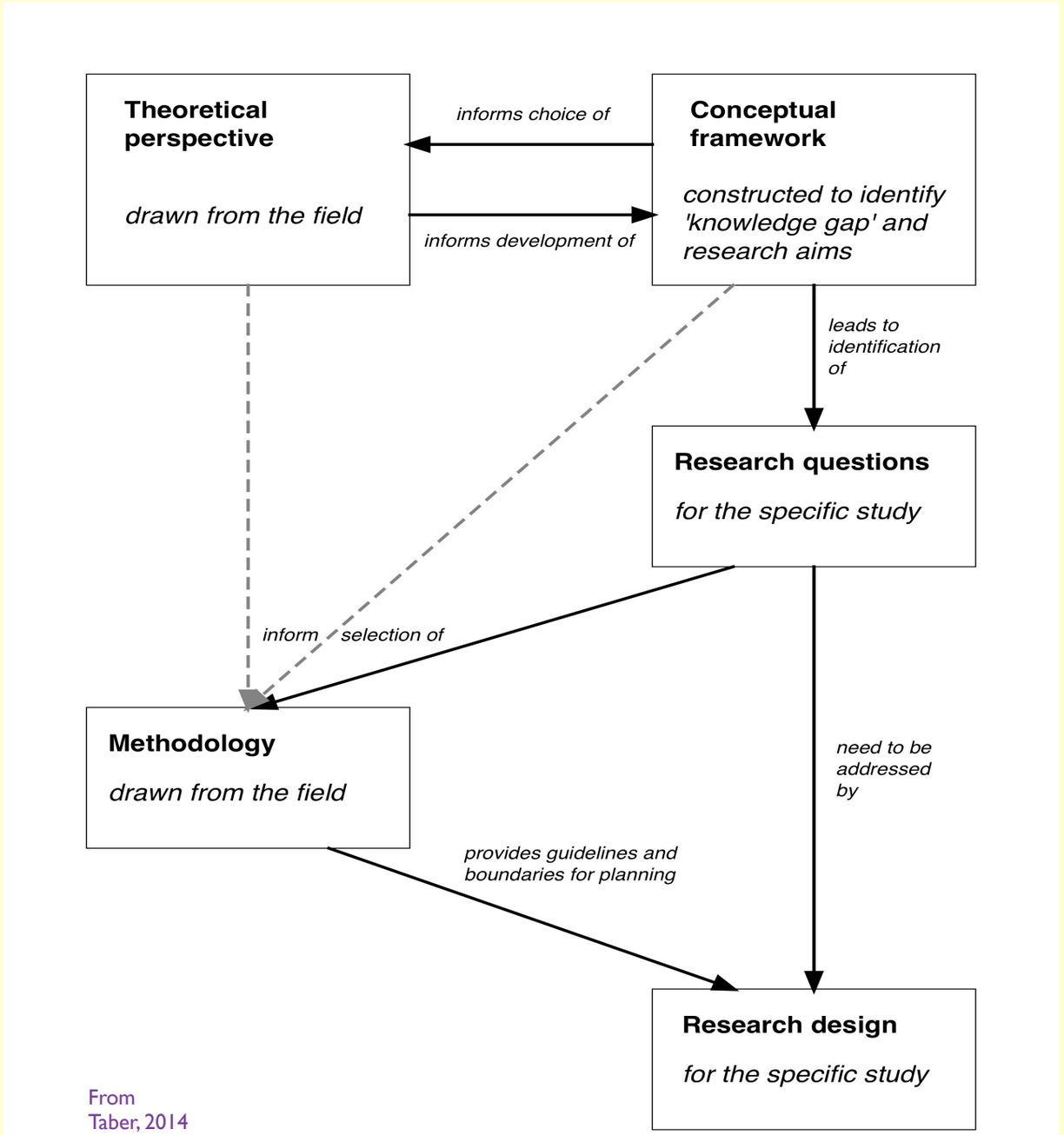
…but a poorly planned study will ***not*** lead to a good research report

Quality of the work?

Conceptualisation

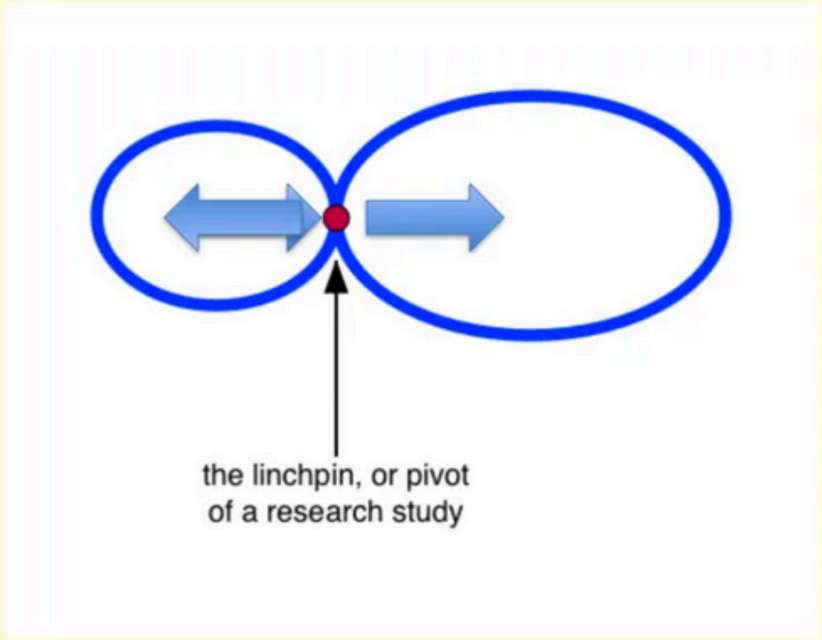
A well-conceptualised study *can* be well or poorly executed…

…but a poorly conceptualised study is ***unlikely*** to provide useful outcomes

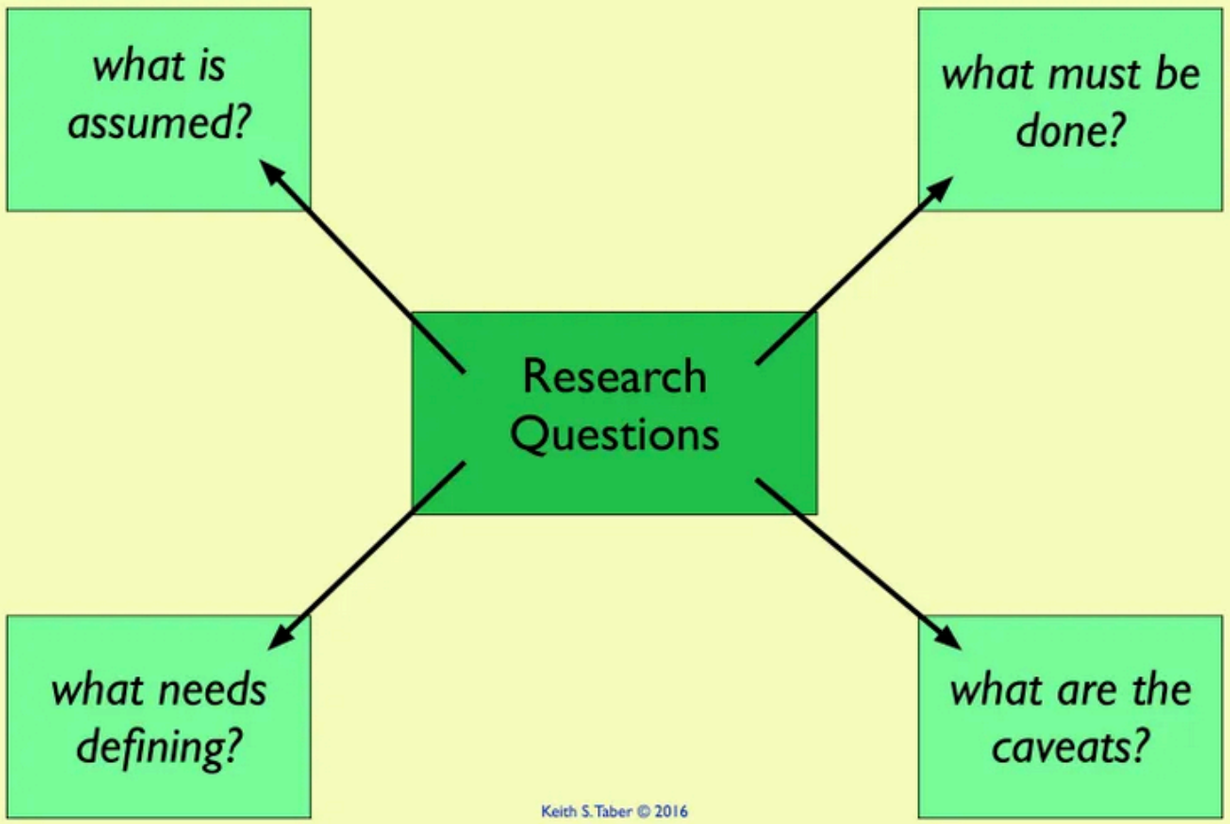


From Taber, 2014

The RQ should both *reflect* and *project*



This simple framework may be useful for analysing research questions (RQ) in studies.



Quality: role of research questions

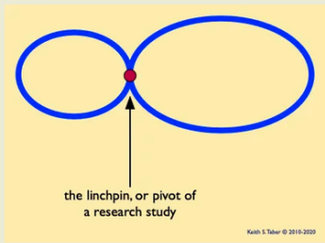
Research questions

A topic in research methodology

"…research questions turn a general purpose or aim into specific questions to which specific, data-driven, concrete, answers can be given."

— Cohen et al., 2011, p.111

Research questions(RQ) play a pivotal role in a study, as they provide the key connections between
- the conceptual framework of the project (as developed out in the literature review)
- the research design (which sets out what is to be done and so what can possibly be found out)

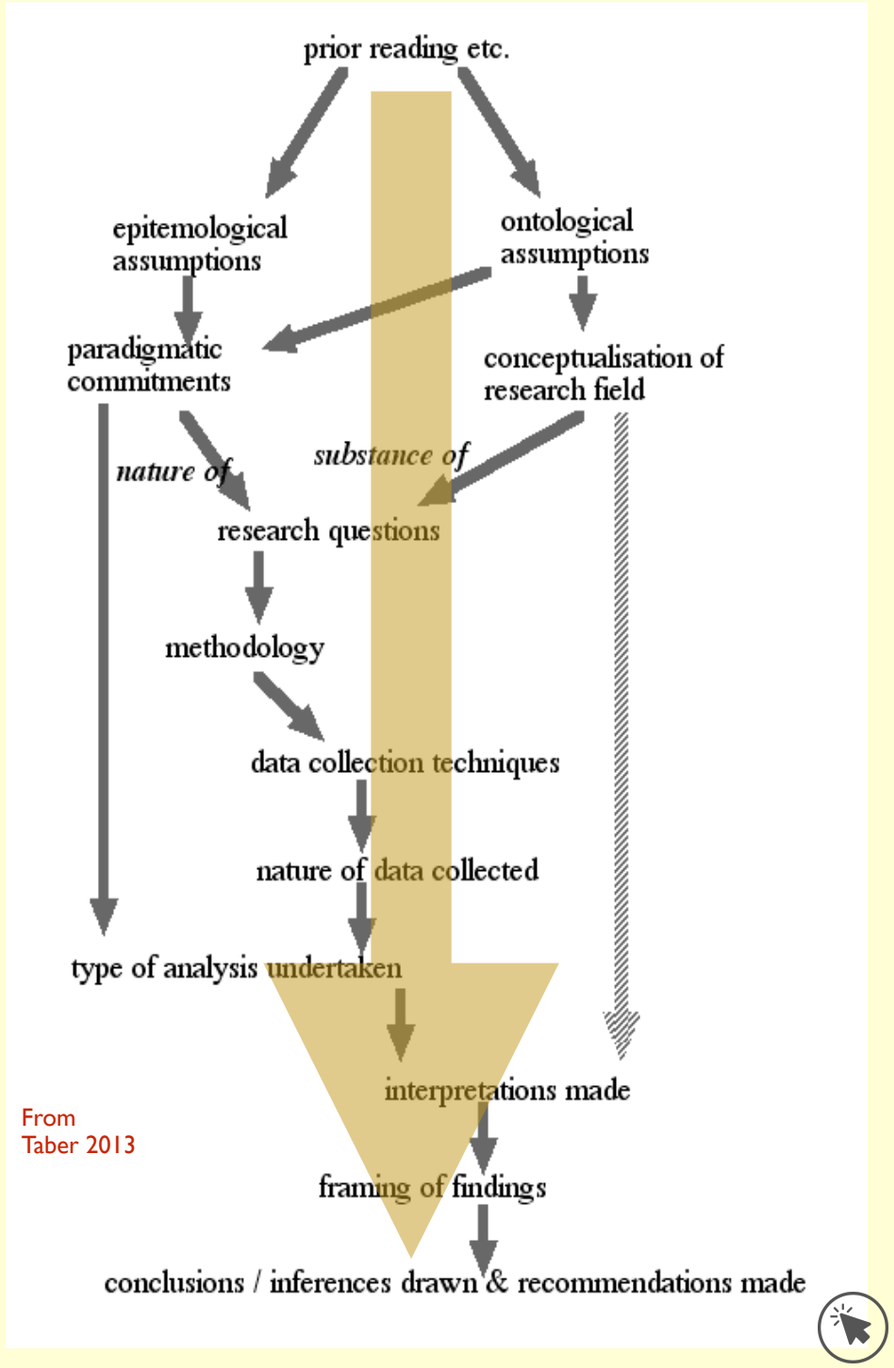


Research questions are critical in a research study

RQ:

- – follow from the literature review
- – need to be focused such that they inform research design
- – have to support the planning of a viable project
- – that can be addressed by a feasible and ethical research design
- – that matches the available resources

Quality of the work?



From Taber 2013

the 'language game'

the genre of a research report is not a personal account

but ***an argument supporting a specific knowledge claim***

*(Honest, but **focused**)*

The research paper as argument

The research paper as an argument for a knowledge claim

A topic in research methodology

Academic research seeks to offer new knowledge. A research report can be see as comprising

- a knowledge claim (or several knowledge claims)
- the grounds for the claim(s)

The knowledge claim is the conclusion of the study.

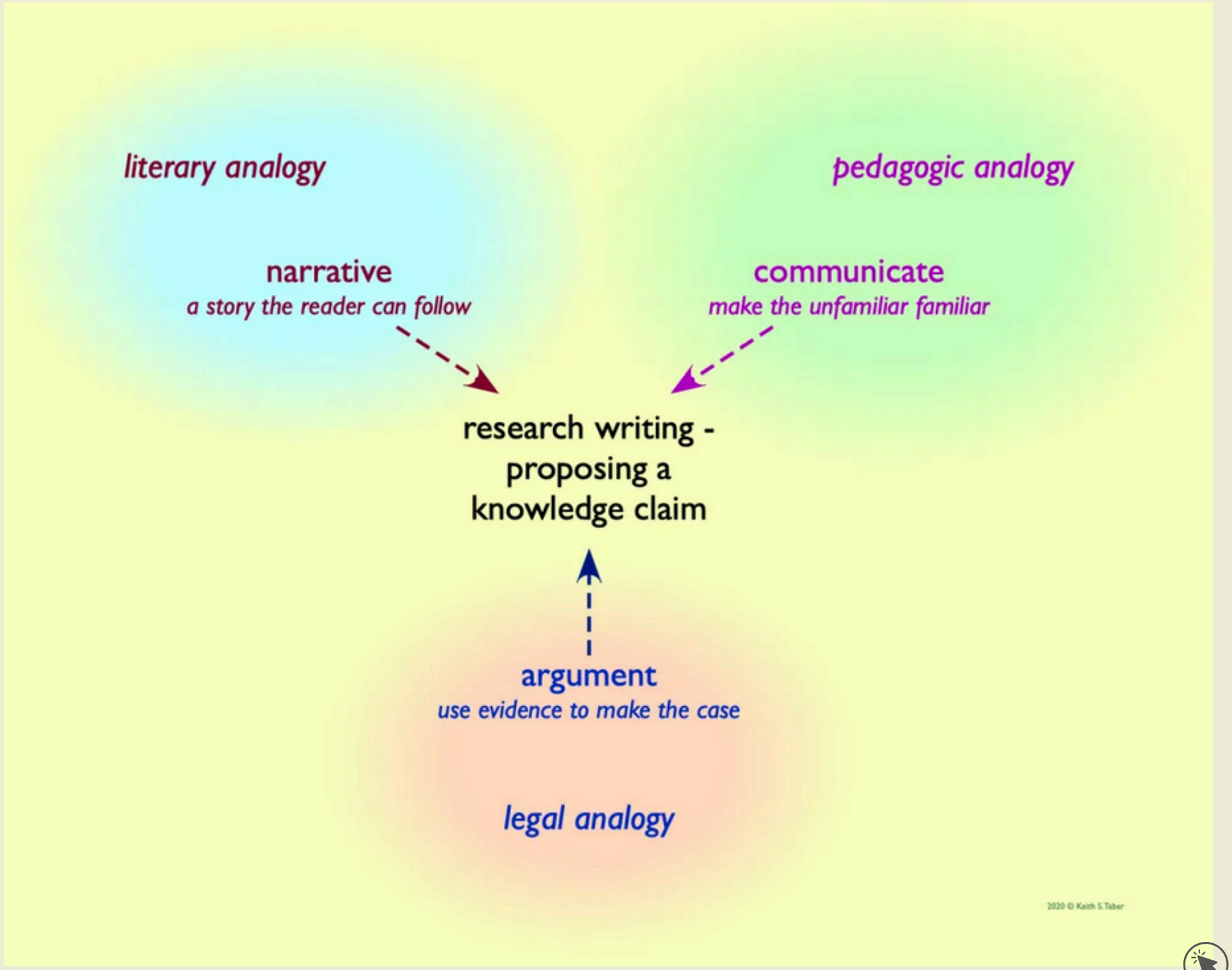
e.g.,

- all normally-developing humans pass through the same invariant stages of cognitive development;
- 85% of children conceive of force and motion in terms of an 'imputus' model before formal science teaching;
- many school science textbooks present a misleading model of ionic bond formation;
- direction instructions is more effective than discovery learning

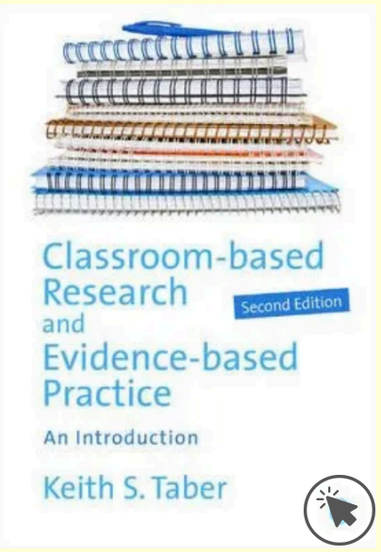
The sections of the research report preceding the conclusion can be considered as building up a multi-stage argument for why the knowledge claim is justified and should be accepted.

Is the scientific paper a fraud?

This was a question posed by the immunologist and Nobel laureate, Peter Medawer.



Three analogies for the nature of writing research reports



Novelty?

theoretical?

methodological?

new findings?

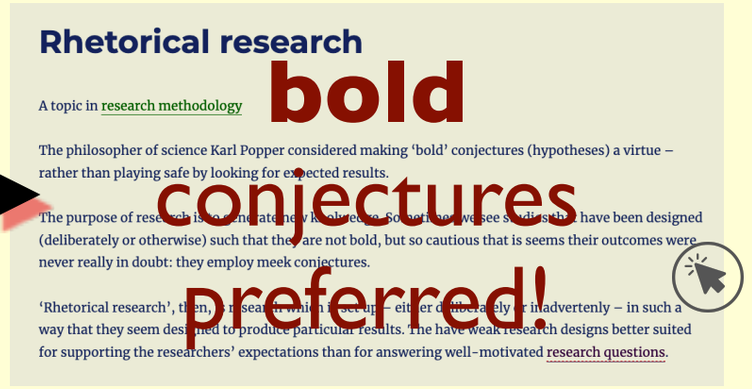
potential ***impact*** on the field - *going beyond* existing studies

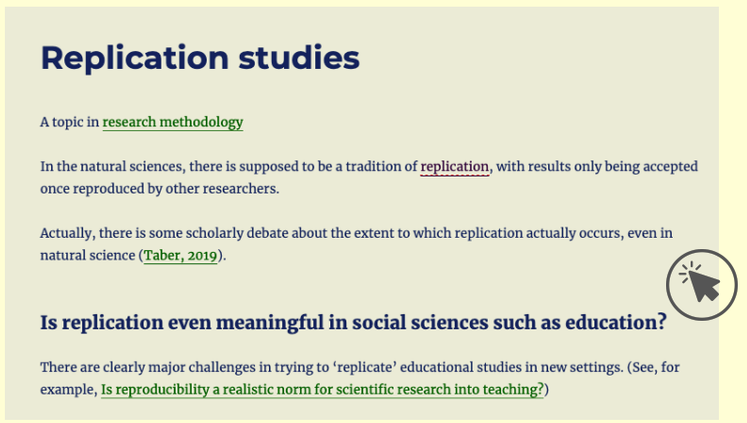
this may mean extending the range of application into a new context (a different age group, a different curriculum area, a different culture…)

linking *features of the novel context* to *the findings*

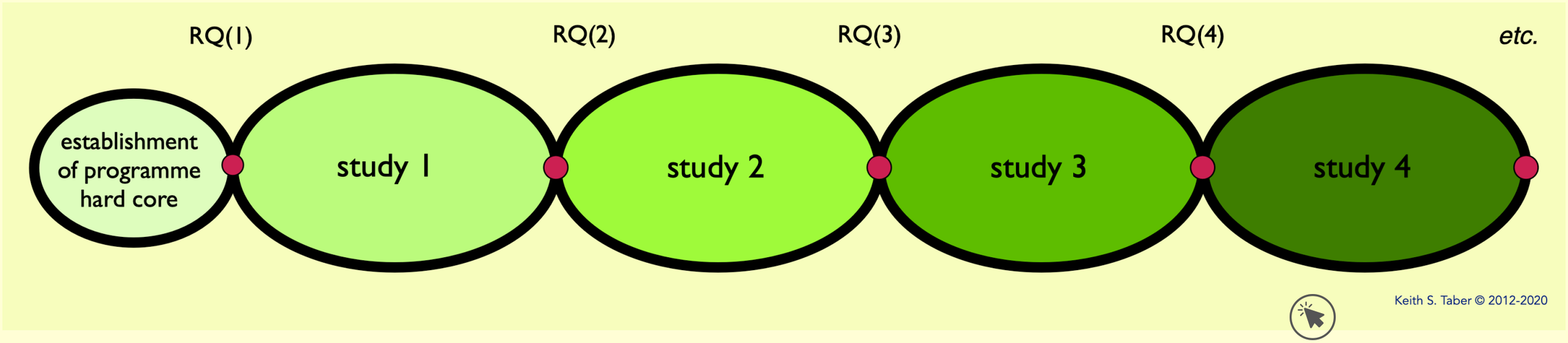
not simply saying, e.g.,

"*it has never been studied before with 10 year olds studying fractions in SMK Taman Selesa Jaya 2 on a rainy Wednesday afternoon in June…*"





Research programmes



Working within a research programme allows

- developing knowledge of a field/topic
- developing expertise in a methodology/specialised techniques
- therefore increasing research effectiveness as building on previous experience
- developing a reputation (invitations to talk/write/review; applications from research students, …)

English!

imprecise or unclear language

- **obscures** meaning
- prevents accurate **evaluation** of quality work
- often gives an impression of **muddled** or illogical thinking
- leads to **rejection** in editorial screening and/or after peer review

Getting the language polished is worth time and effort (and, if needed*, expense?)

* but using professional services may be avoided…

Pre-submission review

Strategies for improving language and quality of reports

- **institutional level** - identify expert English speakers/ writers, build up a pool offering internal evaluation (but this must be recognised in workloads)*; provide research mentorship for less experienced researchers
- **research group** - policies for (critical) reviewing all writing within the group
- **individual scholar** - pairing with a 'buddy' as a critical friend - a reciprocal arrangement

Responding to decisions

What is the decision?

- minor revisions/major revisions/resubmission?

appreciate the differences: inferences? circumstances?

How important is getting the work in *THIS* journal?

How feasible are the changes requested?

How much work is involved in the changes recommended?

Would any of the changes

make you uncomfortable?

diminish the work?

Minor revisions

A decision of minor revision (or equivalent) implies that the editor is expecting the authors to be able to readily, and quite quickly, make the required changes, and expects to publish the work in due course. It is unusual, therefore, that authors would withdraw a paper with this decision.

Major revision

A decision of major revision (or equivalent) implies that the editor is not entirely sure if the authors will be able to respond satisfactorily to referee comments or not, but expect to publish the paper if they can; and/or that the revisions requested are quite substantial and may require some further work (not more data collection, but possibly some additional analysis, perhaps some changes of format of presentation of results) beyond relatively straightforward changes.

Resubmission

A decision of resubmission/reject by invite resubmission means that a good delay more work is needed before the study can be published, and the editor is either not convinced it will necessarily be possible, or believes any such major reworking is likely to take some time. It may mean that referees suspect the underlying study is sound but that the report needs a complete reworking.

Responding to an editorial decision

Responding to an editorial decision on a manuscript submission to a research journal

A topic in research methodology

After submitting your work to a journal (Read about submitting to a research journal), you will (in time) be sent a decision on whether it is considered suitable for publication, usually with a report of the reviewers' comments..

On receiving an editor's decision on a submission, the author(s) may have to decide how to respond.

Revisions

Editors and reviewers are supported in evaluating revisions by:

- **tracking** (use tracking even when not requested)
- the **response** document
  - explicitly address *every point* in referee reports/ decision matters
  - any rejection of a recommendation needs to be *carefully argued*
- say exactly *how* you have responded to each point (and, if not obvious, *why* you have responded that way) and *where* in the MS
- consider using *a table* with each new point to be addressed starting a new row - both as a working document, and when tidied as a basis for the response

Do all recommended changes have to be made?

Editors are usually reasonable people who are open to logical and evidence argument. Sometimes it is acceptable to disagree with some things referees ask for, as long as an explanation is given, then the editor will have to make a decision. Also referee comments may be at different levels: things that needs to be done; things it would be good to do; things that might be useful. So decision letters need to be read carefully to distinguish required changes and recommended changes – and sometimes just suggestions.

Preparing a revision/resubmission

Journals differ, and usually precise instructions are included with the editor's decision latter. As a general process:

Keep a record of changes made.

The recommended approach is to cut and paste a copy of the decision latter into a table so each comments that needs to be addressed is on a separate line, and the changes made or other response can be recorded in another column. This is useful for keeping track on progress in the revision, and responding to the editor.

Editors normally expect a letter with the revision outlining responses to each substantive point made by the editor and reviewers. Presenting this as a table also helps the editor see exactly what you have done, as well as showing you are systematic.

The revised manuscript should be made from a copy of the original manuscript file (keeping the original to refer to in case needed). Tracking on the file for revision will help you keep track of the changes made and review them. The first thing to do is head the copy with 'revision' or similar and save it with a file name so there will be no confusion over which file is being worked on. Journals often ask for a tracked revised manuscript so the editor and reviewers can easily see what has been changed but it usually a good idea to track for your own benefit anyway. Make a copy of the final tracked revision, and accept the changes on the copy so you now have the original manuscript, the revision showing changes made and a 'clean' copy of the final manuscript. Sometimes journals require both the clean and tracked version of the revision.

In conclusion

Treat *writing and submitting* as part of the overall research process - kept in mind at all stages

Flaws in writing can be ironed out: but flaws in the work being reported cannot be corrected when reporting (so planning the study is critical for a strong research report!)

Investigate target journals carefully prior to writing - and write with a journal in mind (but preferably with back-up options)

Take time to *review*, seek advice (developing reciprocal arrangements and support networks), *refine*… before submission

Respond to journal requests for revisions in a systematic and measured manner

Thank you

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