Research proposal and grant writing for development impact

Session 2: Designing for impact and writing successful grant applications.

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Today's agenda

15.00:	Introduction
15.05:	Designing for research impact
15.20:	Grant proposal writing: discovering, planning and writing phases, Q&A
15.45:	Key components of a successful proposal, Q&A
16.10:	Tea break
16.25:	Structuring a winning proposal – group exercise
17.20:	Final Q&A and wrap up

Please mute your mic

You might want to have your phone handy - or can use a separate browser window

In this brief talk I'm going to refresh your memories of and then build on some of the ideas I introduced in the last session – in particular on theories of change and communication and introduce a couple of other tools which you might find helpful when planning a research project for impact.

It's very simple…

- Identify what sort & level of impact is realistic
- Set some clear objectives
- Identify who you need to influence
- Decide how you might be able to influence them:
  - What evidence you will need
  - How best to communicate that to them
- Check what resources you'll need (people/skills)
- Identify where to get them
- Make a plan
- Develop a budget
- (Write a convincing proposal to) to get the money.

It's not rocket science.

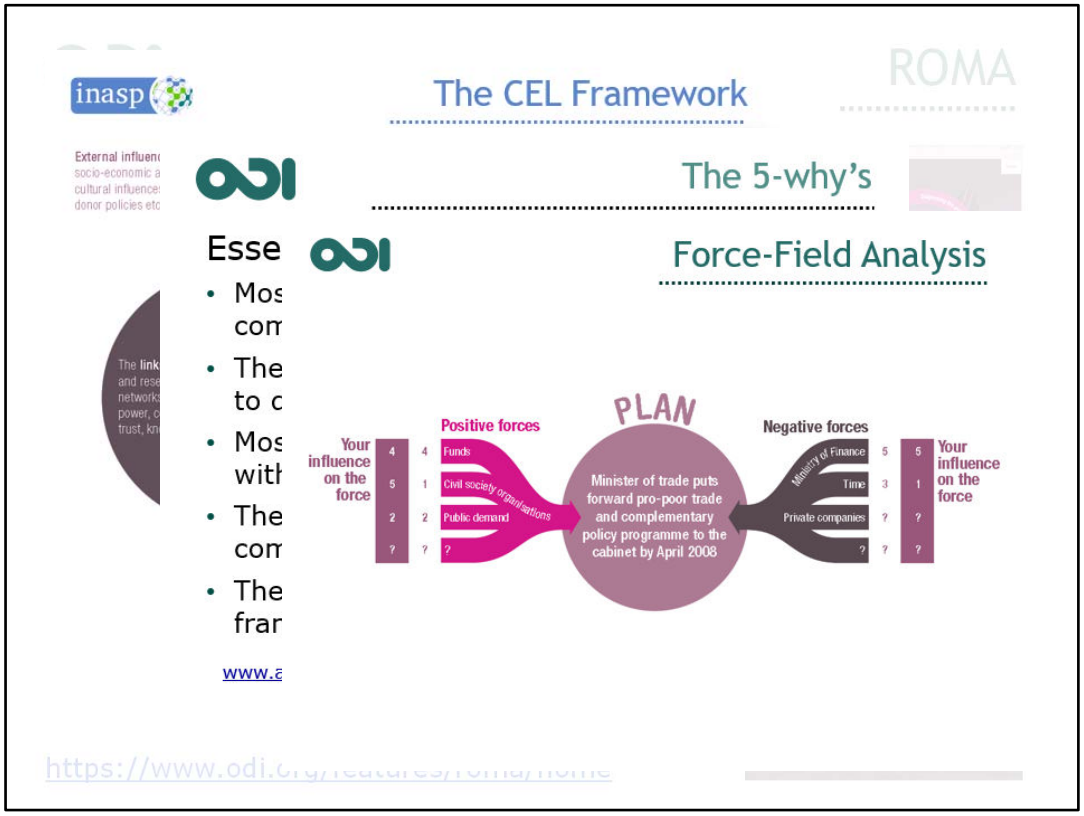
Essentially you've got to…..

And there are lots of tools that can help with all of these steps

I'll be focusing on the top few bullet points and Andy will pick up on the lower ones later in the session.

Last time I talked about the ESRC definition of research impact, and then a rather more complete list from Fast Track Impact – I'll be talking more about that later.

Then I described the 5 levels of policy when I have found useful when thinking about what impact my work might have.



I then ran through some of the tools that you can use to understand the context (the CEL framework), to narrow down your research question (the 5 whys) and start to identify who and what processes you might be able to influence with the results of your research.

And you had a chance to try out FFA

Theories of change

"An ongoing process of reflection on how change happens, and the role we play":

1. What do you want to achieve?
2. Who else is involved?
3. How do they influence change?
4. How can you influence them?
5. Which options will work best?
6. What else can help or hinder?

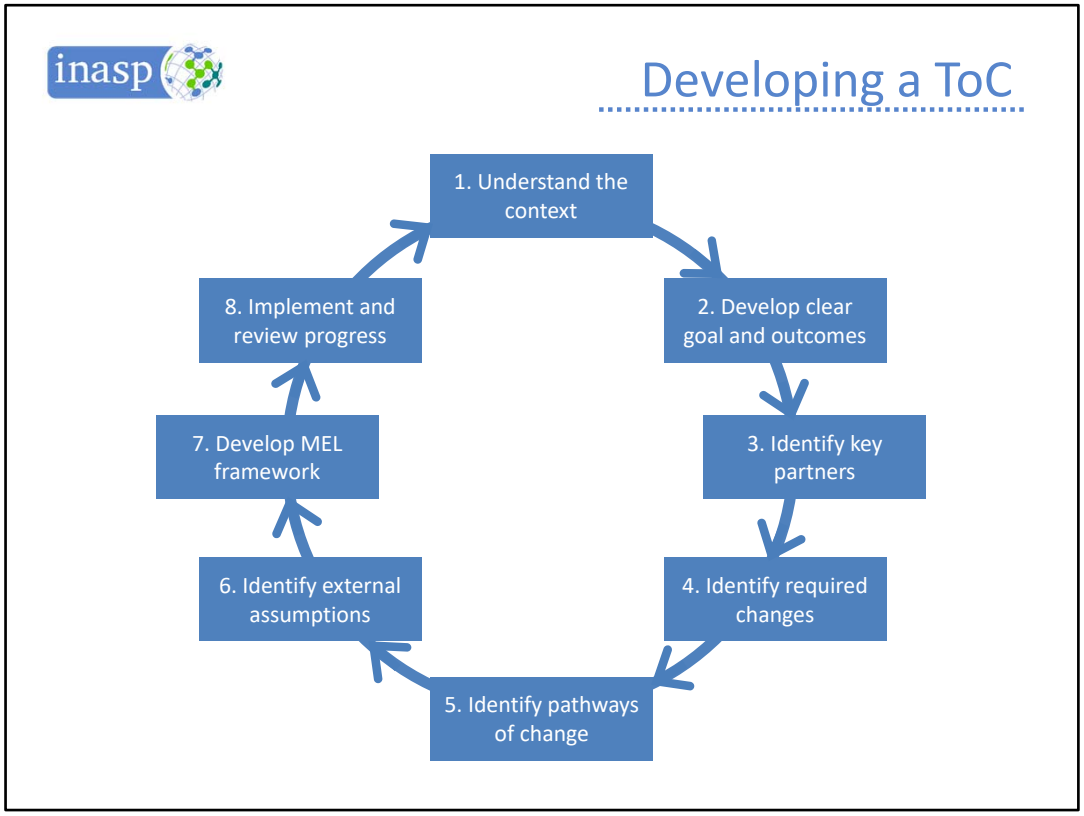
www.theoryofchange.org/pdf/James_ToC.pdf

What I'm going to spend most time on today is theories of change. They can be a fantastically useful way of thinking through how to affect change, how to check you are on track, and how to present what you are trying to do succinctly in a picture or diagram.

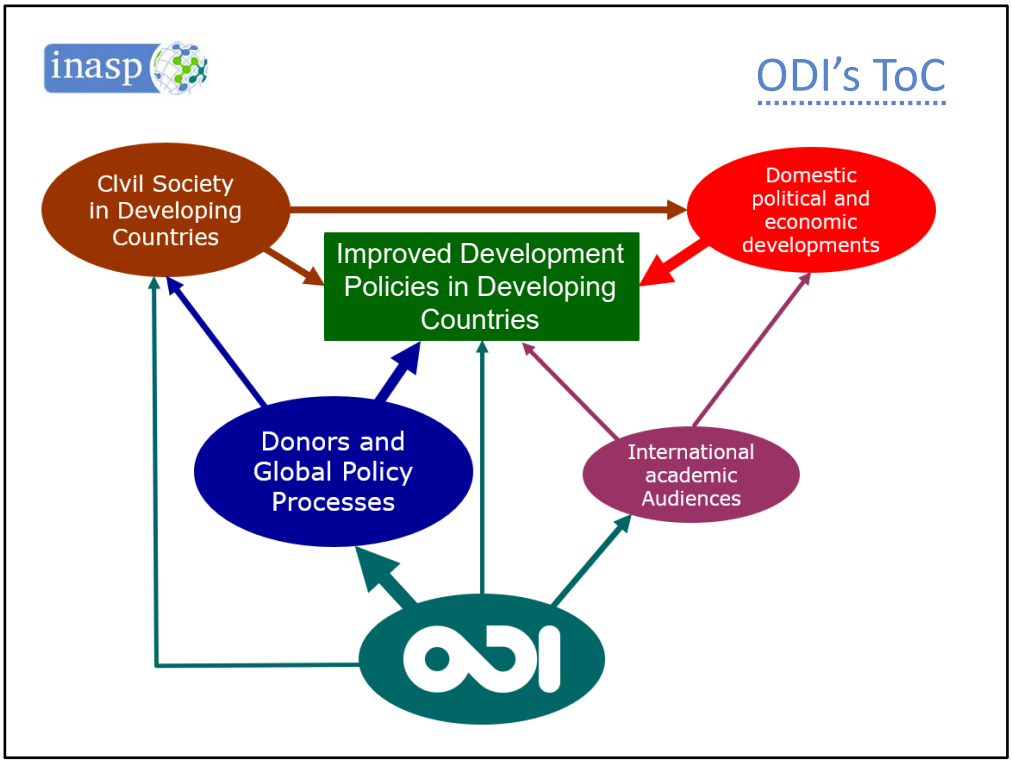
That's what most people think is the most important thing about a ToC, but actually the most important thing is the process you use to generate it, and especially the people you involve in doing that.

It should be a collaborative exercise involving the whole research team and all the other stakeholders who will be involved and affected by the project (remember my slide about transdisciplinarity).

And it's not just for the start of a project, it should be an ongoing process throughout the whole project – checking you are on track and changing course if necessary, and making sure all the other stakeholders are on board.



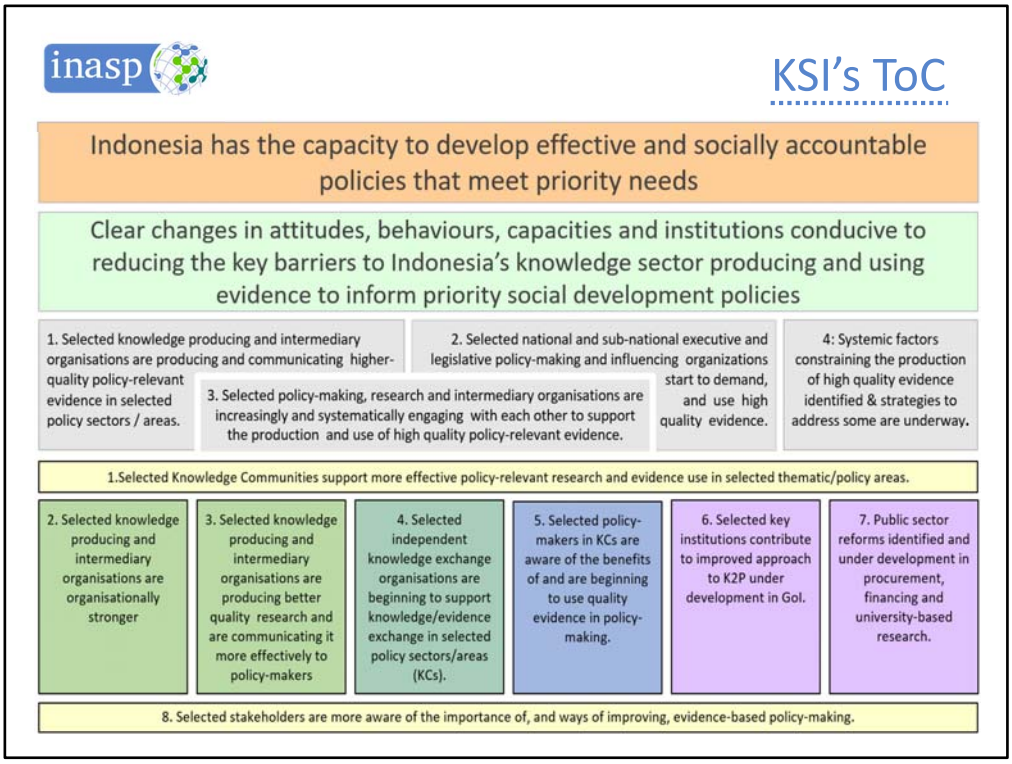
Here's the process graphically…..



And the resulting ToC can be almost anything – provided they show who you are hoping to engage with and how and how that will contribute to the final impact.

Some are just lines and boxes

This is a very simple one we developed for ODI about 15 years ago.

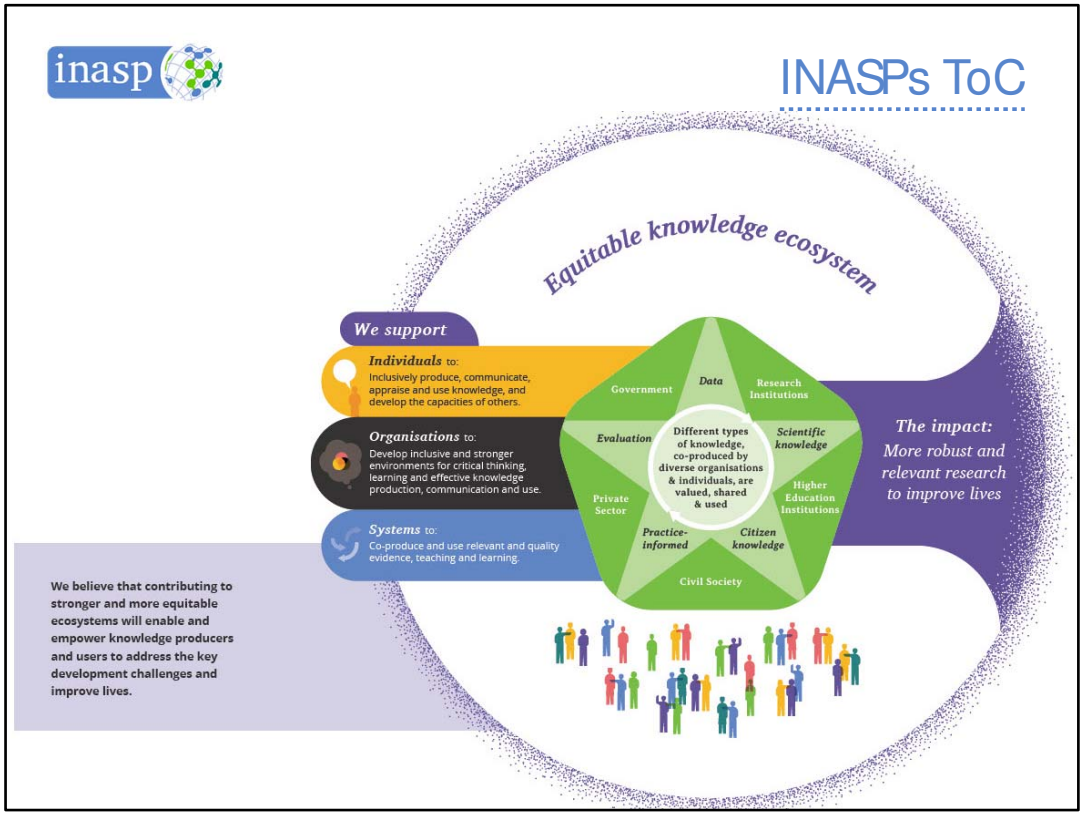


And some are interlocking pieces or frameworks.

This is one I developed about 10 years ago for a big programme in Indonesia called the Indonesia Knowledge Sector Programme.

It has the overall goal at the top, then the overall outcome, then the contributory outcomes (or sub-components) of that, then some specific changes in specific stakeholder groups which will contribute to them.

There was also a longer version which included specific activities with those groups.

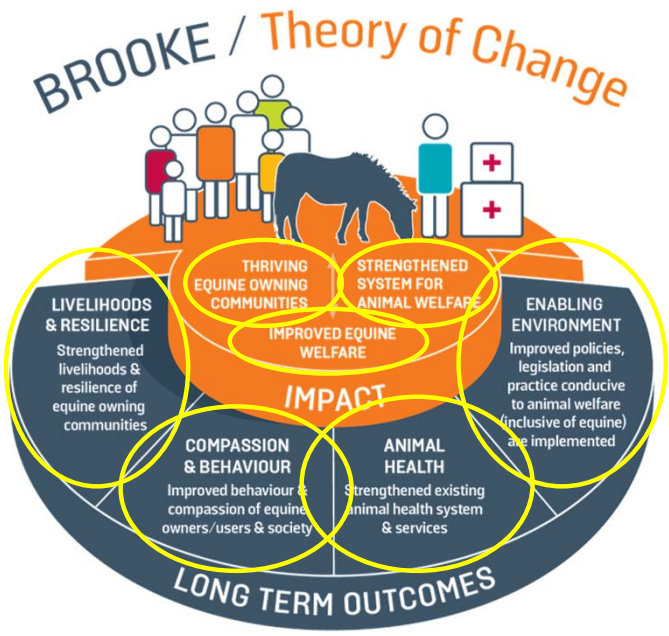


And sometimes there more like pictures.

This is ours.

It shows how we hope our capacity-development work at 3 levels will strengthen the capacity of stakeholders in, and contribute to what we call equitable knowledge ecosystems which will improve the quality and impact of research.

BROOKE's ToC



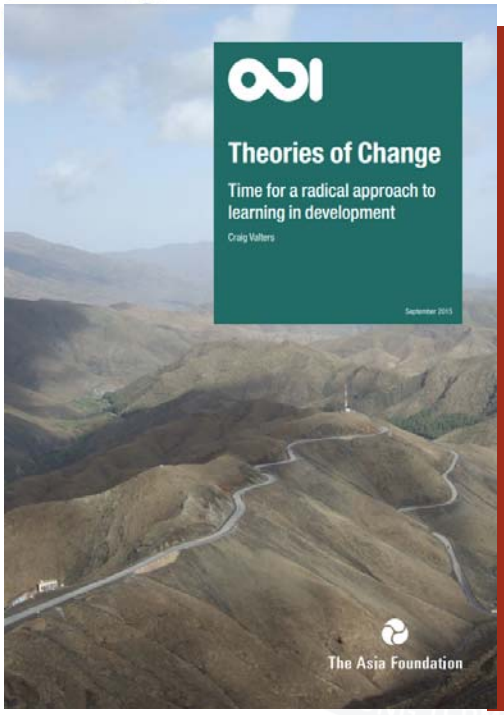
And here's another one. This is for BROOKE – a charity which aims to improve the health of horses and donkeys world-wide.

What they all have is:

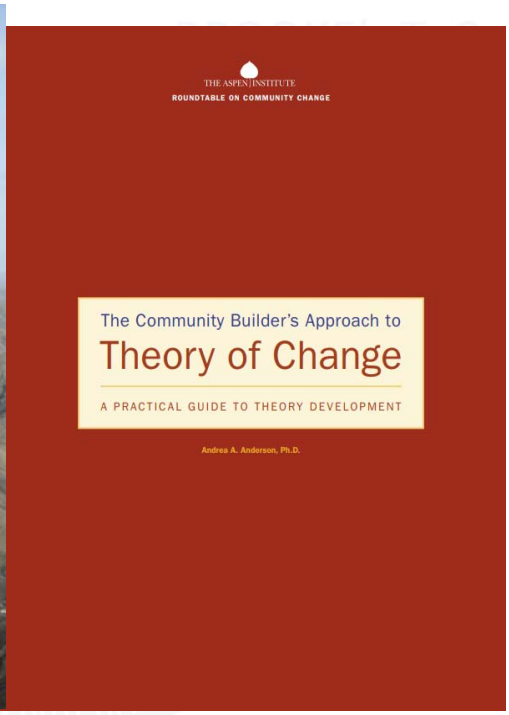
- A high level goal
- A couple of different sub-elements of that
- And four specific outcomes that BROOKE will deliver which will contribute to them.

They often also try to illustrate the vision or mission in a simple picture

And try to show graphically how things contribute to it.



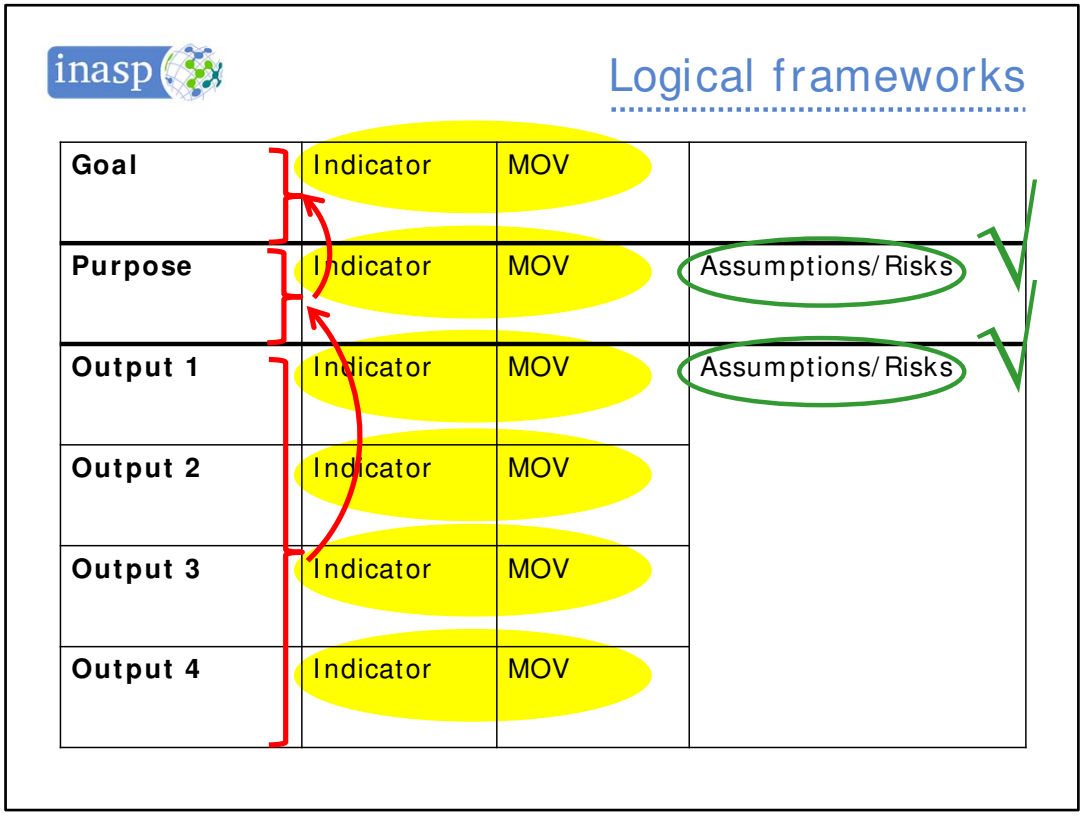
https://cdn.odi.org/media/documents/9835.pdf



https://www.theoryofchange.org/pdf/TOC_fac_guide.pdf

And you can find out much more about how ToC are being used, and how effective they are on this ODI web page

And there's a really good step-by-step guide on how to do it on The Aspen Institute site.



Personally I remain a fan of log-frames

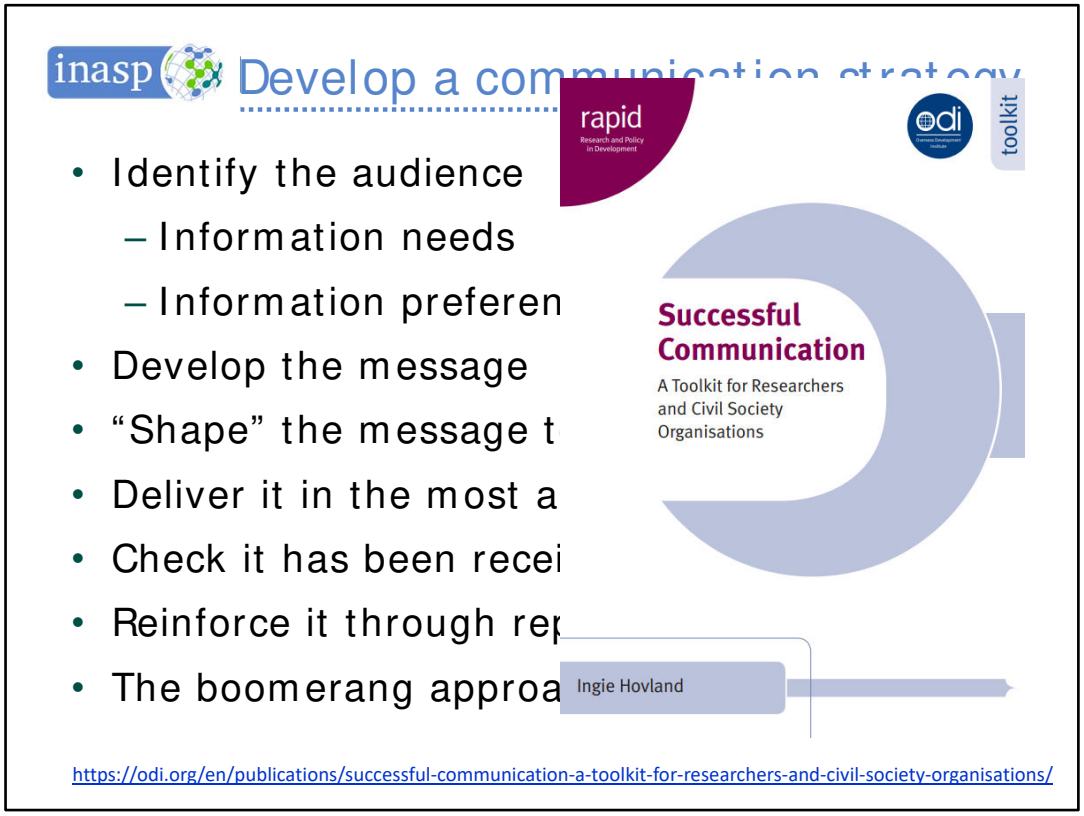
It was developed in the United States for USAID and has been adopted and adapted for use by other major donors including DFID and the EC. As experience has grown on what makes development aid more effective and accountable, an increasing demand for greater rigour in planning, implementing, monitoring and evaluating has led to the introduction of the Logical Framework Approach.

The approach enables the main elements of a project to be concisely summarised and brings structure and logic to the relationship between project purpose and intended inputs, planned activities, and expected results. If used with flexibility this approach to planning encourages creative thinking and promotes participatory engagement between all parties throughout the project life-cycle.

Logframes have become discredited as being “too linear and logical”, but they needn’t be – you can have multiple purposes, and several outputs can contribute to more than one purpose..

As with Theories of Change they should be developed in collaboration with and reviewed regularly with all stakeholders but seldom are.

They can have policy-focused purposes.



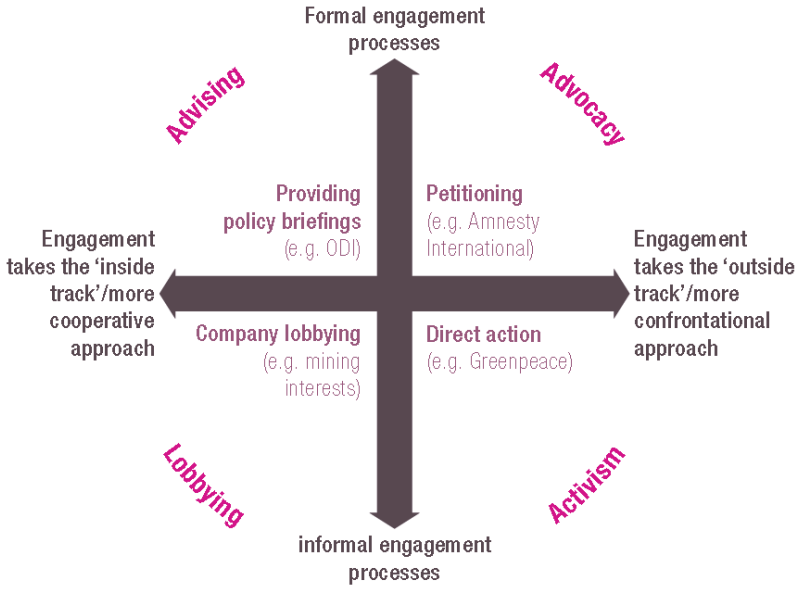
Last week I talked about how it is vital to think about communication throughout the research cycle. It's not just something to do at the end – you need to communicate with everyone who might be involved right from the start.

Like a ToC the communication strategy will evolve through the life of a project – depending on who you want to communicate with about what.

And like ToC a good communication strategy is not rocket science – you just need to….

I particularly like what is called the boomerang approach – if you can't reach your target audience directly, maybe you can reach them indirectly via someone else – you may remember the story I told last time about the department of agricultural extension in the ministry of agriculture in Indonesia telling their rather traditional colleagues in the department of livestock services that the participatory approaches we were using were actually rather good.

Develop a communication strategy



https://odi.org/en/publications/successful-communication-a-toolkit-for-researchers-and-civil-society-organisations/

One helpful way of thinking through a communication activity is whether you are going to use formal or informal approaches, and whether you are going to work closely with the people you are trying to influence, which we call inside track, or more remotely, which we call outside track.

Different approaches work better in different situations.

This figure shows how different approaches to communication map onto this framework.

You can find out much more about how to use this tool and a wide range of other communication tools in our research communications toolkit at this address.

Assess your own capacity

- What type of policy influencing skills and capacities do we have?
- In what areas are we weak?
- What opportunities do we have (allies and connections)?
- What factors can undermine our ability to do this (enemies, time, resources)
- What can we do about them?

Strengths	Weaknesses
Opportunities	Threats

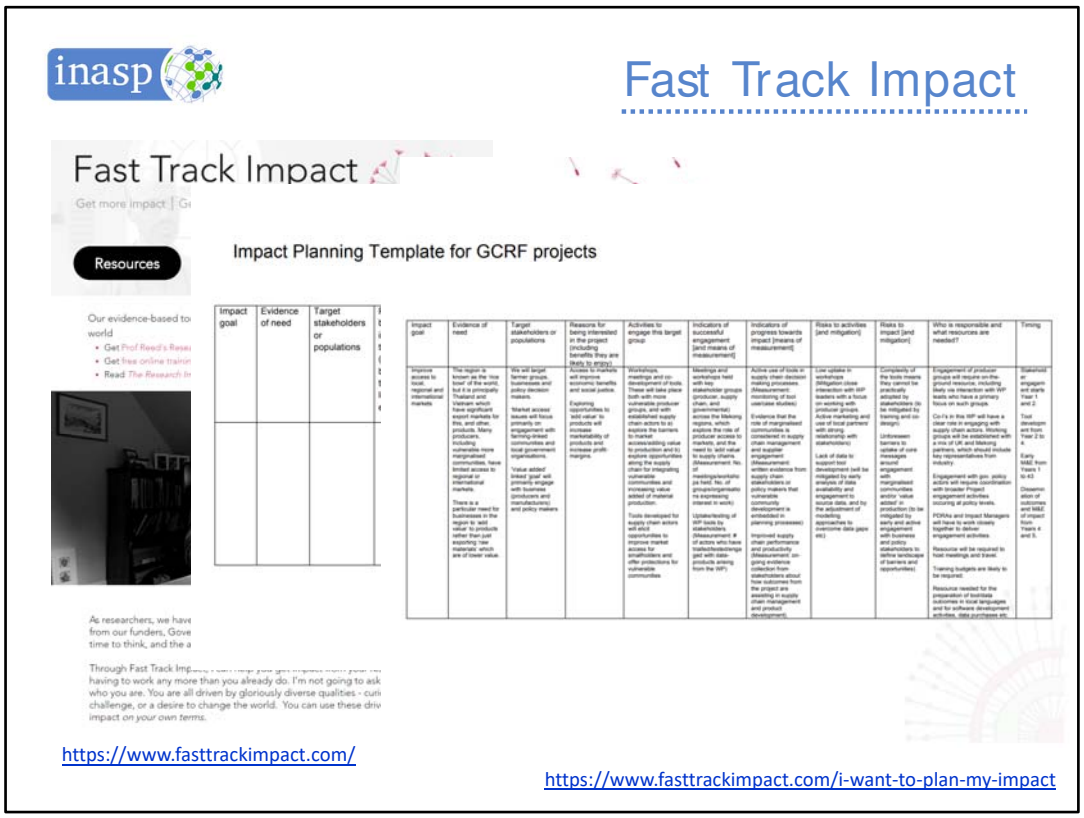
www.betterevaluation.org/evaluation-options/swotanalysis

Another vital part of the strategic planning process is ensuring the project has the capacity to do it.

We frequently use a simple SWOT analysis to do this.

A SWOT can reveal hidden obstacles to a planned project, especially when participants come from different departments or geographical areas in the same organization.

You can find out much more about how to use SWOT analysis on this site.



I said I was going to come back to Fast Track Impact. As I said last time it is a fantastic resource on how to do research with impact.

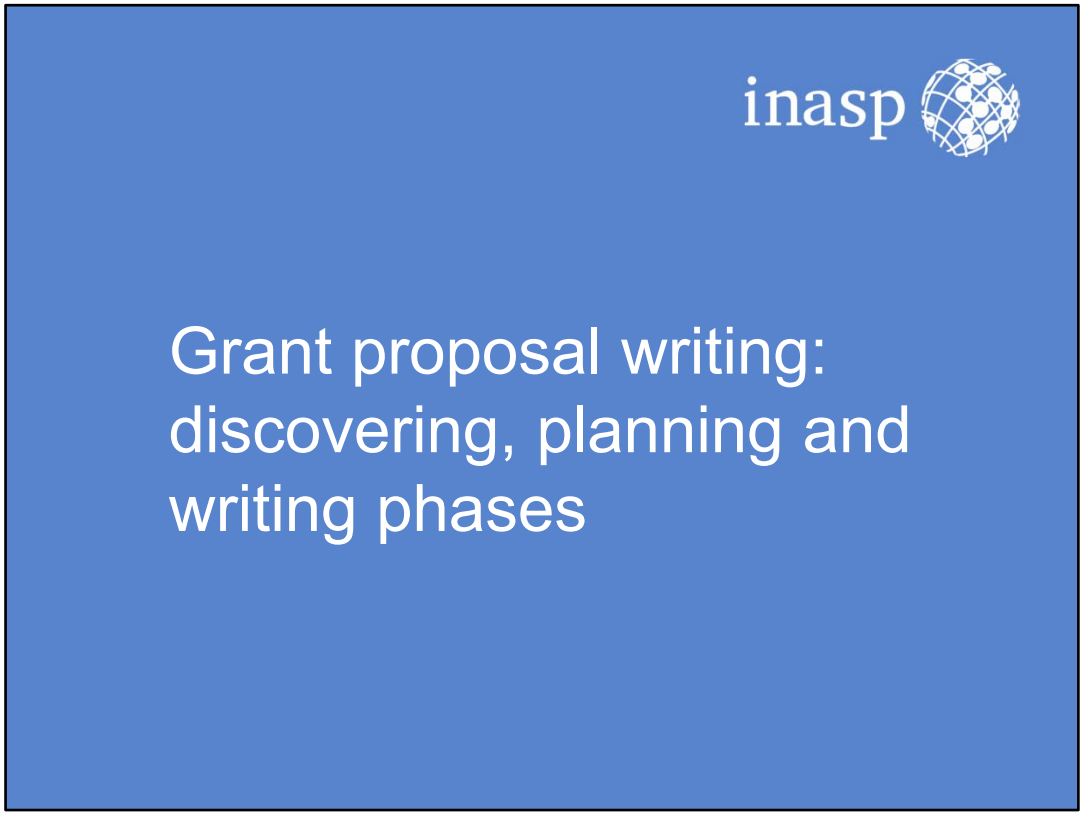
Mark Reed has a huge amount of experience advising research groups in the UK.

There's lots of free stuff on his website or you can buy his book on Amazon.

One of the most useful tools he has developed for UK-based researchers submitting proposals to the Global Challenges Research Fund is his Impact Planning Template.

It's just a step-by-step framework to assemble the information you need to be able to include a really convincing description of how your research will have impact – in whatever format the donor wants it in.

Any Questions?

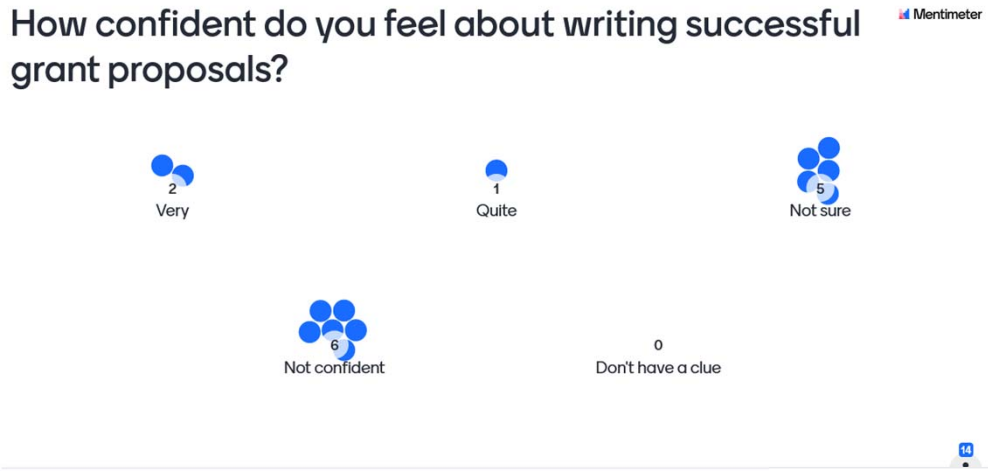


Delivering a presentation on proposal writing to a mixed group of scholars is always a challenge, because every funding application is different.

There are already lots of resources out there on the internet about grant writing tips, but many resources are specific to certain disciplines and funders, and so it's not always easy to find the right type of advice for everyone, and provide the most appropriate tips for the call that is in front of you.

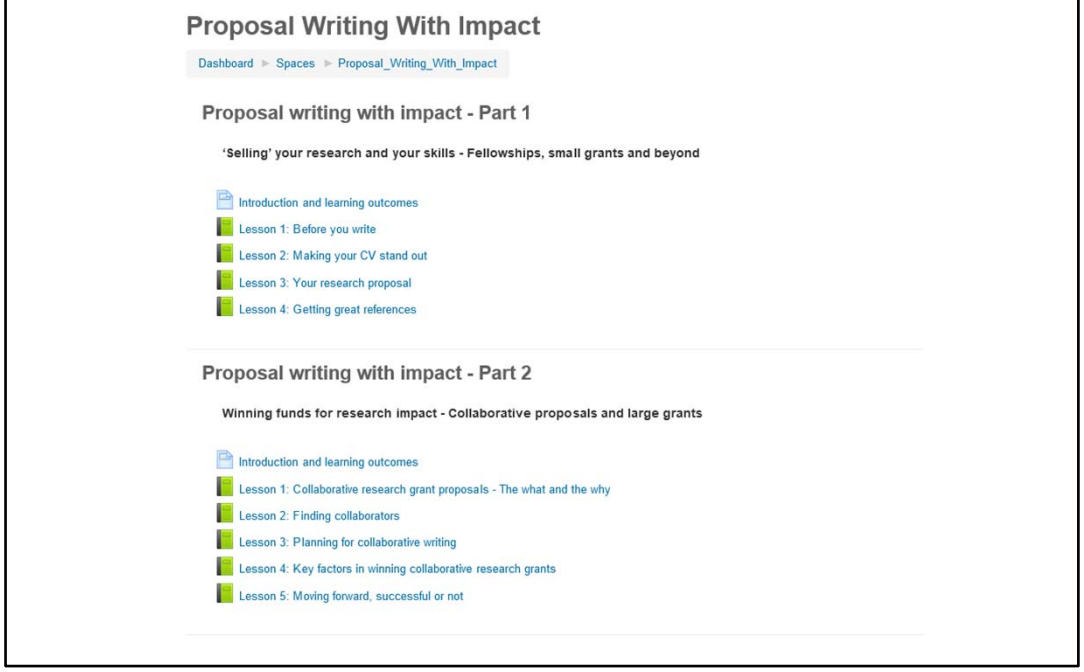
As this group is for a mixture of experienced and less experienced scholars, this presentation will cover all types of grants – from small fellowship and scholarship applications to large collaborative grants – this will cover the themes that are common to all types of proposal.

Results from last week

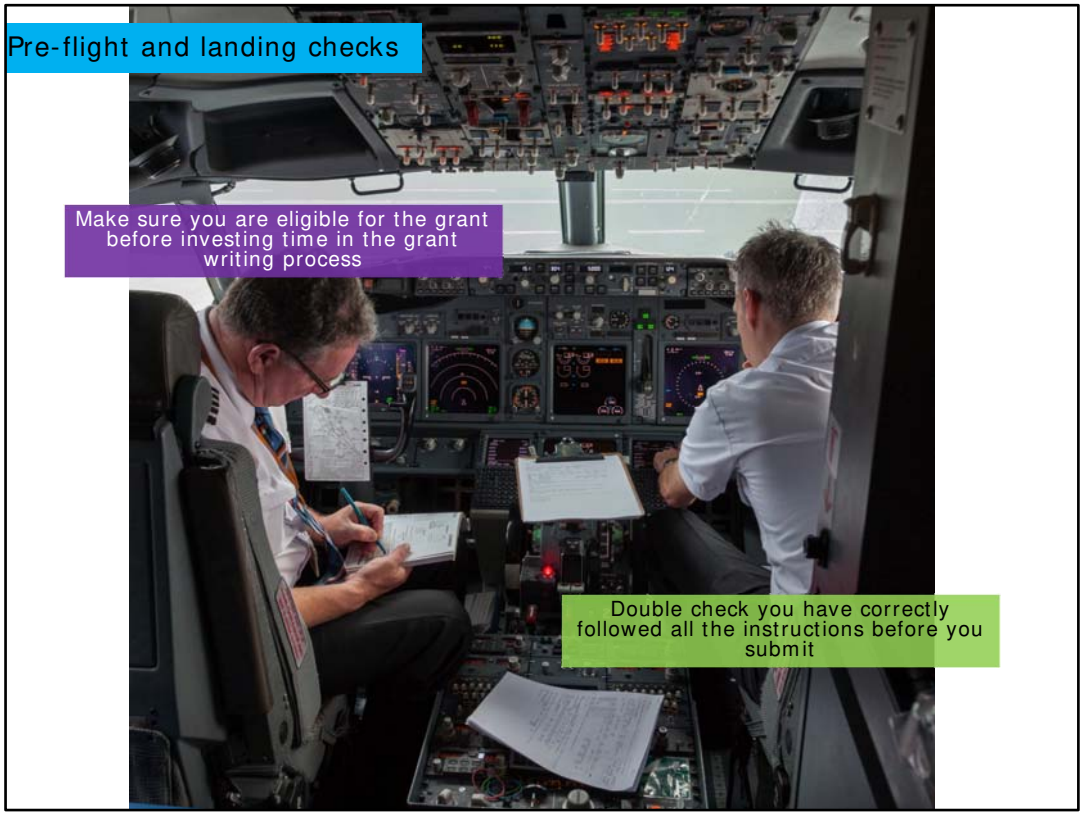


Two more questions!
Please go to menti.com and enter code
7863 0050

More information available online



Many of the themes of this presentation are covered in an online module that we recently developed called 'Proposal Writing with Impact', which was designed for Early Career Researchers. This is available for the next month

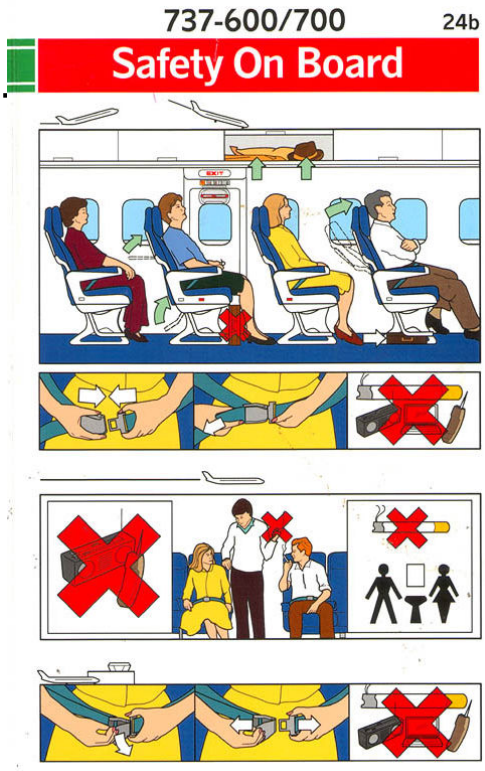


Even if you have wings, you can't fly in the world of research funding unless you do your pre-flight checks! Do you have fuel, permission to take off, cabin pressure etc.? In other words, don't spend time writing an application for a grant that you are not eligible for! And you might also waste a lot of time on an application if you make an error which disqualifies you.

Follow the instructions!

Give yourself time to get things right

- Deadlines are not flexible
- Word limits are not flexible
- Give yourself plenty of time (6-8 weeks for a research council grant, 6 months with big grants).
- Don't be afraid to ask questions to the Programme Officer of the grant giver (email address)



The number #1 tip for grant writing is to FOLLOW THE INSTRUCTIONS! Often funders give you very clear guidelines and clues. Your proposal can be rejected for the smallest error, so give yourself enough time to get things right!

Be realistic

- Start small and early but dream big!
- Don't try to solve all the problems in your field in a single proposal
- If you lack key skills, build a team with people who have! Be strategic in looking for collaborators

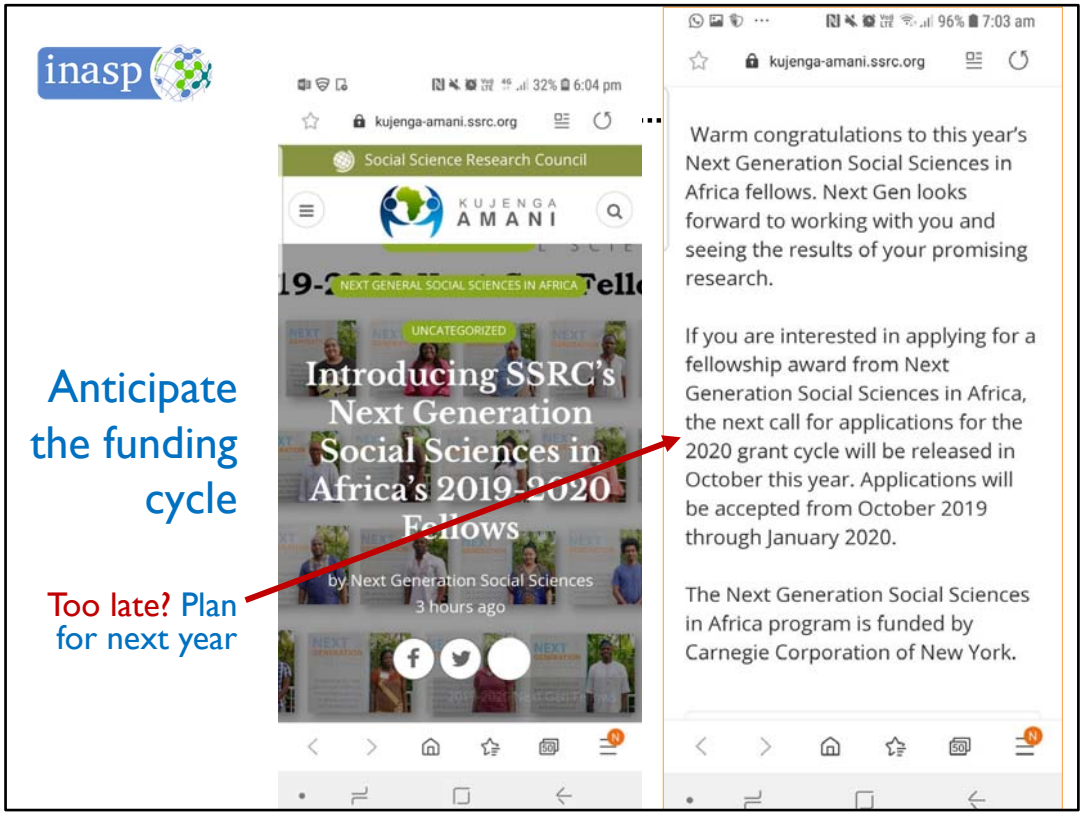
As young researchers, we don't necessarily expect you to be going after the big international funding proposals yet – often you will need to start small and win smaller opportunities and grants, or focus on smaller, niche research topics, and build your way up. You may also have to team up with colleagues or experts in other disciplines. The same can be said for influencing practice and policy – even with fantastic research you probably won't be able to shift government policy as an individual, they may have to focus on more local decision makers, or collaborate with other researchers and actors first.

(picture is a mustard seed)

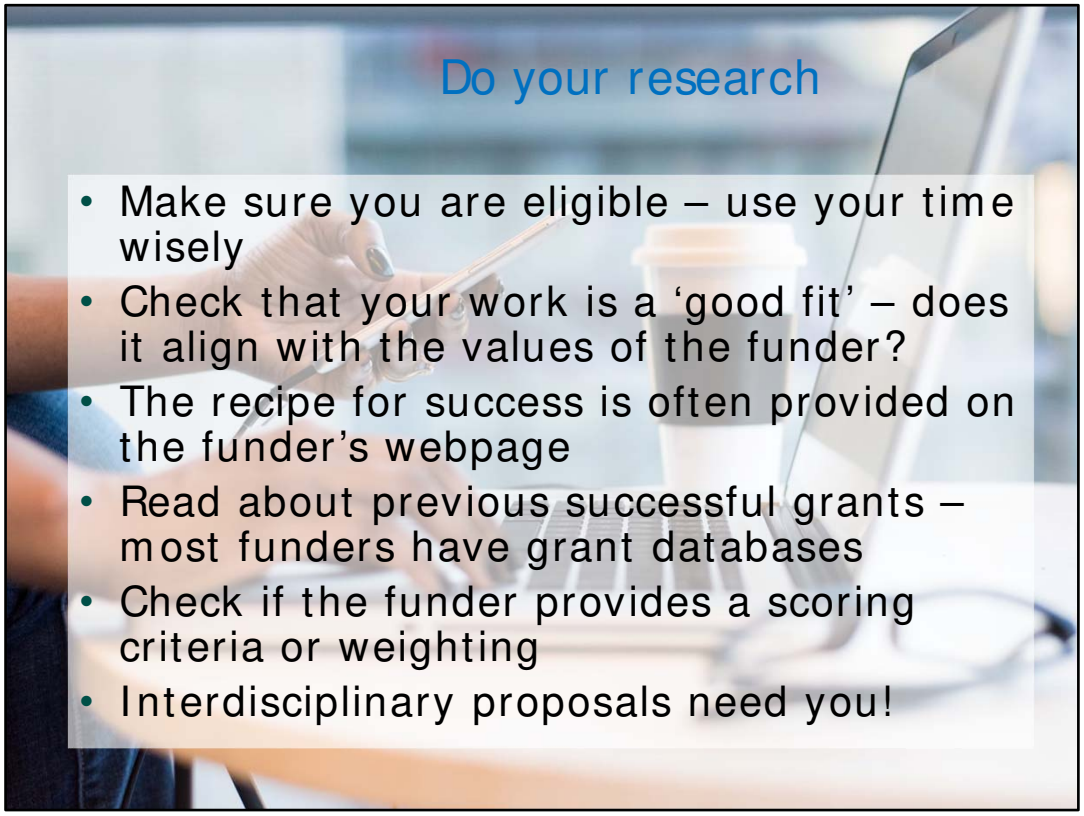
The discovery phase

- The information is out there on the World Wide Web!
- Subscribe to newsletters, websites, blogs.
- Follow funding bodies, societies, universities, researchers on Twitter
- Use Google (but smartly)
- Bookmark and sign up for alerts at common funding portals such as Terraviva Grants, Grants.gov, Early Career Central, Opportunity Desk, ec.europa.eu, UKRI Opportunities
- AuthorAID funding page: https://www.authoraid.info/en/funding/

The information is out there, you just need to learn where to look, and search smartly. What other sources of funding opportunities do you use?



If you are too late for a funding opportunity (like the participants were in this example from a workshop in 2019), make a note of the date and plan for next year



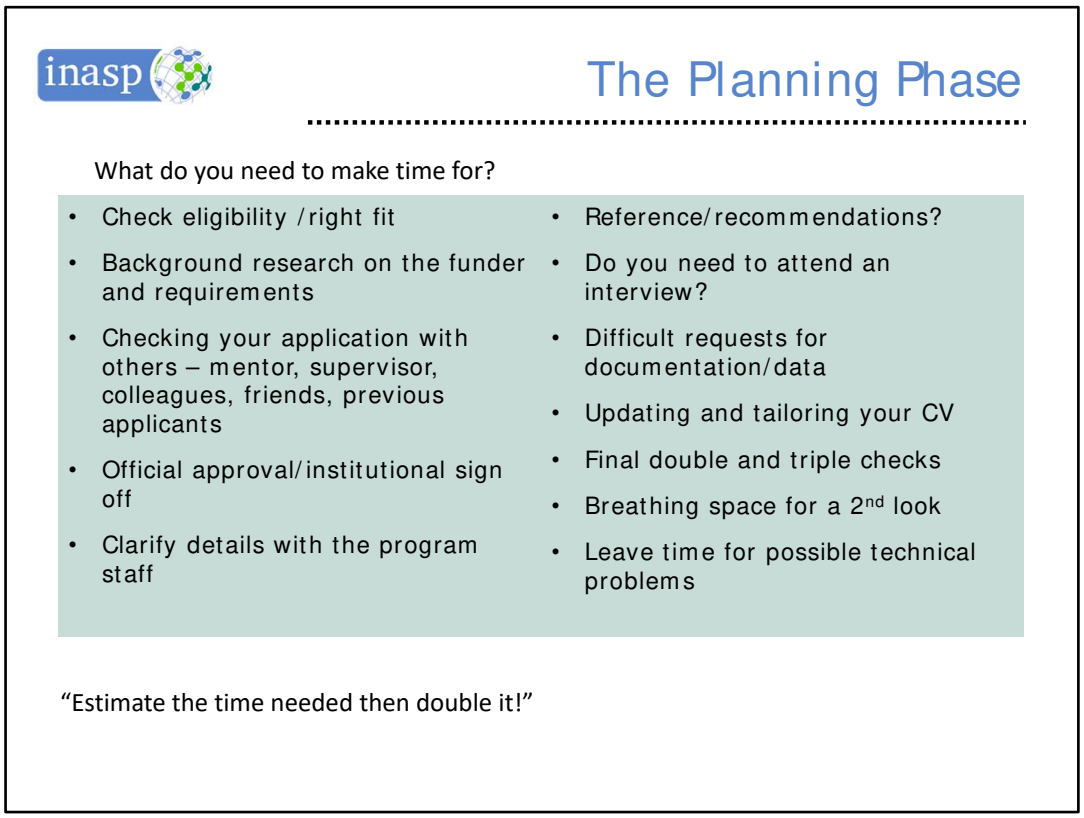
General tips that are useful for any grant proposal

Find successful examples

- Ask your colleagues who have had success applying for the same funder
- Check your institution – they may have a database of successful grants
- Free online resources:
  - The Open Grants database
  - RIO journal (Research Ideas and Outcomes)
  - National Institutes of Health (US) sample grants

Find successful examples of funding applications which you can learn from – colleagues, institutional examples and open databases on the internet.

However, remember that every funding opportunity is different, so whilst you can learn from structure, style and approach of successful applications, it's more important to follow the exact instructions of the current funder and call that you are applying for!



There are lots of things to consider when planning your proposal – many things that can cause unforeseen problems and take longer than you think. One researcher I know also suggests that everything takes DOUBLE the time you think it will.

Planning phase - previous workshops

What do you need to make time for?

1- Look at projects sponsored in the past by the funding body 2-Research topic and literature review to support the hypothesis3-Research site and collaborators4-Estimating time for which funding is needed5-Estimating resources needed-both p

1.The Deadline of the grant2. Time of team members3. Available resources to execute the project4. The objective of the funder5. Time of the senior reviewer

1. Funding body for my research; which organization is most suitable for my research.2. The expectations of the grant.3. How do I express my suitability and future plans?4. The fundamental reasoning behind my research.5. Planning my writing.

Application documentation requirements

Check for an experienced second reviewer of the application

- is my project aligned with the grant's interest- sustainability - what makes the project worthy of the grant (i.e. it's value, why is important, what makes it unique) - the plan should be actionable and realistic - credibility

"Physiology" of a reviewer

Proposal Summary

- It's my door: I enter the application through it.

Proposal Goals Vs Funders' Goals

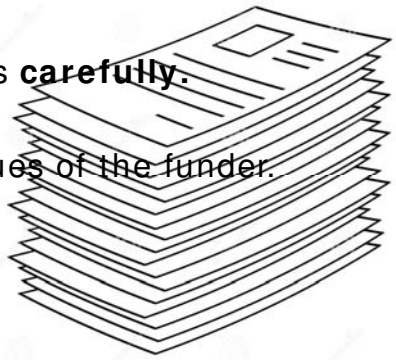
- If they don't match, an application is in trouble.
- If they slightly match, an application begs me.
- If they very much match, an application commands me.

"Know the song of the funder, and sing it well, so a reviewer could dance to your version"
Bernard Appiah

Think of the reviewer – tired, overworked, slightly bored. Trying to justify why one proposal is better than the other . If your goals align with the funders, then reviewers like Bernard Appiah are 'commanded' to take the application seriously.

Experiences of a grant coordinator/ assessor

- My experience with assessing applications
  - Scientific soundness
  - Diversity (how we reported winners to the public and funders)
  - Impact (impressed by impact beyond career progression and publications)
  - Development impact (SDGs)
- Read and follow the instructions **carefully.**
- Look for hints.
- Research the language and values of the funder.
- Tell your story, stand out.



This is my experience working on a small grants programme. Administrators may reject your application for not following the instructions, and reviewers might be looking for different strengths

The writing phase - style

- Make the title compelling
- Explain why research is needed
- Avoid too much jargon, explain acronyms and write concisely
- Get specialists AND non-specialists to read your application
- Don't write like you would for a book or journal article!

The writing style for proposals is a skill in itself, and it is subtly different from scientific writing. The style has to be more readable, persuasive, straight to the point and low on jargon unless it's necessary.

Academic writing vs. grant writing

Academic Writing versus Grant Writing: Contrasting Perspectives

Academic Writing	Grant Writing
Scholarly pursuit:	**Sponsor goals:**
Individual passion	*Service attitude*
Past oriented:	**Future oriented:**
Work that has been done	*Work that should be done*
Theme-centered:	**Project-centered:**
Theory and thesis	*Objectives and activities*
Expository rhetoric:	**Persuasive rhetoric:**
Explaining to reader	*"Selling" the reader*
Impersonal tone:	**Personal tone:**
Objective, dispassionate	*Conveys excitement*
Individualistic:	**Team-focused:**
Primarily a solo activity	*Feedback needed*
Few length constraints:	**Strict length constraints:**
Verbosity rewarded	*Brevity rewarded*
Specialized terminology:	**Accessible language:**
"Insider jargon"	*Easily understood*

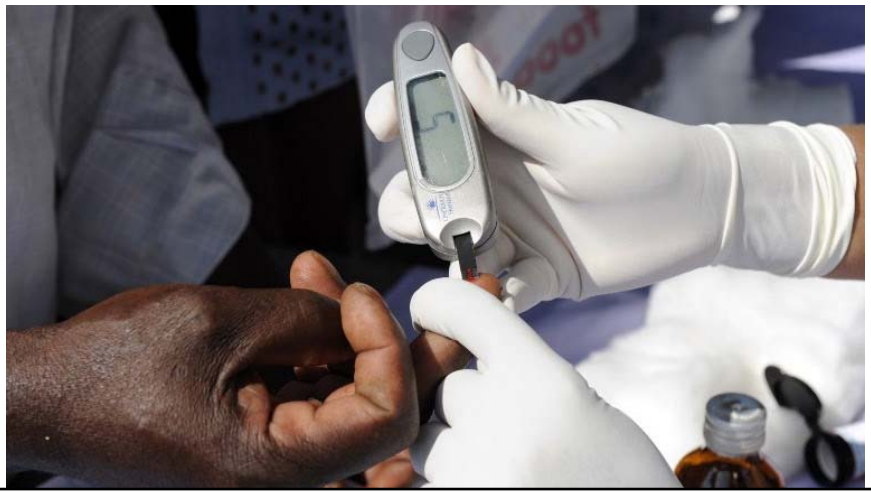
From "Why Academics Have a Hard Time Writing Good Grant Proposals" - Robert Porter

Some tips from Why Academics Have a Hard Time Writing Good Grant Proposals by Robert Porter (Journal of Research Administration; Fall 2007; 38, 2; ABI/INFORM Global). pg. 37

'(A baffled professor once came to my office bearing the written critiques he had received from reviewers of a failed proposal. One of them included this killer remark: "Reads like a journal article.")'

Drawing attention to your opening

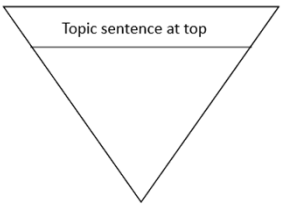
1. Diabetes is a public health challenge in Africa
2. X% of adults in Africa have diabetes and the proportion is expected to increase to Y% in the next decade



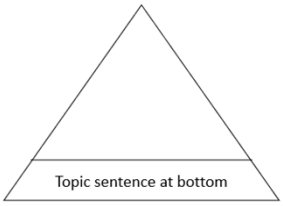
When you explain context, make sure you stress the significance and urgency of the situation

Upside-down triangles

Effective paragraphs are modelled after news stories



Typical academic writing (passive)



Consider also:
- Using active voice
- The 'Assert-justify' technique

Writing is effective when the reader knows where they are going

• The main building block of a piece of writing is the paragraph

• Effective paragraphs begin with a "topic sentence", so you are front loading with the most important information

• Note: Academic or passive writing styles usually dictate that our paragraphs end with the topic sentence

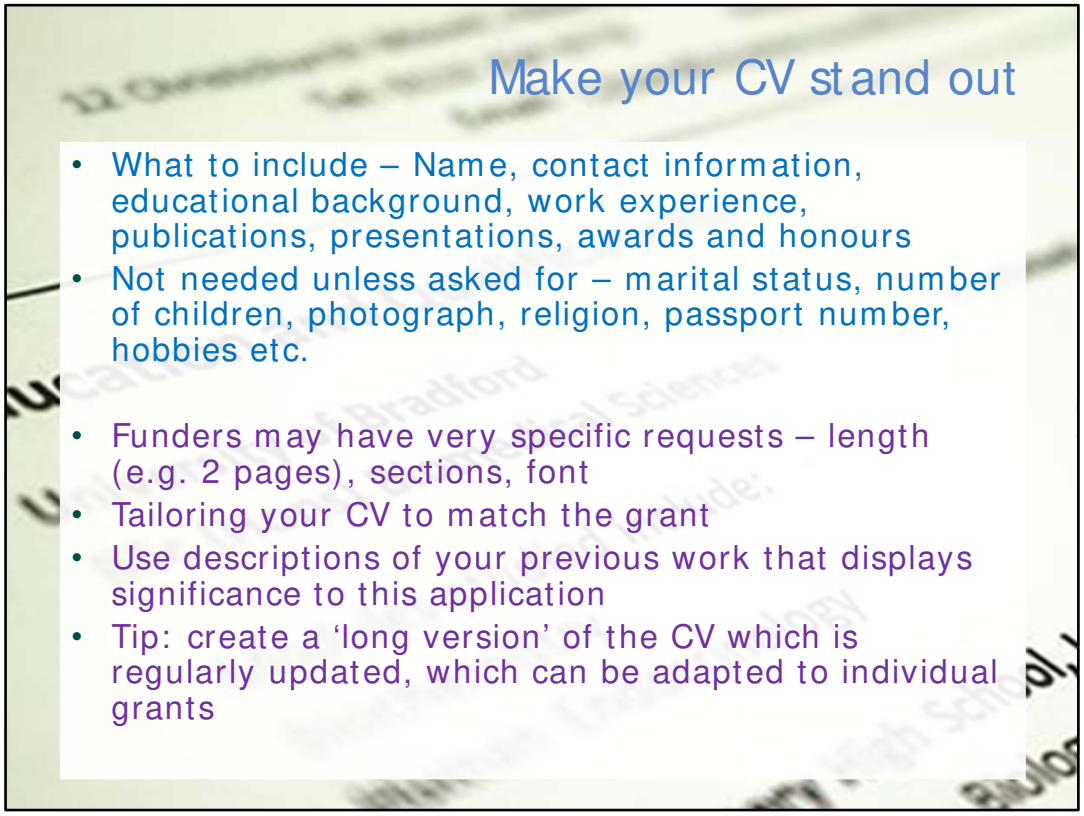
Another similar method is called 'assert-justify', also called 'Tell them; then convince them'

Example

Over three-quarters of school-age children in low- and middle-income countries have been shown to demonstrate inadequate reading performance. This deficiency has the potential to reduce the possibility of children continuing in school and reaching their full developmental and employment potential. Various educational interventions have been shown to help school children increase their reading speed and comprehension – these include computer software and hardware, access to reading specialists, and specialised training for teachers and parents. But these interventions have mostly been studied in developed countries like Canada and the US. They have not been widely studied in resource poor settings outside of North America. In Indonesia, the problem of reading skill is particularly worrisome – 80% of school children may not be reading at correct levels. Because of this great need research is warranted to understand whether assistive reading systems can help school children in rural Indonesia. **We propose to test and validate a novel, assistive reading system in rural Indonesia.**

We propose to test and validate a novel, assistive reading systems in rural Indonesia. Assistive reading systems, which involve computer technology, reading specialists, and training for teachers and parents, have been shown to improve students' reading performance in Canada, but they have not yet been well studied in low- or middle-income countries. There is enormous potential for novel interventions in the Indonesian school system because over 75% of children are reading at two levels below their grade and could benefit from tailored assistance that can maximize their ability to continue in school and reach their full developmental potential.

If taken out of context the paragraph speaks for itself



CVs for proposals should not be like a CV for a job application. You may have to tailor your application to each opportunity – some things are more relevant on one application than they are for another.

See also Grants and fellowships: How to find the right opportunities, cope with failure and craft successful applications

https://www.authoraid.info/en/news/details/1480/

inasp

Any Questions?

Key Components of a Successful Proposal

Who, What, Where, When, Why, How?

Who – You and your organisation / who are the beneficiaries?
What – What are you going to do?
Where – Define target area
When – Project timing/length, and activity delivery dates. Construct a timeline
Why

- Why you are targeting who you are targeting
- Why you have decided on what you will do
- Why you will provide services in a particular place
- Why you have decided on particular times

How

- How you will engage the target population
- How will individuals be assessed and admitted?
- How you will provide services.
- How you will retain participants.
- How you will evaluate the project's effectiveness.

"A good way to start [learning how to write grants] is to take English composition or Journalism classes at a local college to sharpen your writing skills.. You have to learn to tell a story"

http://seliger.com/2008/07/21/every-proposal-needs-six-elements-who-what-where-when-why-and-how-the-rest-is-mere-commentary/

Heilmeier's catechism

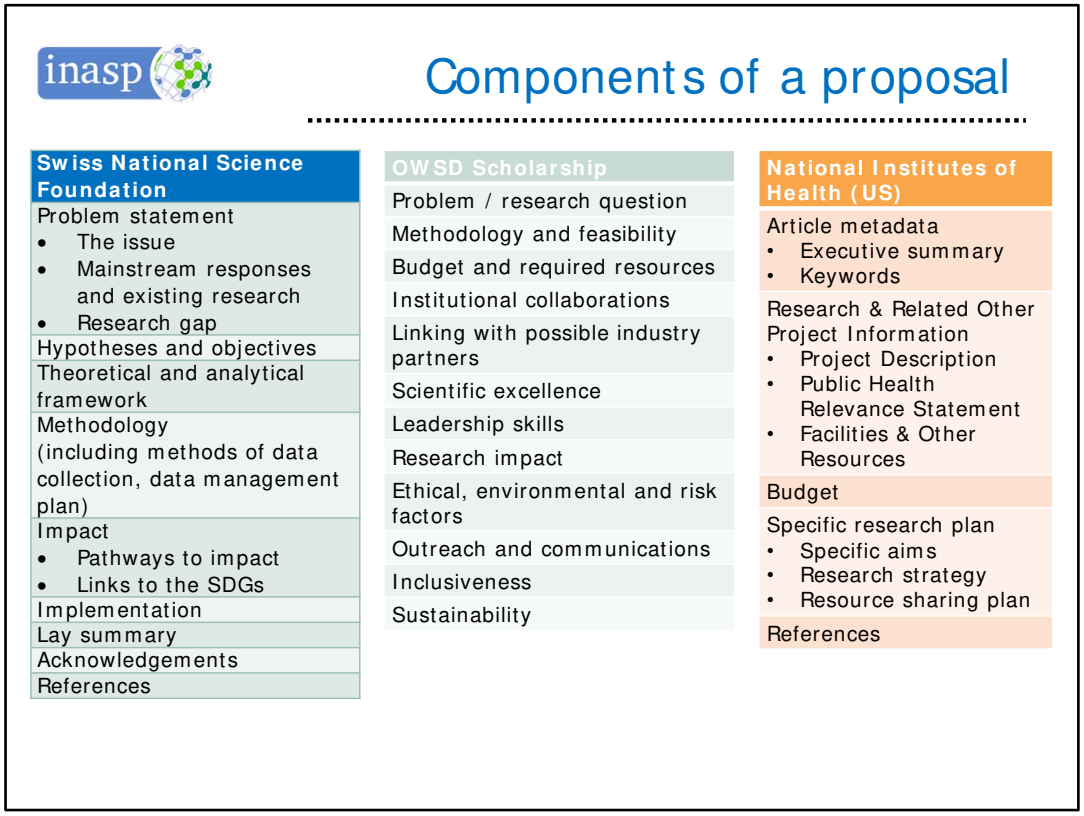
- What are you trying to do? Articulate your objectives using absolutely no jargon.
- How is it done today, and what are the limits of current practice?
- What's new in your approach and why do you think it will be successful?
- Who cares? If you're successful, what difference will it make?
- What are the risks and the payoffs?
- How much will it cost?
- How long will it take?
- What are the midterm and final "exams" to check for success?

George Heilmeier was an American engineer who was one of the inventors of liquid crystal displays (LCDs). His advice on proposal writing was written in the 1960s, but is still relevant today as a set of questions that anyone proposing a research project or product should be able to answer

Common elements of a proposal

- Proposal Form (including budget)
- Researcher/team Track record with/without CV
- Research environment
- Background / Importance / Lit review
- Aims / Objectives / Hypothesis
- Programme and Methodology
- Management plan
- Pathways to Impact / Impact Plan
- Justification of Resources
- Data Management plan
- Work Plan(s)

There are many different sections that you might be asked to complete for a proposal. Have we missed anything?



Three completely different examples of the components of a proposal. Are there any themes?

Funder	What they assess on
National Institute of Health (United States)	The review panel assesses each individual on the strength of the **approach, significance, innovation, investigators, environment**
Australian Research Council – discovery projects	Assesses applications based on – the strength of the **investigators** (35%), **project quality and innovation** (40%), **feasibility** (10%) and **benefit of the project** (15%)
Economic and Social Research Council (UK)	Prioritises **research excellence, ability to deliver and value for money,** but they also judge applications based on **impact**, **innovation** and **interdisciplinarity.**

Three national funders what they assess applications for.

What are the common threads? Impact, innovation, Value for money, significance

UKRI scoring matrix

Score Indicators	Score

Exceptional - Top international programme, or of exceptional national strategic importance
 	
▪ Scientific quality and impact
  ▪ Crucial scientific question or knowledge gap or area of strategic importance
  ▪ Original and innovative; novel methodology and design
  ▪ Potential for high health and/or socioeconomic impact
▪ Scientific leadership
  ▪ Excellent leadership *(track record, team, environment, and collaborators)*
▪ Justification of resources
  ▪ Potential for high return on investment *(resources requested, likelihood of project delivery, anticipated knowledge generation)*
  ▪ Appropriate staff time allocated to deliver project (*Principal investigators and co-investigators*)
▪ Other: Ethical and/ or governance issues are fully considered
	6

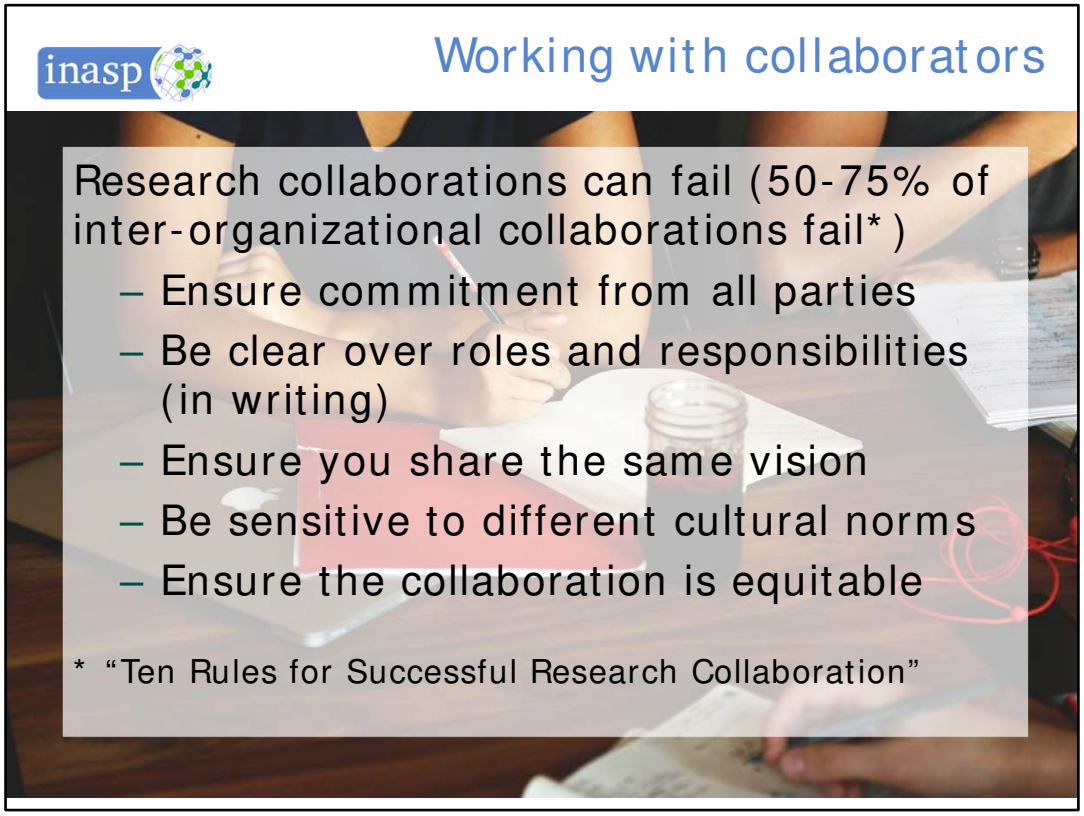
Here is a UKRI scoring matrix which gives further insight into what they consider ‘exceptional’ https://mrc.ukri.org/funding/peer-review/guidance-for-peer-reviewers/scoring-matrix/

Difficult questions

Many international funders are increasingly interested in:

- Impact and sustainability
- Significance and innovation
- Interdisciplinarity/transdisciplinarity
- Capacity building for international partners
- Value for money (VFM)
- Due diligence and safeguarding
- Whistleblowing
- Risk management
- Diversity

I've spoken to a few grant officers, and many young researchers just don't know how to answer these questions and sometimes even leave them blank. Make sure you take these sections seriously, and get help if you need it.



See also “Ten Rules for Successful Research Collaboration” and “Giving and Getting Value in Research Collaborations: 10 Tips for Making Meaningful Impact and Advancing Your Career “

Significance Innovation Impact Sustainability

What do significance, innovation, impact and sustainability mean in the context of proposal writing, and how are they actually different?

Significance – so what?

"Good ideas don't always sell themselves: Tell me why it's important, up front, in the background section, and I'll be ready to roll. Tell me what's known and what isn't known and how [...] you'll move the field forward or answer important questions. A lot of people really are unaware of how absolutely important it is to tell the reviewer from the beginning why it's worth doing"

NIH CSR Insider's Guide to Peer Review for Applicants

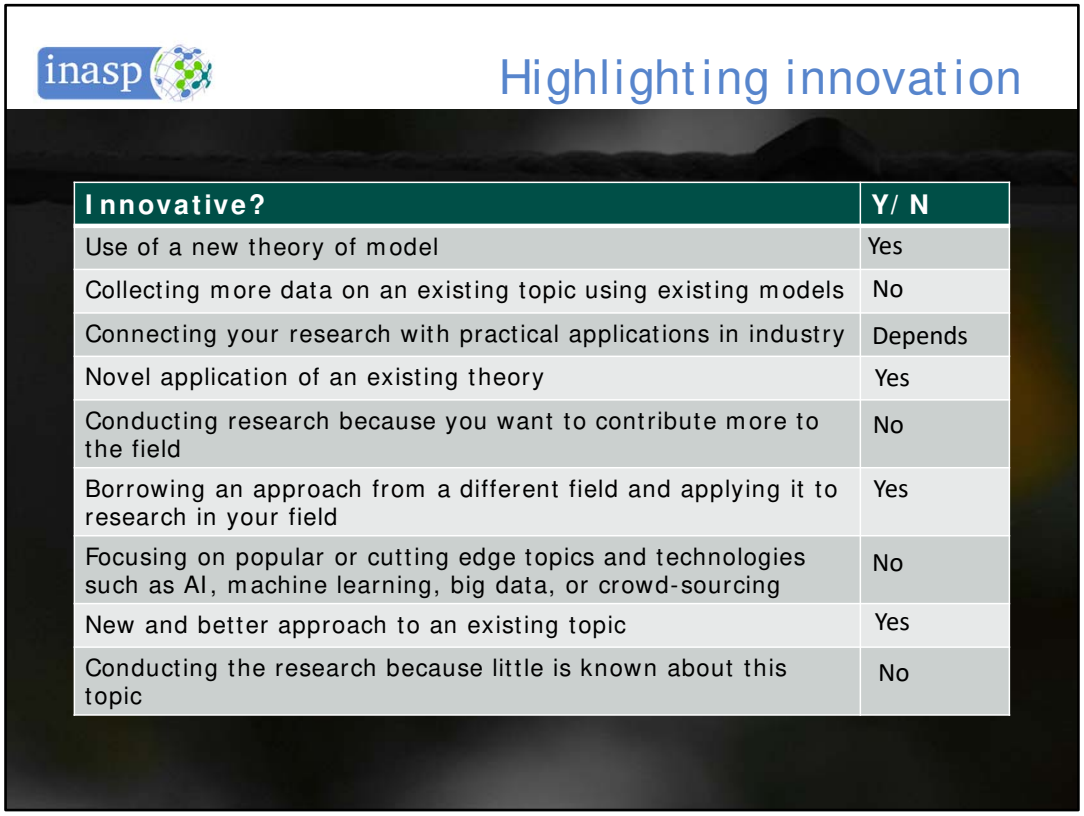
Significance has many different definitions, but it generally refers to general/global importance, or relevance to the big issues in the field - for example in public health research it might be defined as:

the extent to which the research findings will be of great importance in the research area by substantially advancing knowledge, clinical and/or public health applications, policy development or change in the Field' (NHMRC)

Talking about significance

1. Is it a current issue of importance or controversy in the field? Is it broad enough to be of interest to a general audience? Will it lead to a step change?
2. Explaining a real problem or barrier that exists in your discipline, or the real world – what is already known about this topic?
3. What are the gaps in knowledge (what does the literature say?)
4. What are you or your team proposing to do about it? What is your innovative solution?

Some important questions to ask yourself to see if your research topic or solution is shows significance

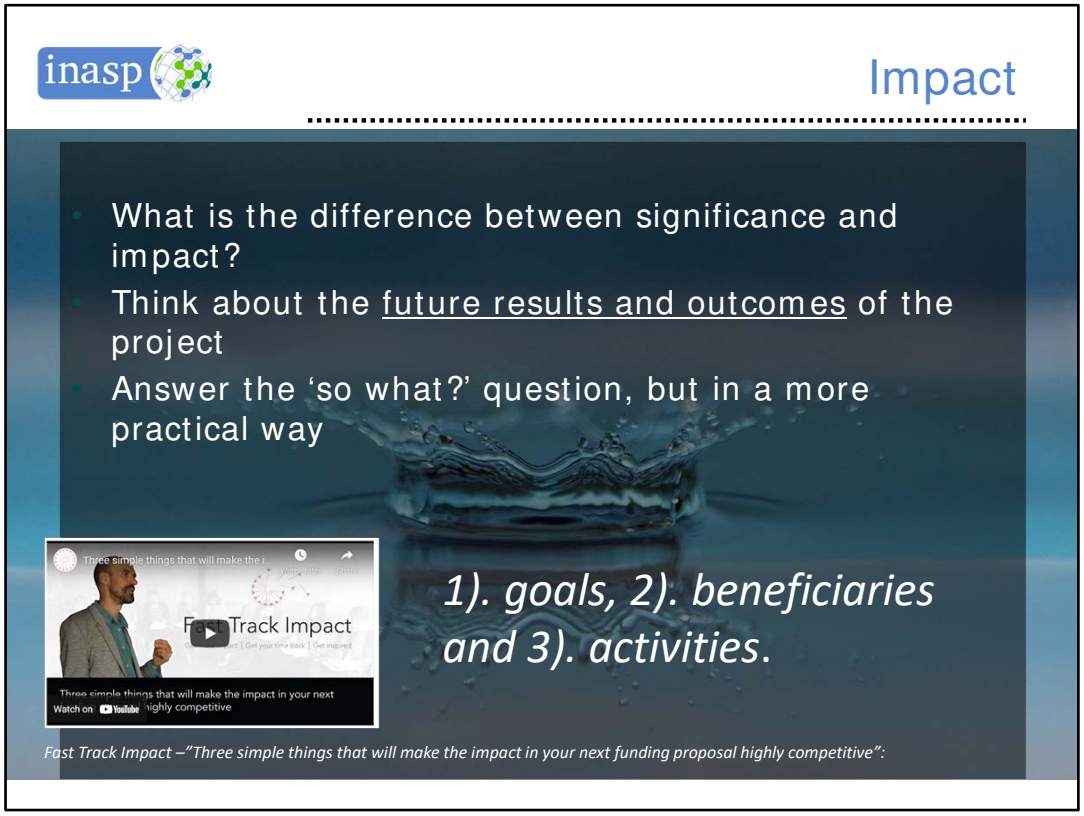


It is also important to be realistic about innovation in your work. Inexperienced researchers are unlikely to produce work that shifts major paradigms early in their careers. It is more normal for both experienced and inexperienced researchers to use new approaches or models, work in new areas, or test innovative ideas rather than cause a paradigm shift.

Talking about innovation

- This work **is innovative because** it will analyse the microparticles in plasma of infant children in using a rigorous method that will lead to new methods in diagnosing...
- This project **will depart from the prevailing paradigm** of studying the quantity of species, **focusing instead on** understanding how biodiversity evolves over time due to human intervention...
- Our study has also **revealed a novel connection** between mitochondrial DNA mutation, premature aging and neurodegenerative diseases, which we will analyse further using...
- This mixed-methods approach, along with the cross-disciplinary expertise of the team assembled, **will be combined to examine for the first time** the connection between microfinance and...
- We **seek to shift current research paradigms** by analysing existing data using two different, but complementary methods...
- **The advantage of our method over existing models** is that it builds upon the interoperability of 'open data' systems, and so we can analyse metadata that has not been compared with...

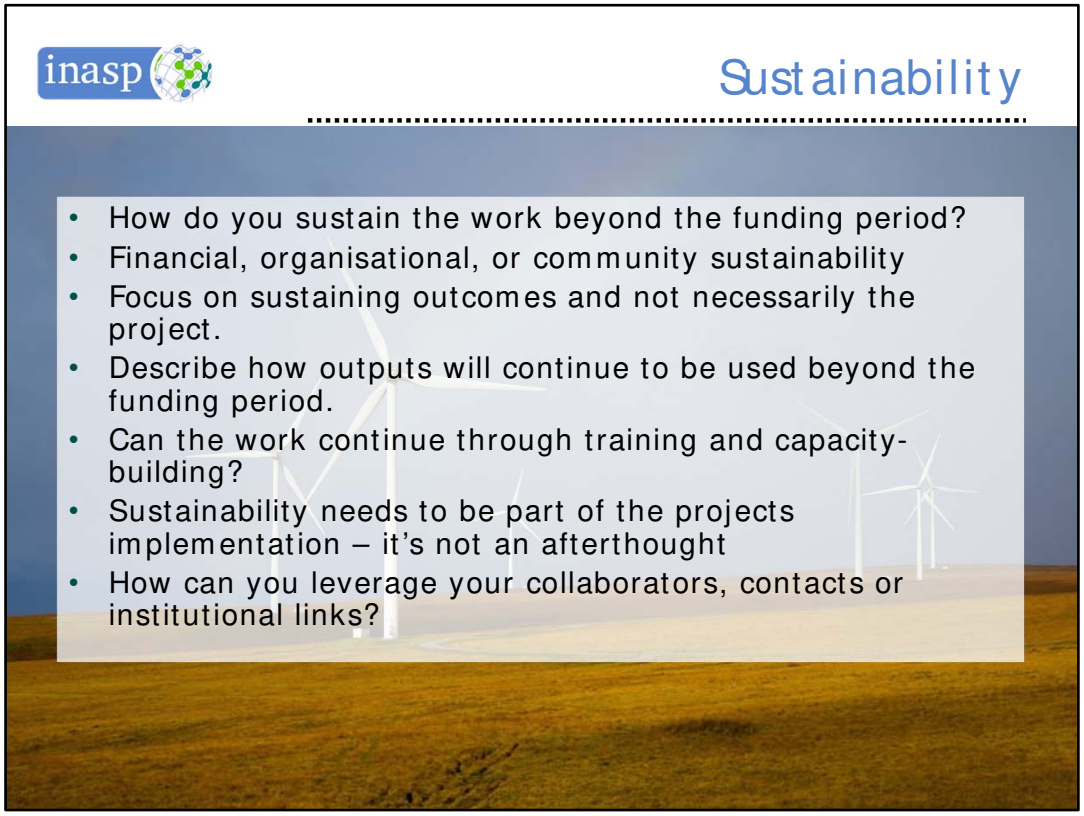
Sometimes it's about being very clear with the words you are using – signpost exactly how you think your methods is innovative. Don't make the reviewer have to dig deep



You may have already talked about the potential impact of your research when talking about significance

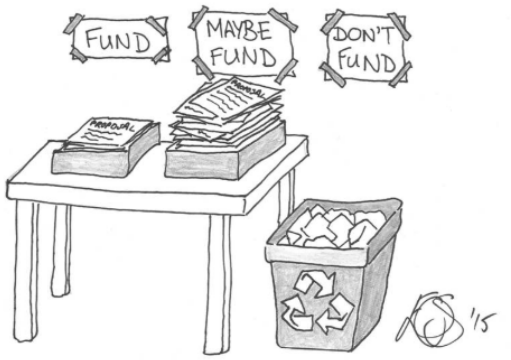
When thinking of impact itself, try to think about the future results and outcomes of the project – this is an additional way of answering the 'so what?' question, but in a more practical way.

See also this video from Fast Track Impact – Professor Mark Reed talks about how this is actually really simple: https://www.youtube.com/watch?v=J2RaRUqp2PU&feature=youtu.be



[we don't mean environmental sustainability]. Sometimes it can be difficult to demonstrate sustainability in research projects. And we could be looking at different types of sustainability depending on the proposal. For example, a new experimental drug, technique or tool that needs investment from the private sector; or embedding a training technique or pedagogy into a curriculum or larger training programme; or perhaps community sustainability - getting buy in from community and other stakeholders from the beginning of the project to ensure a practice continues].

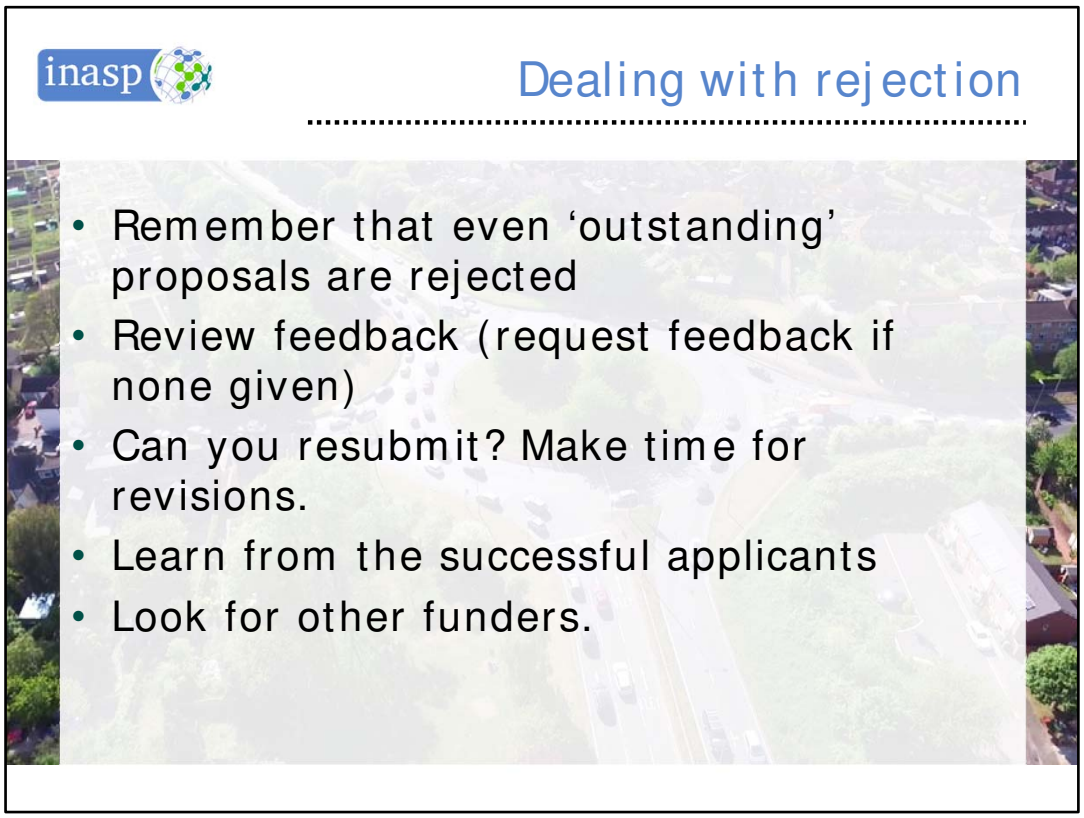
Rejection



"Try and remember that these are certain people's opinions and interpretations of a grant call that has also been set by people with certain opinions and preferences. The best thing to do is keep a good log of the grants you have not got funded. You can always re-use parts for other projects or turn them into other things." -- Louise Bezuidenhout, AuthorAID mentor

Accept rejection and feedback. Even 'outstanding' applications get rejected

Unfortunately you will be rejected at some point in your applications, even if they are excellent.



If reasons for the rejections are available, review them carefully. Reviewing the specific reasons for rejecting your proposal may give you some ideas for moving forward or maybe not even pursuing the idea again.

If a funder requires resubmission, do your homework prior to submission. Some proposals may require that you obtain preliminary data to strengthen it. If this is the case, resubmitting the same proposal without the preliminary data may be a big mistake. If you find that the team is not strong enough, you will have to consider other or additional partners.

Make sure that if you plan to resubmit you realise that you will probably have to rewrite a considerable portion of it to make it suitable for the specific call/funder.

Learn from those funded in the cycle that you applied. Some funders such as the Gates Foundation provide summaries of funded proposals. Reading the summaries may give you ideas for future grants. You could also consider contacting successful applicants to see if they would be willing to share tips or sample applications.

Sometimes, a funder may just not be a good fit for your idea. You will have to look elsewhere. However, ensure that you address key issues identified in the rejected proposal, if specific feedback is given about these.

Successful resubmission

2.1 Response to Review Comments

A previous version of this proposal was reviewed a year ago by the NSF Chemical Oceanography program and received generally positive reviews, with a final recommendation of "Very Good" from the panel. Although there were many positive comments, the most notable criticisms—which we have attempted to address in the present revised proposal—can be briefly summarized as:

- **Review 1 (VG):** "Few specific scientific hypotheses or questions have been posed . . . No plan has been proposed to involve undergraduate students in this work, or participate in outreach programs . . . With a combined budget of > $700k, I would expect more effort to be made to engage with the broader community to build interest in the work."
- **Review 2 (VG):** "While there is a great deal of information on the more technical aspects of the proposed work, there is much less attention devoted to the methods that will be used to analyze and validate the simulations. . . The main weakness of the proposal is the broader impacts section."
- **Review 3 (VG/G):** "The proposal left me unclear as to which specific BGC questions or phenomena the investigators are ultimately interested in addressing. . . What is the current computational cost of running the BGC models in the LES framework? How much saving is necessary to make it viable for research? . . . What are the targeted scientific questions for application of the simulations? . . . Which tracers do you care about and why?"
- **Panel (VG):** "The proposal was too focused on the description of the methodology with the hypotheses solely focused on technical aspects of the approach. . . The connection between methodology and science application was too weak. . . PIs should include some external means of validating their modeling results. . . The broader impacts were relatively weak and could be enhanced."

In response, we have made many changes—both small and large—to the proposal, most notably:

- We refocused the proposal on scientific, rather than methodological, aspects. Most notably, a

Successful NSF grant (2019) - *Resolving Large Eddy Simulations Using Reduced Biogeochemical Models* (Hamlington, Lovenduski, Niemeyer)

An example of responses to reviewer comments from a successful NSF grant (2019) - Resolving Large Eddy Simulations Using Reduced Biogeochemical Models

(Hamlington, Lovenduski, Niemeyer) which is available to view online via the 'opengrants' website

inasp

Any Questions?


Please be back at 16:25

Exercise: Constructing a winning proposal

- Read the proposal very carefully:
  - Identify what it needs to include.
  - Look at the scoring criteria and weighting.
- Write the proposal so that it:
  - Provides all information requested.
  - Is the right length.
  - Has the right amount of detail for the weight of scoring (more for high-scoring items).
  - Is structured to make it as easy as possible to score.

In groups: Prepare a bullet point outline of a proposal to meet the requirements of your call. It should:

- List the main sections and show how long they will be (in pages)
- Have a few bullet points in each section outlining what will be in it.

6. Further resources and feedback

- AuthorAID was launched to support researchers in developing countries, and has a community of over 25,000 researchers in 174+ countries
  - Free **online training** in research and proposal writing
  - Free **online mentoring** and collaboration
  - Free **resources and training materials**
  - Addressing **gender** inequities in higher education

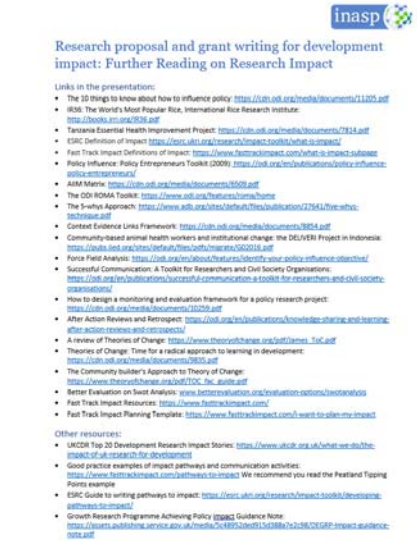
www.authoraid.info

Upcoming online courses

- **Research Writing** - 5th April 2022 to 16th May 2022 (6 weeks)
- **Research Writing in the Social Sciences** – 7th June 2022 to July 2022
- **Research and Proposal Writing** - 6th September 2022 to 1st November 2022 (8 weeks)

These courses are entirely free for participants

Further information



Research proposal and grant writing for development impact: Further Reading on Research Impact

Links in the presentation:

- The 10 things to know about how to influence policy: https://cdn.odi.org/media/documents/11205.pdf
- IRRI6: The World's Most Popular Rice, International Rice Research Institute: http://books.irri.org/9836.pdf
- Tanzania Essential Health Improvement Project: https://cdn.odi.org/media/documents/7814.pdf
- ESRC Definition of Impact https://esrc.ukri.org/research/impact-toolkit/what-is-impact/
- Fast Track Impact Definitions of Impact: https://www.fasttrackimpact.com/what-is-impact-subpage
- Policy Influence: Policy Entrepreneurs Toolkit (2009): https://odi.org/en/publications/policy-influence-policy-entrepreneurs/
- AIM Matrix: https://cdn.odi.org/media/documents/8509.pdf
- The ODI ROMA Toolkit: https://www.odi.org/features/roma/home
- The 5-whys Approach: https://www.adb.org/sites/default/files/publication/27641/five-whys-technique.pdf
- Context Evidence Links Framework: https://cdn.odi.org/media/documents/8854.pdf
- Community-based animal health workers and institutional change: the DELIVERI Project in Indonesia: https://pubs.iied.org/sites/default/files/pdfs/migrate/G02016.pdf
- Force Field Analysis: https://odi.org/en/about/features/identify-your-policy-influence-objective/
- Successful Communication: A Toolkit for Researchers and Civil Society Organisations: https://odi.org/en/publications/successful-communication-a-toolkit-for-researchers-and-civil-society-organisations/
- How to design a monitoring and evaluation framework for a policy research project: https://cdn.odi.org/media/documents/10259.pdf
- After Action Reviews and Retrospect: https://odi.org/en/publications/knowledge-sharing-and-learning-after-action-reviews-and-retrospects/
- A review of Theories of Change: https://www.theoryofchange.org/pdf/James_ToC.pdf
- Theories of Change: Time for a radical approach to learning in development: https://cdn.odi.org/media/documents/9835.pdf
- The Community builder's Approach to Theory of Change: https://www.theoryofchange.org/pdf/TOC_fac_guide.pdf
- Better Evaluation on Swot Analysis: www.betterevaluation.org/evaluation-options/swotanalysis
- Fast Track Impact Resources: https://www.fasttrackimpact.com/
- Fast Track Impact Planning Template: https://www.fasttrackimpact.com/i-want-to-plan-my-impact

Other resources:

- UKCDR Top 20 Development Research Impact Stories: https://www.ukcdr.org.uk/what-we-do/the-impact-of-uk-research-for-development
- Good practice examples of impact pathways and communication activities: https://www.fasttrackimpact.com/pathways-to-impact We recommend you read the Peatland Tipping Points example
- ESRC Guide to writing pathways to impact: https://esrc.ukri.org/research/impact-toolkit/developing-pathways-to-impact/
- Growth Research Programme Achieving Policy impact Guidance Note: https://assets.publishing.service.gov.uk/media/5c48952ded915d388a7e2c98/DEGRP-Impact-guidance-note.pdf

Research proposal and grant writing for development impact: Further Resources on Grant Writing

Grant writing

- Every Proposal Needs Six Elements: Who, What, Where, When, Why, and How. The Rest is Mere Commentary http://selger.com/2008/07/21/every-proposal-needs-six-elements-who-what-where-when-why-and-how-the-rest-is-mere-commentary/
- Assert-Justify Style - Why and How? http://www.researchfundingtoolkit.org/assert-justify-style-why-and-how/
- Research funding: 10 tips for writing a successful application (The Guardian) https://www.theguardian.com/higher-education-network/blog/2013/apr/19/tips-successful-research-grant-funding
- Lancaster University – How to write a good proposal https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/res/Writingagoodproposal.pdf
- Grant Writers Handbook (based on a book by Gary Crawley and Eoin O'Sullivan) https://www.ifm.eng.cam.ac.uk/research/grant-writers-handbook/
- Why Academics Have a Hard Time Writing Good Grant Proposals- Robert Porter https://files.eric.ed.gov/fulltext/EJ802223.pdf
- Grant Proposals (or Give me the money!) University of North Carolina https://writingcenter.unc.edu/tips-and-tools/grant-proposals-or-give-me-the-money/
- What do funders look for in a research proposal - Sue Kinn & Malcolm McNeil http://thrive.ishtm.ac.uk/resources/what-do-funders-look-research-proposal-sue-kinn-malcolm-mcneil
- Planning and Writing a Grant Proposal: The Basics – UW Madison Writing Center (includes annotated examples of fellowship proposals) https://writing.wisc.edu/handbook/assignments/grants-2/
- CSR Insider's Guide to Peer Review for Applicants https://public.csr.nih.gov/ForApplicants/InitialReviewResultsAndAppeals/InsidersGuide
- The anatomy and art of writing a successful grant application: a practical step-by-step approach https://link.springer.com/article/10.1007/s00247-014-3051-8
- Principal Investigators Association - Research Plan: Make the Most of Your Significance, Innovation, Approach and Overall Impact https://www.i2at.msstate.edu/pdf/NIH_R01_Series_Part4_Research_Plan.pdf
- Ten rules for successful research collaboration https://theconversation.com/ten-rules-for-successful-research-collaboration-53826
- Giving and Getting Value in Research Collaborations: 10 Tips for Making Meaningful Impact and Advancing Your Career https://www.authoraid.info/en/news/details/1408/
- Grants and fellowships: How to find the right opportunities, cope with failure and craft successful applications https://www.authoraid.info/en/news/details/1480/
- Make your proposal stand out: Tips on how to make an interesting, innovative and impactful application https://www.authoraid.info/en/news/details/1481/

More examples of grant proposals

- Research Ideas and Outcomes (RIO) Journal https://riojournal.com/articles
- The Open Grants Project https://www.opengrants.org/
- Sage Resources: Annotated Research Proposals https://study.sagepub.com/swain/student-resources/annotated-research-proposals

Your Feedback

What have you found most useful?

What can we improve?

Keep in touch!

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