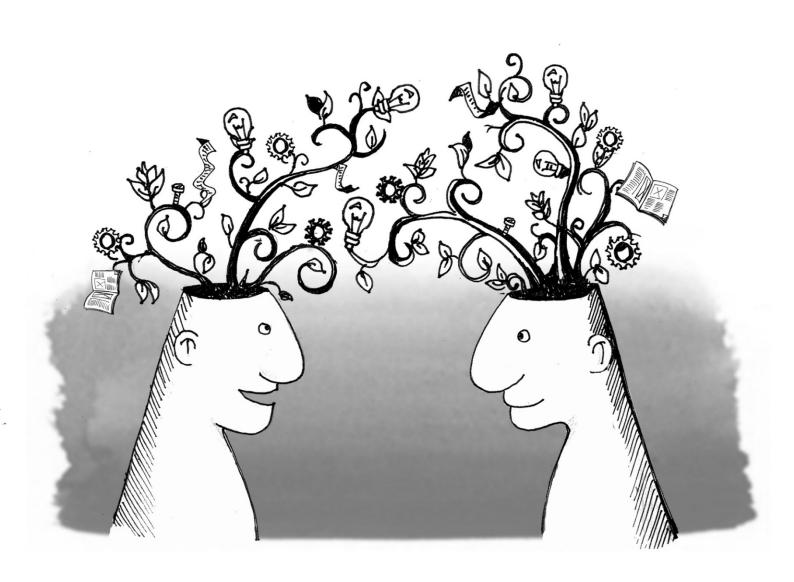
Make Your Knowledge Matter

A Guide to Developing and Documenting Research





Make Your Knowledge Matter Guide to Developing and Documenting Research

July 2014

Acknowledgements

This guide was prepared by Sally Asker from InSIGHT Sustainability with Stefanie Pillora from the Australian Centre of Excellence for Local Government (ACELG) at UTS, and updated by Jessie Lymn from ACELG in 2014.

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Introducing this guide, ACELG and the Practitioner Research Initiative

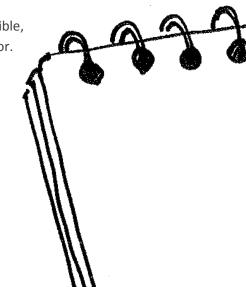
Aim of this guide

This guide has been developed by the Australian Centre of Excellence for Local Government (ACELG) at UTS as part of an overall suite of initiatives to encourage local government practitioners to develop ideas, document good practice and share their work with a wider audience.

This guide aims to:

- Build the capacity of local government practitioners to improve the quality and impact of their written contributions to forums, conferences, newsletters, journals, and other places.
- Support researchers inside local government whoever they are to effectively document ideas and practice in a clear, wellstructured and credible piece of written work.
- Encourage local government practitioners to contribute to the body of local government research, whether or not they have formal qualifications.

The Guide offers tools, tips and Thinklists to help you develop credible, robust, and logical writing to share with the local government sector.

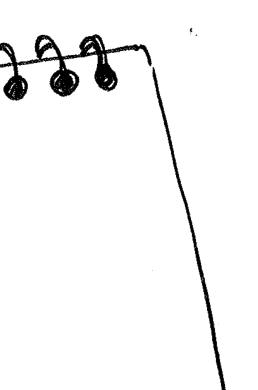


The Australian Centre of Excellence for Local Government

The role of ACELG is to enhance professionalism and skills in local government, showcase innovation and best practice, and facilitate a better-informed policy debate. In particular, the Centre is committed to:

- Building on existing local government programs and networks
- Encouraging innovation and best practice across local government
- Fostering good governance and strategic leadership
- Supporting action to improve local government workforce capabilities to address skill shortages and attract and retain skilled staff
- Promoting new and improved training and development programs
- Stimulating and informing debate on key issues for local government in the coming decades.

This mandate is delivered through a number of programs, including one known as the Research and Policy Foresight program. Its objective is to support evidence-based policy formulation, promote informed debate on key policy issues, and help address major challenges facing local government. An important aspect of this program is to strengthen practitioner research capacity and encourage those working in the local government sector to share their knowledge and insights about practice in a way that contributes to building a permanent knowledge base. Program activities include ACELG commissioned research papers, the Research Partnership Scheme, and a series of associated activities designed to disseminate ACELG research and encourage discussion on the implications of the research for policy and practice.



Research overview

What is research?

It is important to be clear from the outset that the term research is intended to incorporate a wide variety of activities and outputs and is not limited to traditional research methodologies and peer reviewed academic writing. The intention is to encourage a diversity of outputs which share the commonalities of reflection, accessibility, and usefulness.

The former NSW Department of Environment and Climate Change (DECC), and Victorian Department of Sustainability and Environment (DSE), in their *Guide to Using Research in Sustainability Programs*, referred to research as:

"The planned, systematic collection of existing, or generation of new, data, information and understanding which is analysed and used to develop new ideas and build knowledge about a specific issue."

The definition used by the City of Melbourne places emphasis on the interpretation of information:

"Research is defined as systematic collection, analysis, and interpretation (communication) of information, using one or several research methods."

What these definitions have in common is an emphasis on the idea that research is set in a structured context, touches on contemporary thinking on a topic, and connects any conclusions to evidence. By doing this, research commonly has a problem-solving or knowledge building intent which draws on a mix of personal observations, experience, and evidence-based analysis.

Anyone can be a researcher!

Anyone involved in any area of local government can take on a research role, be a 'researcher', and make a valuable contribution to sector knowledge. You do not need six letters before your name, a university degree, or a formalised research role within council. Some people are employed within councils as researchers and have developed ideas about what research means, others may 'do' research without realising it or applying a label to themselves.

If you can answer 'yes' to the questions below, then you are on your way to stepping into the role and headspace of a researcher:

- Do you have an experience or something useful to share from which others can learn?
- Are you ready to step back and apply a 'research lens' to your local government experiences?
- Are you prepared to start from an unbiased position, build a case, and back up your claims with evidence (evidence may include: examples, experiences, literature, case studies, or other 'data')?
- Are you prepared to link local government research to improved practice?

What should be researched?

You do not need to go out and conduct a scientific experiment or generate traditional 'data' to make a valuable contribution to local government research. Page 15 outlines the types of outputs that you may like to contribute and what data you might like to include.

Thinklist

Below are some questions that you may consider in taking on a research role, and to help you think through what you may like to apply a research lens to:

- What new knowledge could you contribute that could improve a service delivered by local government?
- Do you have ideas that you'd like to explore that challenge or shed new light on existing attitudes, practices, or values in local government?
- Have you considered turning an existing idea about local government on its head for a fresh look at the issue/topic from a new angle or innovative perspective?
- Will your topic be something that others will be interested in, and will it build on existing research rather than reproduce it?

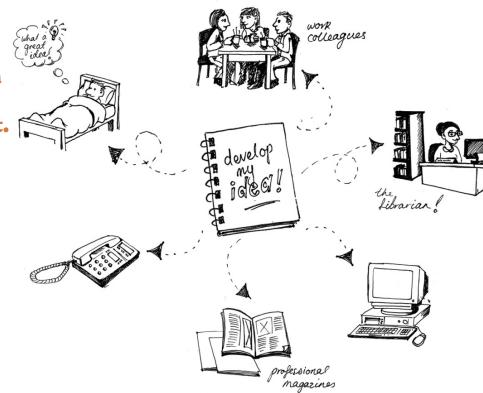
Getting into a research headspace Guiding principles to help you organise your thoughts and develop your ideas

Good planning and organisation are crucial to writing in a succinct and valuable manner.

Ready, set, stop! and think

Put your keyboards away and writing pens down. It is valuable to start thinking inwardly before you start writing or typing outwardly. Thinking about what you are going to write and how you are going to frame it takes time. If you invest time upfront in doing this thinking, you are likely to find the task of writing much easier, effective, and efficient.

"A good rich picture is a full illustration of an issue or topic in its wider context. It includes everything you know about a topic or situation."



Example of a 'rich' picture, 'Develop My Idea'

Tool: Draw a 'rich' picture

Don't wait until you have a crystal clear picture of your paper, it's helpful to start putting down your ideas to clarify them. Drawing a 'rich' picture (or free flowing diagram) of your topic, thoughts and findings can allow the right side of your brain to explore dimensions of your topic that your logical and rational left brain may not have previously considered. (The right side of our brain is often shut down by the left side because it is not as 'articulate'. The right side is responsible for thinking creatively, making connections, seeing relationships, and dealing with complexity.) Illustration allows the right side of our brain to take over from our left side.

A good rich picture is a full illustration of an issue or topic in its wider context. It is not a work of art, but it includes everything you know about a topic or situation, including ideas you've tried or ideas that might improve a situation. An effective rich picture should be completely unstructured and show connections, relationships and activities, and use words sparingly.

Try to spend 15 minutes drawing a rich picture of your topic in its wider environment. When you're finished, concentrate on formulating improvements to the situation, considering lessons learnt, and thinking about what the issue or topic means for the local government sector.

Rich pictures can move you from feeling overwhelmed and not knowing where to start with your writing, to a position of confidence. By drawing and acknowledging complexity in issues, it is easier to work your way forward and organise your thoughts into writing. Reflect on what insight your rich picture offers for your writing approach and structure, your research question(s), and recommendations or conclusions. Write these down. If the issue is very complex, or simply too big to make a valuable contribution to new knowledge in local government, you might like to choose one interesting aspect of the picture on which to focus your writing.

Making Your Knowledge Matter



To help you look at your research topic from different perspectives, imagine you have different sets of glasses to:

See from above ■ See from above ■

See your topic in the context of its bigger picture

y See from below √old √

See your topic up-close

y See ahead

See what your topic means for the future

y See behind

See your topic with an understanding of its past

y See beside ■ See besid

Dare to see your topic from different perspectives that challenge your own conventions

See how your topic intersects with what's happening in the local government sector (e.g. reforms and changes)

See your topic creatively in terms of 'what could be (the ideal)?'

A good researcher is to be able to analyse or see a topic from different angles to gain a deeper and more reflective understanding.

What are your research questions?

Use the Thinklist below to help you think about your experience and identify research questions. This will guide your writing.



What research questions will you answer? Think about your experience and what you want to say then work backwards to frame your main research questions. Some examples are presented below:

Examples

1. I've just returned from a study tour to New Zealand and visited a number of councils to learn about their experiences with community strategic planning. I would like to write about what I learnt.

My research questions are:



What are the key lessons for Australian councils that are preparing community plans?

Are there implications for guidelines provided to councils by state jurisdictions?

2. Our community places a high priority on cleaning up our local waterways but the conventional approach of relying on pollution control devices isn't sufficient. As a result our council has been working with a local university to pilot an approach that incorporates extensive community engagement and education on a sub-catchment basis.



What did we learn from the trial?
What are the implications for implementing this approach on a broader catchment basis?
Is there potential application of this partnership approach by other councils?

3. Our council undertook training last year in the use of the asset management guidelines for small communities prepared by IPWEA and ACELG. As a senior manager I'm interested to review how well we have gone in implementing the guidelines, and in undertaking some benchmarking with other councils.



What were the findings of our evaluation?
How does our council compare with other councils with a similar sized budget and population?

4. I've been reading recent research reports about the ingredients of successful shared services in local government. The councils in our region have been involved in a range of shared services from community education programs through to joint purchasing.



How successful are our shared services if measured against the findings of the previous research?

Could the experiences of our group of councils add to the existing knowledge

base?

Think about what you want to 'say' through your writing and why it's important to 'say' it

Tool: Test your ideas

Test your initial research ideas with some peers or colleagues that you trust and respect. Be prepared to revise your approach or topic and re-test. You might also take advantage of assistance from an experienced researcher or writer in the ACELG network.

Think about how your research questions and overarching research topic will contribute to learning in the local government sector. In doing so, consider: What do you currently think? What informs your thinking (i.e. your world view)? And is there is another way of thinking about the issue or topic that may be useful or worth exploring? Encourage yourself to challenge your own ideas and be innovative. Think about the scalability of your lessons or findings (e.g. to state, national or international levels), and how the topic affects multiple stakeholders (and their sub groups) who are directly and indirectly linked to local government. Then decide what you want to say and ensure that you are able to justify to yourself why it's important to say it. You may like to document your thinking by capturing your justification in free flowing writing to remind yourself, check back, and/or refine it later.

Think about the 'so what?' dimension of your written piece

All useful and relevant research pays careful attention to the question, 'So What?' You will need to write about what you found out or experienced, but the real value in your research lay in its application to practice and in your ability to express what your findings mean for local government at large.



Tool: Undertake a quick information search

Your time will be well spent undertaking a quick information search to find out what written work and knowledge already exists on your topic. However you may wonder where you can go for information, and how you can tell the good (credible and trusted) sources from the bad (unreliable) ones? You may like to consider going to:

Respected organsiations

Think about the respected institutions, organisations, and peak bodies that undertake local government research and knowledge sharing. These organisations will have their own standards about the credibility of the information that they host. A selection of these organisations and their websites is included in the list of *Further* Resources at the end of this Guide.

Scholarly web databases and search engines

Consider searching key words and phrases in free scholarly databases and search engines such as DOAJ (Directory of Open Access Journals), Google Scholar (online journals), and CORE (multidisciplinary databases). All these sites provide access to the latest research. Moreover, many scholarly journal articles are peer reviewed, which adds credibility.

Sector journals and magazines

Local government sector magazines and journals, such as the Commonwealth Journal of Local Governance, are useful and rich in current information about what's happening in the sector.

Council library

Don't forget your local council library! Often this rich source of information is overlooked because people think it's more convenient to look up things online. The problem with that is you may miss out on discovering a book or magazine that might just be the perfect source. Staff at your council library are also invaluable experts in assisting you to locate credible sources.

A trusted expert

A telephone chat or email to an expert on the topic could help guide your research and point you in the right direction. Experts are often very generous with their time and advice when someone is genuinely interested in their pet topic.

Once you locate your sources, you will need to assess the credibility of the work to make a judgment on the reliability of the information and views expressed. Asking the following questions will help you determine if a source is credible:

- On what kind of website or in what kind of publication does the work appear? Is it a respected one?
- Is there any evidence that the author holds authority on the topic? What are the author's qualifications on the topic?
- Is there any indication that the author's views are biased? For instance, is the author taking a personal stand on an issue or is the author being objective? Bias is not always a bad thing; however, the reasoning should be clearly stated.
- Does the source include a complete reference list and reference credible sources? If the information is not backed up with references, what is the author's relationship to the subject to be able to give a credible or expert opinion?

Tips

It is not necessarily the quantity but the quality of your sources that matters. However, be careful of making unjustified conclusions based on a narrow range of sources.

A reference list from a trusted source can provide a useful starting point for further reading.

Thinklist

- Have you clearly defined your topic so that it's not too complex?
- Have you developed your research questions?
- → Have you conducted some basic research to ensure your topic builds on existing research or bridges some knowledge gaps?
- Will you be able to demonstrate an up-to-date understanding of facets of the issue from a local government perspective?
- What will be your key messages and your 'so what?' implications for the local government sector?
- Can your learnings and experiences be scaled up to generate useful findings for councils at large?

Additional sources of ideas for research topics could include briefing notes, special member networks, meeting agendas from ROCs etc.

Research strategies, methods and tools

If you are planning to undertake academic research it is important to note that this Guide does not directly address research methods. However, it is important to note that your thoughts need to sit in a framework that is both robust and justified. Research methods and tools help to achieve this. It is important to write about which method(s) you used to gather your information and justify your choice/s (e.g. interviews, documents, surveys, case studies, observation etc.) A glossary of some of the most common research strategies, methods, and analysis tools are included in Appendix 1.

I'm ready to write!

What types of written research outputs can I contribute?

This section outlines a variety of written outputs that may be interesting to a wider local government audience, and provides examples of each of these outputs.

What outputs can you write for?

Your written piece could include:

- Generating and reflecting on lessons from a single or multiple case studies. Case studies can be analyses of people, events, decisions, projects, policies, organisations, or other entities that are studied holistically. The case is the subject of research inquiry, and an object within the case is usually illuminated and explicated to share insight and learning. An example case study is included in Appendix 2.
- A 'think piece' or 'opinion piece' on a topic you are interested in. An opinion piece is an article that mainly reflects the author's personal opinion on the subject. Opinion pieces often feature in blogs, magazines, and newspapers and are generally 500-700 words. Tip: imagine you're standing on a balcony looking down on a complex local government situation or issue. What can you to contribute to the learning from that situation or issue? An example think piece is included in Appendix 2, and you might consider writing a blog for ACELG's Town Crier (see Further Resources).
- **Critical reflection** on a council process, program, or experience. Critical reflection is the process of analysing, and questioning experiences within their broader context.

- Writing up any formal research that council has funded / conducted or any of the above experiences as a research paper (approximately 2,000-6,000 words). An example journal paper entitled Incorporating Social Justice Principles in NSW Local Government Community Strategic Plans by Melissa Boxall is included in Appendix 2. An example abstract is also included in Appendix 2.
- Undertaking a **literature review**. A literature review is an examination of the existing literature relevant to a particular topic. In this format, the literature itself is the subject of discussion. An example literature review is included in Appendix 2.
- A simple analysis or review of what did or did not work in an internal or external program at the community or organisational level.

Thinklist ...

Below are some questions to help you think through your content or 'juicy insights' shared in any of the above outputs:

- ☑ If something worked well, what made it work well?
- → What were the enabling factors?
- ☑ What contributed to the enabling factors being present?
- → How can other stakeholders recreate the same favourable conditions?
- ☑ What were the main barriers and challenges involved in your topic of interest?
- What were the key human (e.g. relationships, networks, inclusive and participatory approaches) and non-human elements that created these or removed these challenges?
- What do your findings or analysis mean for you as an individual? What do they mean for your organisation? For other organisations? For the broader community and their sub-groups (residents/businesses)? For the architecture of local government at the state, national and international level?

Tips for good writing

Writing is a craft. There are several factors that will influence how effective your writing is. For starters, you will need to consider your audience together with your writing structure, style and use of graphics.

Consider your audience

Target your piece to your audience. Consider: Who are they? What do they already know? What will they be interested in knowing about your topic? What are their expectations of you? What language and what written outputs will resonate best with them?

Structuring and organising your writing

There is no magic formula or absolute set structure to follow however the most important thing is that your writing follows a logical sequence. Here are some guidance notes to create a skeleton structure to get you on your way:

- Include an introduction to your chosen research output (paper, case study, opinion piece etc.) which explains in clear language its purpose and structure. Be sure to ground it in its context by explaining your area of responsibility and your council/organisation. After reading the introduction, the reader should have a very clear idea of the author's purpose in writing.
- The body of the written piece should include what you found out, by introducing ideas and facts to support the ideas. Each part of the body should reasonably and logically linked to the next. Once you have dealt with the description you need to analyse your results, data or facts that you're presenting and think about the 'So what?' dimensions.
- Include a conclusion or concluding remarks that tie the elements of the written piece together and demonstrate the value that you have added to the topic or questions you sort to answer. The conclusion of the paper should reiterate the main points and not introduce new ideas or findings not discussed in the body of the paper.



Ask yourself, 'Am I clear in my own mind about what I'm trying to communicate to others?' If you don't understand what you want others to know, how will you be able to write effectively?



Avoid oversimplifying the analysis. Analysis means the separation of something (an issue, event or topic) into its component parts, so to do analysis you will need to identify what the parts are. Analysis then involves looking beneath the surface of an issue, event or topic to discover the elements which have come together to produce it. By tracing things back in this manner, you can shed light on some general principles that can be used to explain the issue, event or topic you are researching. Importantly, your principles can then be of value to other people in local government.

Appendix 3 offers a basic structure for a research paper.

Style

Good writing is clear, credible and justified. Use a professional writing style and strive for an engaging and interesting tone. Combine facts and background research with your own original thoughts and reflections so that each supports the other. In research speak this is called 'evidence based research'. Conventions include using a third person voice, language that is in the past tense, using headings and subheading to divide the text into clear manageable sections, and presenting tables and figures properly (with a clear title, the source of the table if it's not original). See the example written pieces in Appendix 2 for demonstrations of well styled, evidencebased, and well-reasoned written outputs.

Use of diagrams and graphics

The old saying that 'a picture says a thousand words' still holds if you use pictures wisely and with purpose.

Conceptual diagrams and graphics that enhance your points and reflect your content need to be easily legible.

Remember to attribute their original or adapted source.



Below are some questions to help you think about your written piece:

- → How does your writing contribute new or interesting knowledge to the topic?
- Is how you are presenting the topic of best use to others? Is there another way to 'slice' the topic that would contribute more to what people learn from your written piece? Is there another, clearer way of getting your main points across to the audience?
- Can you justify to yourself and others why you chose to focus on a particular topic over another?
- Does the writing flow well and have you established a theme that is well developed and supported?
- Are all parts of your piece easy and straightforward to read?
- △ Are you being concise or have you repeated yourself?



An example of effective use of a diagram within a research paper.

Source: Local Political Leadership in transition: lessons from the new Auckland Council by Christine Cheyne (2011)

Avoiding the Writing 'Rut'

Many researchers experience inertia in getting started. They are tripped up by little details, procrastination, and excuses that keep them from writing up their research. Every day, they mean to start, but every day, something gets in their way or seems more important. Day after day, they tell themselves that they intend to start writing their paper. After all, they've collected all the data, analysed it etc. Is this you? If so you might be in a 'writing rut'!

Below are some tips for getting out of a writing rut (adapted from Gardiner and Kearns (2011)):

- Write before you feel ready because you might never feel ready. It's amazing how people magically feel ready when there is a deadline approaching!
- Write through writing blocks don't be a perfectionist and be gentle on yourself. Try and write through any blocks, it will help organize your thoughts and some of your work may be very valuable when you look back the next day.
- Snack write work in short, frequent bursts instead of waiting to sit down for big blocks of time. Those blocks hardly ever come, and when they do, they don't always get used very productively.
- Set specific times in your schedule for writing don't leave it to chance, because chances are it won't happen.



Avoid repetition and be concise. It's harder to write a short written piece than a long one!

Sometimes poorly organised written pieces move too rapidly between topics, and the reader can feel like they are watching a tennis match. Be sure to pay attention to the structure and flow of the piece.



Consider asking for a day or two away from the office to focus on writing without distraction. Many councils are supportive of this approach.

Acknowledging Other Research -

Referencing

You are encouraged to use a range of sources (e.g. experiences, project reports, case studies, journals, references, interviews, presentations, and conversations) to substantiate and add to your own reflections and observations.

Anything included in your writing which is not in your own words or your ideas should be referenced. If you forget to reference them, it's considered plagiarism. Each reference used in the text should also be included in a list at the end of your written piece.

To acknowledge and reference an individual's comments, use the phrase "pers. comm." (short for *personal communication*). This means that you are quoting someone's comments directly.

ACELG prefers the Harvard system for referencing.

An excellent resource is the UTS Harvard referencing guide:

http://www.lib.uts.edu.au/help/referencing/har vard-uts-referencing-guide.



Quotes are best when short (aim for a paragraph or less). Use them to support your own original thoughts or reasoning.

As an overview:

Book referencing

Spence, J. & University of Strathclyde 1986, *Applied solid mechanics*, 2nd edn, Elsevier Applied Science, London.

Book chapter referencing

Furnham, A. 1990, 'Work and leisure satisfaction', in M. Strack (ed.), *Subjective well-being: an interdisciplinary perspective*, Pergamon Press, Oxford, pp. 235-60.

Journal referencing

Wagner, C.S., Shehata, S., Henzler, K., Yuan, J. & Wittemann, A. 2011, 'Towards nanoscale composite particles of dual complexity', *Journal of Colloid and Interface Science*, vol. 366, no. 1, pp. 115-23.

Report referencing

Asker, S. & Pillora, S. 2013, Make Your Knowledge Matter, Guide to Developing and Documenting Research, Australian Centre of Excellence for Local Government, Sydney.

Internet referencing

Department of Immigration 2011, Fact Sheet 1 - Immigration: The Background Part One, Canberra, viewed 5 March 2012, http://www.immi.gov.au/media/fact-sheets/01backgd.htm.

The Value of Revision, Editing, and Review

Once your piece is drafted, re-read it for improvement. The power of proofreading cannot be understated. Identify where you can have clearer expression and improved sentence length, and fix grammatical and spelling errors. Avoid overly long sentences and try varying their length for impact. Ensure that your ideas hang together well and make sense.

The Value of Peer Review and Critical Friends

Peer review (which is different from a review) is a supportive process undertaken by 'critical friends' intended to help a practitioner identify the paper's strengths, as well as what it needs to improve. The word 'peer' signifies equality between the reviewed and the reviewer, removing any authority in the relationship. Trust and shared confidence is the key to a peer review working well for both parties. Peer review is a concept that is being increasingly used and tested in local government in the endeavour to develop symbiotic relationships for change and improvement. It is worth noting the value of presenting your writing to an audience at different stages of your research. For instance, presenting semi-finished work will allow you to canvass valuable feedback and opportunities for collaboration. Contact ACELG if you need help identifying reviewers or a mentor.

Thinklist

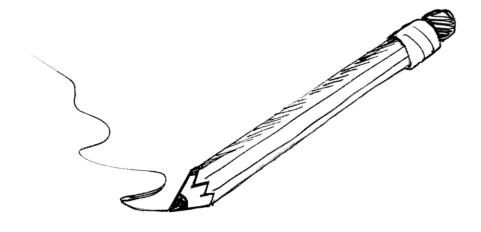
When reviewing your own and others' work, consider the following:

- Do you make a clear, wellstructured, and credible argument?
- → Is your written piece objective. (i.e. not biased)?
- → Have you taken an ethical approach to avoid misrepresenting your topic?
- Are your opinions supported with examples?
- → Are your findings and ideas robust and justified?
- → Have you kept your audience in mind?
- ✓ If someone asked 'what additional knowledge does your research add?', would you be able to answer confidently?

Write Now!

We hope that this guide acts as a reminder and offers some new information to assist you in developing your ideas, and documenting good practice to share with the local government sector. It may be useful to keep this guide close by and refer back to the Thinklists as you develop your written piece. ACELG encourages and supports you on your research journey.

There is no better time to make your knowledge matter than right now!



List of Accessible Research Resources for Further Reading

Published Research

The Local Government Association of South Australia (LGASA) have collated a full listing of web addresses of sources of information on current Local Government issues and projects being undertaken across Australia http://www.lga.sa.gov.au/site/page.cfm?u=35 5#e185.

ACELG regularly publishes research on issues facing local government in Australia on its website http://acelg.org.au/publications.

Research Methods Resources

NSW Department of Environment and Climate Change (DECC) & Victorian Department of Sustainability and Environment, Guide to Using Research in Sustainability Programs, NSW DECC, viewed 17 July 2014,

http://www.environment.nsw.gov.au/reso urces/research/0993SustResearch.pdf.

Wadsworth, Y. 2011, Do it Yourself Social Research, Allen and Unwin, Australia.

Wadsworth, Y. 2011, Everyday Evaluation on the Run, 3rd edn, Allen and Unwin, Australia.

Writing Style Resources

Check if your council has a Style Guide first.

The Global Travel and Tourism Partnership (GTTP), A Business and Education Alliance, How to Write a Case Study, GTTP, viewed 5 December 2012,

http://www.gttp.org/docs/HowToWriteAG oodCase.pdf.

Leigh, A., A Few Tips for Opinion Piece Writers, viewed December 5 2012, http://www.naclc.org.au/resources/OpEd_ Tips.pdf.

Editing Resources

The University of New South Wales (UNSW) Learning Centre, *UNSW Editing Checklist*, UNSW, viewed 17 July 2014, http://www.lc.unsw.edu.au/onlib/pdf/edit.p df.

Bemidji State University Writing Resource Center 1997, How to Proofread and Edit Your Writing: A Guide for Student Writers, viewed 17 July 2014,

http://trojan.troy.edu/writingcenter/assets/documents/handouts/ProofreadAndEdit.pdf.

The UNSW Learning Centre, *Report Writing FAQs*, UNSW, viewed 17 July 2014, http://www.lc.unsw.edu.au/onlib/pdf/report%20.pdf.

Structure and Approach Resources

Barnett, S. & Cain, A. 1997, A Short Guide to Writing About Literature, Addison-Wesley, Boston.

Cuba, L.J. 1988, A Short Guide to Writing About Social Science, Scott Foresman, Illinois.

References cited in writing this Guide

City of Melbourne 2012, *City Research Branch Manual*, City of Melbourne, Victoria.

Kearns, H. & Gardiner, M. 2011, 'Waiting for the Motivation Fairy', *Nature*, vol. 472, no. 127, p. 127

Online version available at:

http://www.nature.com/naturejobs/science/articles/10.1038/nj7341-127a.

NSW Department of Environment and Climate Change (DECC) & Victorian Department of Sustainability and Environment, *Guide to Using Research in Sustainability Programs*, NSW DECC, viewed 5 December 2012,

http://www.environment.nsw.gov.au/resources/research/0993SustResearch.pdf.

Wadsworth, Y. 2011, *Do it Yourself Social Research*, Allen and Unwin, Australia.

Appendices

Appendix 1 - Common Research Terms

Common Information Source Terms

Primary information sources	First hand original information that you collect specifically for the purpose of your research. E.g. meeting notes, interviews, manuscripts, pamphlets, speeches, surveys.
Secondary information sources	A secondary source interprets and analyses primary sources. These sources are one or more steps removed from the primary source. E.g. Textbooks, magazine articles, criticisms, commentaries, or a journal/magazine article which interprets or reviews previous findings.

Common Research Strategies and Tools

Collinion Research Strategies and Tools	
Surveys	Survey means to 'view comprehensively and in detail'. To survey a situation is to go out and look and obtain data for mapping the situation. Surveys can be written, oral or on-line.
Questionnaires	Questionnaires are one of the best known types of surveys. Questionnaires are usually done via self-completion, and sometimes via personal contact to compliment an interview.
Case studies	Case studies can be analyses of people, events, decisions, projects, policies, organisations, or other entities that are studied holistically by one or more research methods. The case is the subject of research inquiry and an object within the case is usually illuminated and explicated to share insight and learning.
Observations	Observing can help you better understand the landscape of your topic within its context. It is useful to 'look and observe' what is happening with an objective unbiased mind frame.
Structured and semi- structured interviews	The most common type of interview is face to face. Interviews may take place anywhere, such as in the street or in the workplace. They can be highly or semi-structured around a set of research questions. Face-to-face contact allows researchers to select their sample of respondents to fill representative quotas. Where location and resource constraints are issues, interviews are sometimes undertaken over the phone or on platforms like Skype.
Documents	In social research especially, emphasis is often put on information from people, and the value of documents can be overlooked. Using documents (as empirical research) can help bring things up to date, with a literature survey a prime example. Using documents alongside other strategies is the basis for good research in order to gain a panoramic view of the landscape of your topic.

Critical reflection	Critical reflection is the process of analyzing, reconsidering, and questioning experiences within a broad context of issues.
Action Research	Action research is a cyclical process that is both practical and applied. It is driven by the need to solve practical real world problems. It involves planning, acting, observing, and reflecting on practice. Action research is a learning process to create change. Continuous structured self-reflection is a key element of action research.

Common Research Analysis Terms

Quantitative data	Techniques for collecting information (or data) that are easily represented as numbers (e.g. yes/no surveys, financial records, population densities).
Qualitative data	Techniques for collecting information (or data) that are not easily or usefully summarised as numbers (e.g. minutes, quotes, interviews). Qualitative data usually describes people's knowledge, attitudes, and practices.
	Validity is often sought through: Triangulation – Triangulation is a powerful technique that facilitates validation of data through cross verification from more than two sources. In particular, it refers to the application and combination of several research methods or strategies in order to identify the 'truth' about a topic.
Information validity	Constant comparison – The constant comparison is a process where newly collected data is compared with other data to look at patterns. This is a continuous ongoing procedure, because as you learn more your theories form, by enhanced, confirmed, or even discounted as a result of any new data and comparison.
	Coding data – Coding is the process of going through the information (or data) 'with a fine toothcomb' looking for emerging themes, ideas and categories, and then noting similar parts in the text and giving them a 'code label' to describe what they have in common. Codes are often formed around recurring ideas, concepts, terms, phrases, and/or keywords.

Appendix 2 – Examples of Written Pieces

This appendix contains the following written examples: a case study, a think piece, a research paper, and a literature review.

Example Case Study

Citation: McKay, D. and R. Rauscher, 2005 'ESD Strategies at the Local Government Level: Case Study of the City of Newcastle'. Proceedings of the State of Australian Cities Conference, Griffith University Brisbane. viewed 17 July 2014 at http://www.griffith.edu.au/__data/assets/pdf_file/0020/81380/environmental-city-21-mckay.pdf

Excerpt:

Abstract

Over the last decade there has been increasing pressure on Local Governments around the world to accommodate principles of Ecologically Sustainable Development (ESD) within their urban policies. In Australia much of this pressure on councils has derived from higher tiers of government. This paper explores the implementation of ESD at the local level, in particular with regard to the broader vision that emanated from the Commonwealth's National Strategy on Ecologically Sustainable Development (NSESD). Using a case study of Newcastle City, the paper demonstrates the folly in requiring unsupported councils to implement ESD strategies, no matter how enthusiastic these councils may be.

Though Newcastle City gained prominence in the mid-1990s for its spirited pursuit of comprehensive ESD strategies, including industrial ecology ambitions, these unfortunately have fallen short of expectations. Given budgetary constraints, Newcastle Council reliance on an extensive partnership approach to implement its ESD strategies proved difficult to maintain over the longer term. The paper concludes that local government requires stronger support from higher tiers of government and a better revenue base if it is to be successful in delivering comprehensive ESD strategies. This is an important political economy issue in light of the state's and in particular the Commonwealth government's tentative commitment to sustainable development.

Example 'Think Piece' or 'Opinion Piece'

Citation: Robinson, T. 2012, *Creating a Legacy – The Knowledge Challenge of Practitioner Research*, Australian Centre of Excellence for Local Government Town Crier blog, viewed 17 July 2014 online at http://www.acelg.org.au/creating-legacy-knowledge-challenge-practitioner-research

I enjoy photography and was struck recently by a series of photographs of blackboards showing very faint chalk writings and drawings. The photographer presented his work under the theme of *The Impermanence of Knowledge*. His accompanying story referred to knowledge once writ large but inevitably wiped clean. While I think he wanted to emphasise the more romantic idea of knowledge being refreshed, it struck me as a rather apt metaphor for the way we in Local Government often manage our knowledge. The only difference is that the blackboard has been replaced by the ubiquitous PowerPoint presentation!

The aptness of the blackboard metaphor lies in its impermanence. I have been to many seminars, conferences, special interest group meetings and so on and seen presentations from Local Government practitioners. In most cases there is an evident passion and energy driving the desire to share valuable practical wisdom. Momentarily the white screen is bursting with knowledge, but the session inevitably

concludes, the PowerPoint presentation evaporates and an empty white screen prepares itself for another impermanent experience.

The small group of people who saw the presentation were lucky enough to receive and interact with the knowledge, but where is that knowledge one month, one year or one decade later and is it in a form that can be applied effectively? As a sector I believe one of our key knowledge challenges is to care more about ensuring the value, endurance and availability of knowledge. If we do not care enough about what we know and understand, we will not create a sufficient and permanent legacy of knowledge and insights about our practice.

I am sure that the French philosopher, sociologist and anthropologist Pierre Bourdieu had Local Government in mind when he observed 'Practice has a logic which is not that of logic.' 1. Certainly the idea resonates with many in Local Government in Australia (and probably beyond) given the uniqueness of the sector as a level of government. And while there are many fora for sharing knowledge and insights about practice within this unusual tier of government, they are all too often defined by their impermanence and not strongly enough buttressed by disciplines to strengthen the robustness, endurance and availability of the knowledge.

I am not suggesting that nothing is happening in the sector in relation to knowledge creation and retention. There are a number of activities such as the development of guides and toolkits by peak sector bodies as well as regional groups of councils doing research drawn from practitioner knowledge and published through various means. Some in the sector are involved in the more traditional forms of academic research and do have work published in theses and journals. However there remain many untapped opportunities.

I would argue that practitioner research is able to make a strong and distinctive contribution to knowledge for three key reasons. First is its inherent capacity to explore, describe and explain from the viewpoint of the lived experience of practice. This tends to give practitioner research a well-grounded and practical sense, focused on informing practice and decision-making².

Secondly, because it has the potential to be '...a form of inquiry that is collective, collaborative, self-reflective [and] critical....³ it helps to build and sustain professional communities of interest who have a genuine commitment to self examination and learning. Thirdly, practitioner research is characteristically inclusive of many avenues of inquiry⁴. This means that knowledge from a diverse range of discovery activities such as conducting a program evaluation, undertaking and interpreting a community survey, developing a regional submission to another tier of government or writing a case study to be shared at a conference, can become, when combined with a measure of review and permanence, part of the knowledge legacy of the sector. Enter the Australian Centre of Excellence for Local Government (ACELG).

The remit of ACELG is to enhance professionalism and skills in local government, showcase innovation and best practice, and facilitate a better-informed policy debate. The knowledge, understanding and insights of practitioners are critical to this mandate. It is a commitment of ACELG to encourage and support

¹ Bourdieu 1990 as cited by Flyvbjerg, B. 2001, Making Social Science Matter: Why Social Inquiry Fails and How it Can Succeed Again, Cambridge University Press, Cambridge, UK.

 $^{^2}$ Lawrence, N.W. 2000, Social Research Methods: Qualitative and Quantitative Approaches, 4th edn, Allyn and Bacon, Needham Heights, Massachusetts,

³ McCutcheon, G. & Jung, B. 1990, 'Alternative Perspectives on Action Research', *Theory into Practice*, vol. 29, no. 3, pp.

⁴ Cochran-Smith & Lytle 1999 as cited by Lim, C.P. & Cheah, H.M. 2010, 'Situating Practitioner Research in Future Schools', in L.Y. Tay, C.P. Lim & M.S. Khine (eds.), Research by Practitioners for Practitioners: A School's Journey into the Future, Pearson, Singapore, pp. 2-14.

practitioners to record their practice in a variety of different ways and to provide opportunities/platforms to develop, share and retain this knowledge. Some of this work has already been undertaken⁵.

However right now ACELG is shaping a specific program to encourage practitioner research and is looking at what resources can be marshalled to better enable practitioners from the sector to develop their ideas and insights using a diverse frame of applied research approaches. The intention is to support a wide range of research outputs. We are considering a variety of strategies such as:

- A mentoring program to assist practitioners to develop and structure ideas,
- Staging small-scale research forums especially for practitioners to discuss and present their work,
- Publication of practitioner papers on ACELG websites to ensure their availability across the sector, and
- Assistance from a practical, plain English guide which describes approaches to developing and documenting research.

You can help develop this program by submitting your thoughts and ideas by emailing them to ACELG's Program Manager Research, Stefanie Pillora, stefanie.pillora@acelg.org.au. You can also reflect on your recent discovery activities and figure out how best to contribute to the knowledge legacy.

Example Literature Review

Citation: Pillora, S. & McKinlay, P. 2011, *Local Government and Community Governance: A Literature Review*, Australian Centre of Excellence for Local Government, Sydney. Viewed 17 July 2014 at http://www.acelg.org.au/news/local-government-and-community-governance-literature-review?id=142.

Excerpt:

Introduction

This paper introduces community governance to an Australian local government audience and provides the foundation for further research on the topic. It summarises the findings of a literature review on community governance from a local government perspective and sets out the theoretical underpinnings.

Literature on the governance theme is vast, so this paper is necessarily selective. The focus is on key ideas and theories of community governance that are well researched and on authors who are recognised as leading researchers in the local government field. With some exceptions the paper draws from academic research and government publications produced within the last ten years.

Key questions covered by this review include:

- How is the term governance defined in international literature and how is it different from 'government'?
- How is the term 'community' understood?
- From a community governance perspective what does the literature tell us about the changing nature of the relationship between citizens and local government and about the role of local government?
- How is the term governance currently used by Australian councils?
- What are the key theories and ideas underpinning the term community governance?
- How has the term evolved and what have been some of the key influences?
- What can we learn from recent Australian experience about the practice of community governance?

⁵ ACELG Dec 2011 Researchers Forum Program/Papers available at http://www.acelg.org.au/news-detail.php?id=187.

The paper also reviews some of the challenges in applying community governance approaches, summarises international comparisons of the practice of community governance and briefly covers an evaluation of local governance in four European countries as a case study.

Example Research Paper

Citation: Keneally, A., 2013, 'The lived experience of Insider Action

Research in a local government setting' in Proceedings of the 3rd National Local Government Researchers' Forum accessed 18 July 2014 at

http://epress.lib.uts.edu.au/conferences/index.php/acelg/PNLGRF/paper/view/479

Abstract:

Insider Action Research is undertaken by researchers within their own organisation. The researcher is an 'insider', or a complete member of the organisation and not one who joins the organisation temporarily for the purpose of the research. Action research involves cyclical planned interventions or actions, study and review of the actions, then further revised action. This paper describes the lived experience of carrying out Insider Action Research as a senior manager undertaking a PhD in a large rural council in Victoria. Although the insider has access to internal intelligence which can be useful in addressing and solving practical problems in organisations, this approach is not without its difficulties which can arise from the political and personal dimensions of undertaking research within one's own organisation. Challenges arise from the tension between the need to be close to the setting and, at the same time, the need to maintain distance in order to be objective and to be able to stand back, assess and reflect. Ethical challenges and role conflict are some of the dilemmas confronted by the researcher, and in the fast moving life of the organisation, the mental and emotional energy required to work through these dilemmas is considerable. Nonetheless, Insider research can also be rewarding and has the potential to provide an avenue for self-development and selfknowledge.

The paper is structured in the following way:

Setting the scene What is Insider Action Research?	Background to the paper and the researcher (useful given the methodology).
What is inside! Action research!	
Challenges of this approach	About the methodology of Insider Action Research, and about doing research.
Ethics and ethical challenges	
Research methods	How the research was done.
A taste of doing the research	
Making sense of the experience and the data ———	Analysis and findings.
Reflections at the end of the journey —————	Conclusion and next steps for the research question.

Appendix 3 – Example Research Paper Structure and Example Abstract Structure

Example Research Paper Structure

The success or otherwise of a research paper is determined long before the first word is written. It depends largely on the structure. Below we offer you a basic structure for a local government paper.

	The introduction is like an executive summary of what is to come in the rest of the paper:
Introduction (300-800 words)	 Include a general statement or orientation to the topic State the main aim of the research Explain the practical relevance or importance of your research to the local government sector Briefly summarise the contribution you will make to the topic Briefly explain the main points you will make State your research questions.
Background and/or concepts (500-1000 words)	 Describe the context and background to your research You may also like to summarise the latest or existing research on the topic and highlights the gaps, or controversies found.
	The methods section describes the steps you followed in your research and justifies why you took them. It should contain enough information to provide reliability and credibility in terms of how you undertook the research and the bases on which your findings are made. You may include:
Methods or Methodology (500-1000 words)	 Data collection method(s), including a description of your method(s) An explanation of your motivation for your choice of methods (e.g. perhaps they were the most feasible/practical) If applicable you can include things like: How many people were involved? What was the participation or response rate? What was the demographic or behaviour profile? What was the time period? Were you measuring anything, if so, what?

Findings or results (800-1500 words)	 The results section should present descriptive results with some preliminary analysis: Present your findings as precisely as possible while providing enough detail to justify your conclusions Use figures, graphs and graphics only where they add value and ensure they are clear and properly labelled Interpret all findings to the reader and do not leave it up to them.
Discussion (500-1000 words)	 Discuss and analyse your main findings: Summarise the findings or results in relation to your research questions Give possible explanations for unexpected findings or results Relate the findings (the evidence) back to the existing knowledge on the topic Discuss the implications of the findings for the local government sector Discuss insightful directions or future opportunities for the topic.
Concluding thoughts / Recommendations (500-800 words)	Recap or summary of the main points made in the body and a give final comment (if appropriate) and recommendations for the future.
List of references	Include a list of references using consistent formatting like the one included in the referencing section of this Guide.

Structuring Solid Paragraphs

<u>Paragraphs</u>	Topic sentence A	
	 supporting sentence 	Supporting sentences support,
	supporting sentence	expand or explain the point
	3. supporting sentence	made in the topic sentence
	2. Topic sentence B	
	 supporting sentence 	
	2. supporting sentence	
	3. supporting sentence	
	3. Topic sentence C	
	 supporting sentence 	
	2. supporting sentence	
	3. supporting sentence	

Example Abstract Structure

An abstract is a short summary of a paper in around 250-350 words. Most readers scan an abstract to decide whether or not to reading the paper, or attending a talk about the paper would be worth their while. The abstract serves as an important entree or window display to your paper. The main pitfall of abstracts is that they are so vaguely written that they do not capture the attention of the reader or do justice to what could be a great paper. Most attention grabbing abstracts have the following (sequential) elements in common:

- 1. The abstract should start with a brief sentence to orientate the reader on the overall issue or theme in the paper. This should be attention grabbing!
- 2. The abstract should say what the intended aim or purpose of doing the research was.
- 3. The relevance and practical importance of the research (or what was done) should be explained.
- 4. The methods used should be briefly described.
- 5. The main finding(s) should be summarised.
- 6. A statement should show the importance of the research in contributing to new and/or useful knowledge in local government
- 7. Finally, any practical or future implications should be noted.

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