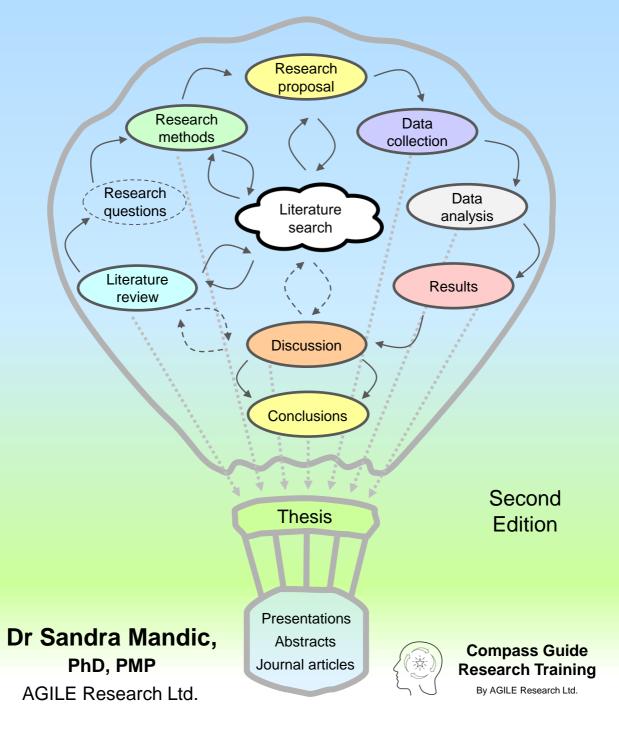
### **COMPASS GUIDE**

FOR POSTGRADUATE STUDENTS (AND THEIR SUPERVISORS):

# How to Navigate Your Research Journey



AGILE Research Ltd., 3/43 Cooper Street, Karori, Wellington, 6012, New Zealand

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No artificial intelligence (AI) tools were used in creation of the content of this publication.

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Sandra Mandic. (2021) Compass for Navigating Your Postgraduate Research Journey: Guide for Students. (First Edition) AGILE Research Ltd., Wellington. ISBN: 978-0-473-58521-1 (PDF)

To Professor Emeritus H. Arthur (Art) Quinney for his mentorship, inspiration, and role modelling which created signposts to guide me well beyond my own PhD journey...

### **About the Author**

Sandra Mandic, PhD, PMP is a researcher with over twenty years of research experience in the health and transport sectors. She also holds a Project Management Professional (PMP)<sup>®</sup> certification from the Project Management Institute.

Sandra's personal and professional experience spans nine cities across five countries and three continents - including Europe, Canada, United States and New Zealand. She completed a Bachelor's degree at the University of Novi Sad (former Yugoslavia), Master's of Science and Doctor of Philosophy degrees at the University of Alberta (Canada) and postdoctoral training at Stanford University (United States) and has worked as an academic and a researcher in New Zealand since 2009.

Sandra is passionate about research, innovation, mentoring, project and programme management, and building bridges between people, sectors and cultures. She is the founder and the director of AGILE Research Ltd. (https://agileresearch.nz/), a research consultancy which specialises in providing research and evaluation, research project management training and research consultancy services to government departments, schools, businesses and academic institutions.

As a researcher, Sandra has initiated and managed a wide range of research projects and programmes, including the award-winning and internationally recognised Built Environment and Active Transport to School (BEATS) Research Programme, published over 90 scientific journal articles to date and supervised over 40 research students.

Sandra also has experience of working and applying research and project management skills in the government sector.



Sandra designed the Compass Guide Research Training Resources for researchers, current and future research students and their supervisors, research project managers and coordinators, and professionals involved in research activities in various sectors. At the time of this publication, the Compass Guide Research Training Resources comprise four Compass Guide books and a series of short research training videos on the AGILE Research YouTube channel (see next page for more information).

Sandra speaks four languages, is happily married to a Canadian husband and has two Kiwi (New Zealand) children. She loves travelling and learning about different cultures and has many friends and professional connections around the globe.

### **Compass Guide Research Training Resources**

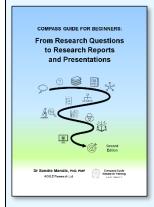


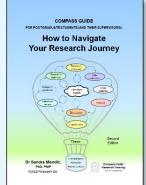
Designed to help individuals and teams navigate the research process and successfully complete their research projects

### **How to Navigate the Research Process**

## Compass Guide for Beginners

Compass Guide for Postgraduate Students (and Their Supervisors)





Book (40 pages)

Designed for professionals and research students who are new to research

Beginners / novice level

### Features:

- · Guidelines · Tips ·
- · Some examples ·
- YouTube videos

Sandra Mandic. (2024)
Compass Guide for
Beginners: From Research
Questions to Research
Reports and Presentations.
(Second Edition) AGILE
Research Ltd., Wellington.
ISBN: 978-0-473-71089-7
(PDF); 978-0-473-71088-0
(paperback)

Book (150 pages)

Designed for Doctoral and Master's students and their supervisors

Advanced level

### Features:

- Guidelines · Tips · Examples
   Feedback templates · Ask
   your supervisor · Activities ·
- · Readings · YouTube videos

Sandra Mandic. (2024)
Compass Guide for
Postgraduate Students (and
Their Supervisors):
How to Navigate Your
Research Journey. (Second
Edition) AGILE Research
Ltd., Wellington.
ISBN: 978-0-473-69701-3
(PDF); 978-0-473-69700-6
(paperback)

### **How to Plan and Manage Research Projects**

Compass Guide: How to Plan Your Research Project



Compass Guide for Research Project Management



Book (55 pages)

Designed for professionals, research students and research staff

Beginners / novice level

### Features:

 Guidelines · Tips ·
 Research project planning templates · Examples ·

Sandra Mandic. (2024) Compass Guide: How to Plan Your Research Project. (First Edition) AGILE Research Ltd., Wellington. ISBN: 978-0-473-71223-5 (PDF); 978-0-473-71222-8 (paperback) Book (187 pages)

Designed for researchers, students, project managers, and professionals working outside academia

Advanced level

### Features:

- Recommendations · Tips ·
   Research project management tools ·
- · Examples · Case studies ·

Sandra Mandic. (2023)
Compass Guide for
Research Project
Management. (First Edition)
AGILE Research Ltd.,
Wellington.
ISBN: 978-0-473-67924-8
(PDF); 978-0-473-69523-1

(paperback)



The AGILE Research YouTube Channel www.youtube.com/@agileresearch

A series of short research training videos based on the content covered in the Compass Guide books

Compass Guide Research Training Resources are available from the AGILE Research Ltd. website: https://agileresearch.nz/

### **Acknowledgments**

This book evolved through many years of interactions with and learning from a wide range of individuals who I have crossed paths with, worked with, supervised, taught, and/or mentored over the years.

I would like to acknowledge and extend my gratitude to my academic mentors at different stages of my own academic journey for their guidance, inspiration and many valuable lessons learned: from the late Professor Franja Fratrić and Professor Emeritus Nikola Grujić at the University of Novi Sad (Former Yugoslavia), to my Master's and PhD mentor Professor Emeritus H. Arthur (Art) Quinney and PhD co-supervisor Professor Mark Haykowsky at the University of Alberta (Edmonton, Canada), and to my post-doctoral supervisors Professor Emeritus Victor Froelicher and Professor Jonathan Myers at Stanford University (Palo Alto, California, United States). Many of those insights have been helpful in shaping my own approach to supervision and mentoring of research students.

I also extend my gratitude to many of my academic colleagues from around the world who taught me so much about research and working with research students through their role modelling, shared personal experiences and their own cultures.

A genuine thank-you to all my research students who over the years taught me many things about student supervision, about themselves and their cultures, and about myself. It was an honour to join you on a part of your own research journey.

Special thank-you goes to my colleagues
Professor Emerita Jennifer S. Mindell,
Associate Professor Ricardo Oliveira,
Associate Professor Jennifer Roberts and
Associate Professor Susana Aznar Lain who
reviewed and commented on earlier drafts of
this book and to Tessa Pocock for proof
reading and providing her valuable feedback.

Many thanks to <u>Pixabay</u> for images and <u>Microsoft</u> for icons used in infographics created for this book.

Last but not least, a massive thank-you to my Dream Team – my husband Philip McKague and children Adriana and Oliver McKague – for their love, inspiration, positive energy and support over the years and for their direct and indirect input into my academic work. Thank you for always being there for me and for being understanding when I say that I just need five to ten minutes to finish some piece of my academic work and it takes me an hour (or two)...



Image: Copyright © 2018 Sandra Mandic. All Rights Reserved.

### Imagine...

Imagine you have signed up for an exciting solo adventure into the wilderness to challenge yourself and expand your horizons – and come back ready to re-enter your professional life accepting greater responsibilities. In this adventure, you will be choosing and creating your own unique path through an unknown territory, discovering and following clues along the way, and learning from your own experience. Make sure you take a map (if you can get one) and a compass with you – and have access to a trusted mentor (and a friend or two) for advice when necessary...

Dr Sandra Mandic, PhD, PMP



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## What You Will Find in This Compass Guide Book

### **Content Overview**

This Compass Guide book consists of four sections designed to guide you through your postgraduate research journey: from setting up a good foundation and early stages of your research journey through to writing up different chapters of your thesis and sharing results through research presentations, conference abstracts and scientific journal articles.

Thesis or dissertation can mean different things depending in which part of the world the degree is awarded. In this Compass Guide, the term 'thesis' is used to refer to 'thesis' or 'dissertation'.

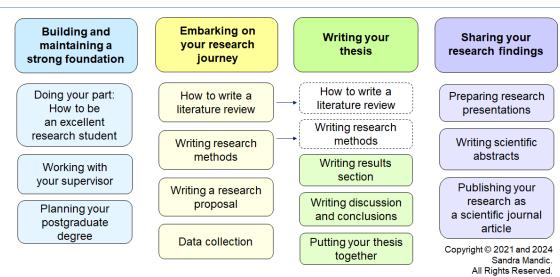
In the first section you will find recommendations for <u>Building and</u>
<u>Maintaining a Strong Foundation</u> for your postgraduate research journey: how to be an excellent student, how to work with your supervisor and how to plan your postgraduate research degree.

In the next section, <u>Embarking on Your</u> Research Journey, you will find the tools for navigating the early stages of your research journey: searching the literature and writing your literature review, writing research methods, preparing your research proposal and planning your data collection.

In the following section, you will find guidelines, tools, examples, and practice exercises to assist you in Writing up Your Thesis. Building on your literature review and research methods preparation from the previous section, this section will guide you through writing your research results, structuring the discussion and conclusions sections and putting your thesis together.

The final section, Sharing Your Research Findings, will guide you through the process of writing scientific conference abstracts, putting together and submitting a scientific journal article, and preparing different types of research presentations.

## Compass Guide for Postgraduate Students (and Their Supervisors): Content Overview



### **Activities and Tools**

In addition to providing generic guidelines for academic research, this guide also contains the following:

- Examples,
- Activities,
- Ask Your Supervisor sections,
- · Feedback templates,
- Tips for navigating different aspects of your postgraduate research journey,
- Links to short research training videos at the <u>AGILE Research YouTube channel</u> and
- Suggested reading.

These activities and tools have been designed to help you integrate the information presented in this guide and apply this knowledge to your own research.

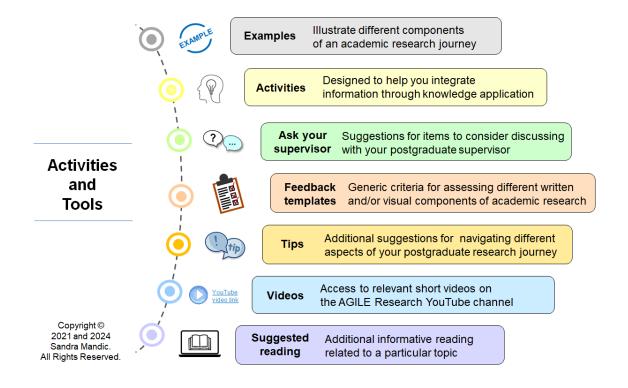
You will be able to locate the activities and tools easily throughout the guide by looking for their icons as indicated in the infographics below. Each of these activities and tools are described in more detail on the next page.

### Notes from the Author

All examples in this guide have been created by the author, Dr Sandra Mandic.

Sandra's research activities have been inspired by interdisciplinary and cross-sectoral approaches to physical activity and health with links to transportation, built environment, and sustainability. Therefore, examples in this guide largely come from physical activity, active transport, and built environment fields.

Although this Compass Guide would be useful for students engaging in both quantitative and qualitative research, most of the activities and examples provided in this guide are based on quantitative research.





**Examples** included in this Compass Guide are generic documents created by the author to illustrate various aspects of the postgraduate research journey and different components of academic research work. These examples integrate generic guidelines for academic research.



**Activities** included in this guide are designed to help you integrate the information presented in each section through knowledge application. Most activities provide you with an opportunity to analyse examples of academic writing, taking into account generic guidelines for preparing academic work.



Ask your supervisor sections provide suggestions for items that you may want to consider discussing with your postgraduate supervisor. Your supervisor will be an invaluable source of relevant information throughout your postgraduate research journey. For instance, you could ask your supervisor for examples of relevant high-quality pieces of academic writing and/or where to find such examples. As you read through Ask Your Supervisor sections, think about other questions for your supervisor related to your discipline and/or your stage in the postgraduate research journey.



Compass Guide feedback templates contain generic criteria for assessing different written and/or visual components of academic research. It is recommended that you use these feedback templates to help you plan, structure, write, assess and revise your work.

You may also consider assessing your work using relevant feedback templates before submitting each piece of work and your self-assessment to your supervisor for review. This will give your supervisor an idea of your thoughts regarding the strengths and areas of improvement for each document which can help guide supervisor's feedback.

You could also consider asking your supervisor to complete the relevant feedback template as part of supervisor's feedback on your work. If you receive such feedback, you will have an opportunity to compare your supervisor's feedback to your own assessment, look for discrepancies and ask your supervisor for clarifications if necessary.



**Tips** include additional suggestions to help you navigate different aspects of your postgraduate research journey including ideas for structuring, writing, and editing your work. Tips will remind you that there are many things you can do as a student to get the most out of your postgraduate research journey. For example, it is always a good idea to ask your peers to provide comments on your work <u>before</u> you send your work for your supervisor's review. This is especially important for students who are studying in their non-native language. Your peers could help you with language and grammar editing which will enable your supervisor to focus their feedback on the content.



Look for this icon throughout the book to access relevant **short research training videos** at the <u>AGILE Research YouTube channel</u>.



**Suggested reading** includes informative reading related to a particular topic covered in this Compass Guide.

### **Compass Guide Feedback Templates**

This book contains six Compass Guide Feedback Templates covering various aspects of research-related academic writing including literature reviews, research methods, research proposals, results, discussion and conclusions sections, and scientific conference abstracts.

### **How These Feedback Templates Work**

Each aspect of a specific piece of academic work is rated on a 5-response scale ranging from 'poor' to 'excellent'. Additional space is provided for open-ended comments. The results will highlight the strengths of a specific piece of academic work as well as areas for minor and major improvements.

- Areas assessed as 'very good' or 'excellent' indicate strengths.
- Areas assessed as 'good' indicate areas for minor improvement.
- Areas assessed as 'poor' or 'fair' indicate areas for major improvement.

### **How to Use These Feedback Templates**

You could **use these feedback templates** to **complete your own assessment** of your work and submit it to your supervisor together

with drafts of your work. Your assessment will help you identify specific questions for your supervisor and area(s) in which you would like supervisor's feedback.

You could also ask your supervisor to complete relevant feedback templates as part of their feedback on your work. That will allow you to compare your own assessment with the feedback from your supervisor and discuss specific components of work. Look for discrepancies and ask for clarification and/or guidance, if necessary.

If you are asking your peers to review your work, you could ask your peers to provide their feedback using these feedback templates. They (and you) may learn as part of that process. You will also be able to compare your peers' feedback to your own assessment.

Comprehensive feedback provided using the Compass Guide Feedback Templates will help guide your next steps for revisions and strengthening your academic work.

Check out feedback templates included in this Compass Guide. Use them for assessing your own academic work and getting feedback on your work from others. Happy learning! ©



### **Compass Guide Feedback Templates**

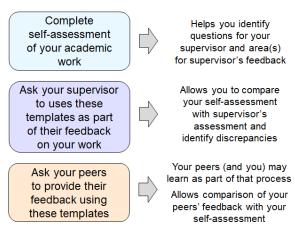
### **How Do These Templates Work?**

Various components of academic work are assessed on a 5-response scale ranging from 'poor' to 'excellent'

Rating	Interpretation
Excellent	Strengths
Very good	
Good	Areas for <u>minor</u> improvement
Fair	Areas for <u>major</u> improvement
Poor	

The results highlight the strengths as well as areas for minor and major improvements

### **How Could You Use These Templates?**



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### When to Use This Compass Guide Book

Use this Compass Guide as your research buddy to accompany you on your research journey.

For example, you may want to refer to this guide when you wonder what is expected of you during your postgraduate research journey, what you can do to be a great research student or how to effectively work with your supervisor.

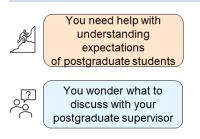
You will also find this guide helpful if you are curious about requirements for specific components of academic research (such as writing a literature review or a research proposal) or if you need help planning your research data collection.

See the infographic below for more examples.





### You May Want to Use This Compass Guide When...



You wonder about requirements for specific components of academic research

You want to see some examples of academic research work



You need help with planning the structure for your literature review



You want to create a plan for your research data collection



You want to get ideas on how to present research findings effectively



You wonder how to structure the discussion section of your thesis



You wonder how to prepare a scientific journal article for publication



You want to get specific feedback on your work from others, including your supervisor



You want to assess your work and check if you are on track

... And any other circumstances when you think this guide would be helpful to you.

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### **How to Use This Compass Guide**

You may choose to read the guide from the beginning to the end or you may choose to go straight to the chapters and sections that are of interest to you. Whichever way you choose, it is recommended that you come back to the same chapters and/or sections several times throughout your postgraduate research journey. Your knowledge will grow over time, and you will likely look at those sections differently – and discover new insights – when you return to them at a later stage.

Although just reading the material presented in this guide will provide you with many new insights, your learning will be much more powerful when you take the time and make an effort to apply your knowledge. You will get more out of this Compass Guide by reading through and analysing the examples included and completing the suggested activities.

Make use of feedback templates included in this guide to help you prepare and assess your work. You can also use these feedback templates to seek feedback from your supervisor(s) and/or your fellow research students. Your postgraduate research journey will provide you with a unique learning experience to advance your knowledge in a chosen scientific discipline. Familiarise yourself with the requirements of your scientific discipline and add your own insights to the information provided in this guide.

Strive for excellence and put your best work forward at each stage of your postgraduate research journey. Work closely with your postgraduate supervisor – your supervisor is/will be the most valuable resource on your postgraduate research journey.

Ask for feedback and learn from the feedback you receive. Then revise your work, ask for more feedback and broaden your horizons with new insights again. And again... And again... Gradually increase your independence to become less reliant on your supervisor, who is there to advise but not to do your research nor write it up.

Use this guide as a compass to assist you in navigating your postgraduate research journey – and enjoy the learning experience!



## How to Get the Most out of This Compass Guide (and Your Postgraduate Research Experience)

Review the same chapters and/or sections several times throughout your postgraduate research journey

Strive for excellence and do your best at each stage of your postgraduate journey Take the time to analyse the examples included and complete the suggested activities

> Work closely with your postgraduate supervisor(s)

Use feedback templates to help you prepare and assess your work and get feedback from others

Ask for feedback, learn from it, revise your work, ask for more feedback... and keep learning Add your own insights to the information provided in this guide

Use this guide as a compass to assist you in navigating your postgraduate research – and enjoy learning!

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**How to Navigate the Research Process** 





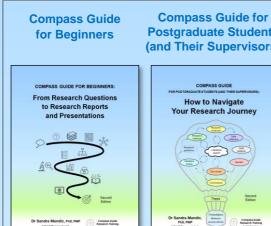


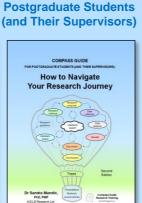


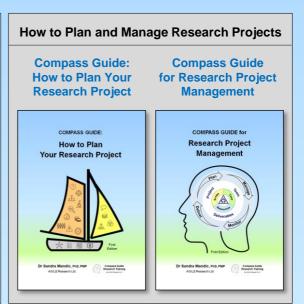
## **Compass Guide Research Training Resources**

By AGILE Research Ltd.

Created by Dr Sandra Mandic, PhD, PMP











Free short research training videos based on the content covered in the Compass Guide books





Available from the AGILE Research Ltd. website: https://agileresearch.nz/

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