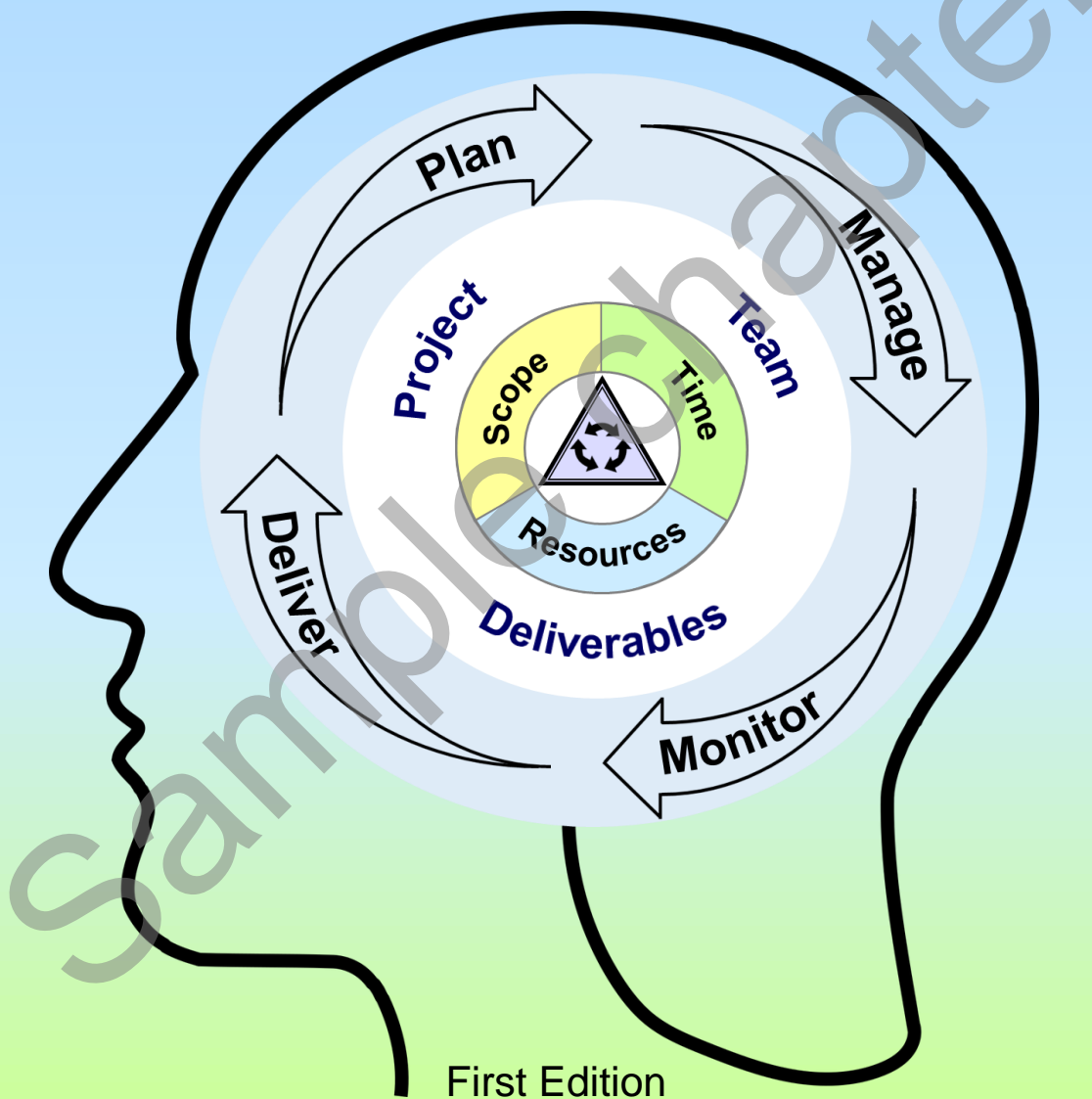


COMPASS GUIDE for Research Project Management



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**Compass Guide
Research Training**
By AGILE Research Ltd.

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2.5 Plan Project Resources and Budget

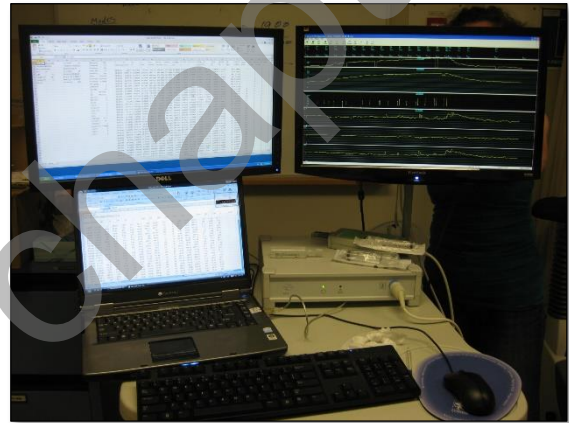
The resources required for research projects are project-specific and therefore vary from project to a project. Project resources depend on the project scope, chosen research methods, planned project deliverables and a timeframe for project completion.

Availability of research staff and required research funding are key resources for most research projects.

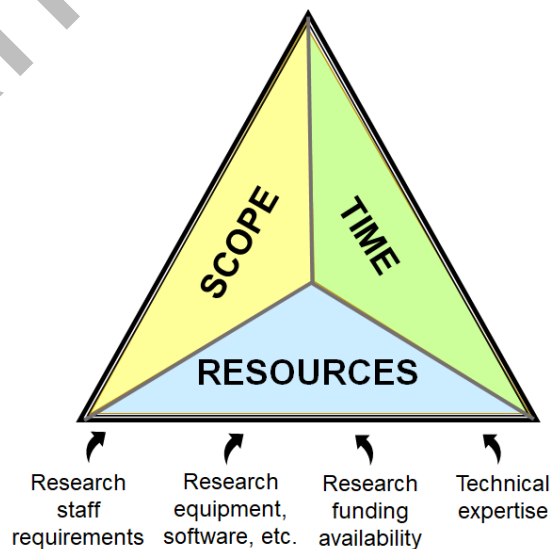
Other project-specific resources may include specific research equipment and software, project-related materials, research space, travelling expenses, specific technical expertise (such as statistical analysis expertise) and other costs.

Irrespective of how much you or your team would like to work on a particular research initiative, keep in mind that research projects should have adequate resources which match the planned project scope and the project timeframe.

Therefore, adequate project planning should include assessment of all required resources, identify missing resources and create a plan to secure the missing resources **before** the project proceeds.



Common Resources Required for Research Projects



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Assess Project Resource Requirements

Determining research project resources and preparing the project budget involves the following steps:

- Assessment of project resource requirements,
- Identification of availability of the required resources,
- Estimating the cost of the required resources,
- Planning how to secure resources, and
- Creating a backup plan (optional but good idea).

Planning project resources starts with assessing project requirements. Consider **all** aspects of your project in this step.

Once identified, determine the availability and cost of all required project resources.

For each required but unavailable resource, make a plan for securing that resource. For example, consider if required research equipment could be booked at no cost (i.e., already available in the organisation), rented or if it needs to be purchased for the project?

Given the high competitiveness in obtaining research funding for academic research projects and financial constraints in many organisations, it is a good idea to create a

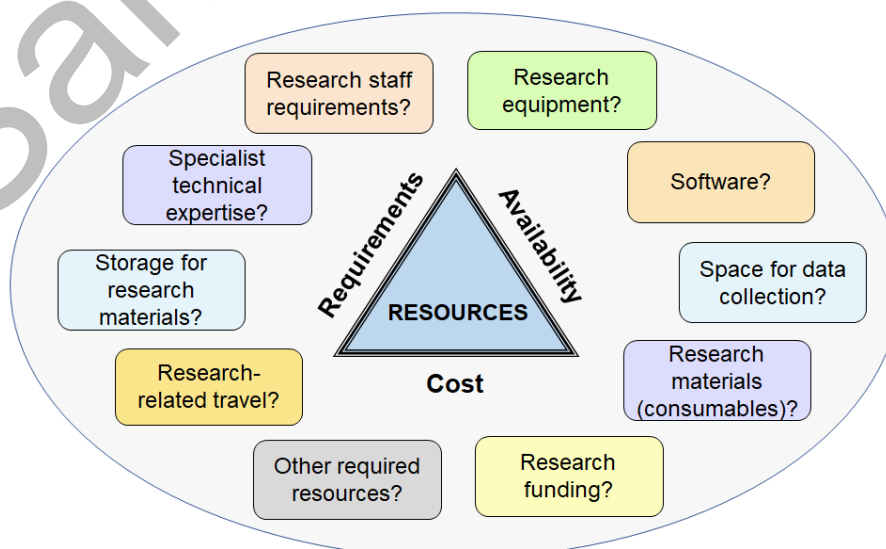
backup plan (or two) in case the requested project funding for a particular project is not secured.

Sometimes lack of or insufficient resources for research projects may be accommodated by an increase in project duration (if that is an option) or a reduction in project scope.

If the missing resources are essential for the project and no funding or other options exist for securing those resources in the short term, the project will not be feasible. In that case, the project objectives and scope may need to be revised to ensure the project objectives and scope are feasible given the available resources. If that is not an option or if such an option would not be suitable to address the planned project objectives, then a necessary decision may be to give up on a planned project in the existing format and move onto new or different projects.

Alternatively - as is often the case with academic research initiatives - your team would need to keep shaping (and re-shaping) the originally planned research project and keep applying for research funding to proceed with it once the funding is secured in the future. Such an approach may not be an option for research conducted by government organisations or industry.

Assessment of Project Resource Requirements, Availability and Cost



Plan Project Budget

The research project budget should clearly outline which items are included in the project budget and provide justification for them. Research funders need to be convinced that items included in the budget are required for the project and that the overall budget is reasonable.

The budget section for each project will look slightly different, depending on the specific project requirements. Some generic guidelines for preparing research project budget are included here:

- Provide budget details for all relevant project components as well as the total project cost,
- Present separately salary-related costs and consumables,
- Minor research equipment can often be included under project consumables while major research equipment would usually be listed separately, and
- Budget justifications should be written succinctly, providing as much detail as necessary. In research grant applications, the amount of detail may be limited by the space available.

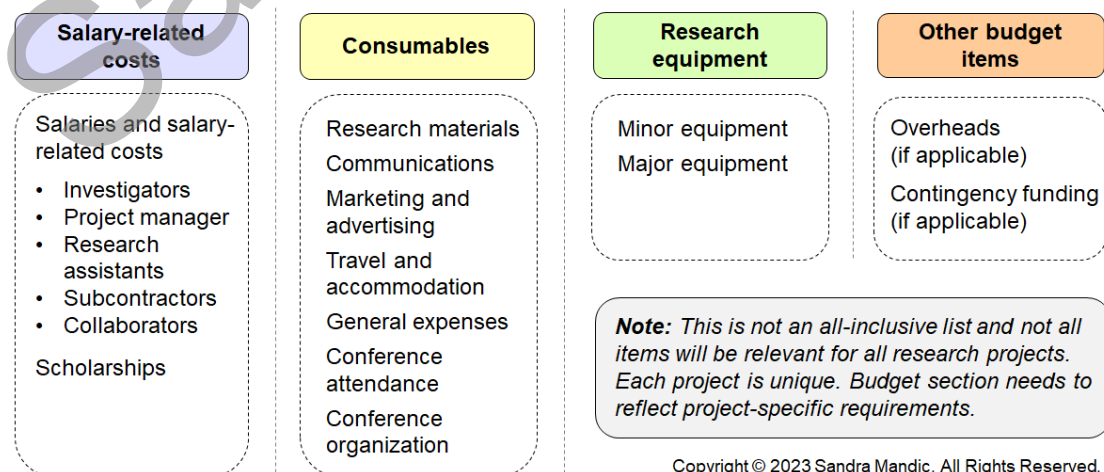
Overheads should be included in the project budget if required by your institution and if funded by a particular research funder.

Contingency funding is often not planned or reported separately in the budget for academic research projects and may not be funded by research funding bodies as a stand-alone budget item. However, contingency funding is particularly important for research projects given the unpredictable nature of research and often limited knowledge of the actual time and costs associated with certain project components (for example, recruitment of research participants).

Researchers need to be aware of the need for contingency funding for dealing with unexpected circumstances that may arise during the project and should plan to integrate contingency funding into the project plan and budget. For example, that could be accomplished by planning for additional time and cost that may be required to recruit research participants if this happens more slowly than expected.

In general, larger, more complex and/or more expensive research projects require a more detailed and stronger justification of items included in their planned budget compared to less complex projects requiring less funding. That is apparent from the examples of research project budgets presented on the following pages.

Components of a Research Project Budget



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Example: Budget Section from a Small Research Grant

This example shows a budget section from a small research grant application for the BEATS Teacher Survey and Focus Groups (for details, see [pages 20-21](#)).

Part 1 shows the project budget overview with justification of each component included in the budget. Note a statement about budget items that the application refers to, indication of a salary-related costs with justification for employing a research assistant, cost of printing research materials and details about study rewards.

Part 2 shows the project budget breakdown for each item, including salary-related costs and project consumables as well as the total project cost.

In this example, the budget section also includes other relevant information related to an intention to secure funding from other sources for other subsequent phases of the project – data processing and data analysis.

Note: Colours have been used to highlight different parts of the budget section in this Guide but colours were not used in the original grant application.



Example: Project Budget Overview with Justification (Part 1)

Budget details for each project component with justification

Budget and justification: *This grant application seeks funding only for a research assistant, incentives for schools' participation, and printing study material. One Research Assistant will be employed at RAN.02 level (\$22 per hour × 180 hours) to assist with participant recruitment for both focus groups and teacher survey, conducting focus group research, transcribing focus group sessions, and coordinating data collection and data management for a teacher survey. [...] Cost of printing study materials: \$90. Focus Group incentives: \$100 book voucher for each school that organizes a teachers' focus group (\$100 per school × 5 schools = \$500). Teacher Survey incentives: \$50 book voucher for every 25% of teachers within the school who complete the teacher survey (estimated recruitment rate) (up to a total of \$200 per school for 100% completion rate) (\$50 per school at 25% survey completion rate × 9 schools = \$450).*

- Statement about budget items
- Salary cost with justification and calculation details
- Research materials
- Rewards for participation with justification and calculation details

Adapted from Sandra Mandic. (2021) Compass for Navigating Your Postgraduate Research Journey: Guide for Students. (1st Edition) AGILE Research Ltd., Wellington.

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Example: Project Budget Breakdown (Part 2)

Budget breakdown

<i>Research assistant (180 hours)</i>	\$3,960
<i>Incentives for schools' participation</i>	\$950
<i>Printing study material</i>	\$90
Total:	\$5,000

- Salary component
- Consumables

Total budget requested

Funding from other sources will be sought for data processing and analysis.

- Other relevant information

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Example: Budget Section from a Medium-Size Research Grant

Project: The project in this example has been modelled based on the BEATS Parental Survey (for details, see [pages 20-21](#)). The hypothetical project includes the recruitment of 220 parents to complete a 20-minute

research questionnaire (online or on paper) with subgroups of 80 participants to also complete a 7-day physical activity assessment and 15 participants to take part in one of three focus groups.



Budget

In this grant application, **we ask only for funding for a salary for two research assistants (\$20,647) and operating expenses (\$4,510) for this project (total funding request: \$25,927)**. Budget details and justification are presented below in order of priority. Our institution will provide office space, access to a computer, phone and internet and relevant specialised research equipment and survey software. In collaboration with the local city council, we have secured spaces for meeting research participants in five different locations (public libraries) throughout city for conducting physical activity appointments.

Item with justification	Cost
Salary-related costs	\$20,337
<p>Research Assistant 1 (RAN03; 0.35 FTE)</p> <p>The responsibilities of this research assistant will include the following: working with the schools for recruitment of parents through schools; making contacts with prospective participants and arranging completion of an online or paper-based questionnaire; scheduling and conducting physical activity appointments; collecting physical activity meters from participants; transcribing focus group data; and coordinating postgraduate students involved in this project. Research assistant [name] who has been working with the principal investigator and assisting with the project coordination on a similar project [project name] will be employed on this project.</p>	\$15,968
<p>Research Assistant 2 (RAN.03; 0.10 FTE).</p> <p>This research assistant will work with the principal investigator and Research Assistant 1 to assist with participant recruitment, data collection, data processing and preparation of research reports.</p>	\$4,679
Consumables	\$5,590
<p>Printing, photocopying and stationery</p> <p>These items will include printing of the study information packages for parent participants, paper-based study surveys, study posters, study-related materials, and stationery.</p>	\$1,300
<p>Postage and courier cost</p> <p>Postage cost will include posting study information packages to prospective parent participants and return of signed consents, posting paper-based study surveys (when necessary) and courier return of physical activity meters for 80 participants (\$8.00 per participant).</p>	\$640
<p>Vouchers for study participants</p> <p>To facilitate recruitment, we will offer incentives for participants in each aspect of the study:</p> <ul style="list-style-type: none"> a) survey participants (a draw for a \$250 grocery voucher x 3 vouchers = \$750); b) physical activity sub-study (\$20 grocery voucher x 80 participants = \$1,600); and c) focus groups (\$20 grocery voucher x 15 participants = \$300). 	\$2,650
<p>Mileage reimbursement</p> <p>Data collection for this project will require traveling to different sites in the city for physical activity assessments and will be reimbursed at a rate of \$0.75 per kilometre.</p>	\$1,000
TOTAL PROJECT COST:	\$25,927

Other Research Grants for this Project:

No other grants received to date overlap with the research project proposed here.

Example: Budget Section from a Large Research Grant

The infographic in this example shows an overview of budget components included in the 3-year BEATS Natural Experiment study (for details, see [pages 20-21](#)).

Note the structure of items presented under the salary-related projects costs (including overheads). Note also the groupings of items under project consumables.

The second part of this example shows cost details (including cost calculations) and justification for one of the items included under project consumables: the mobile phone costs. All items listed in the budget section for this project had cost details and justification (data not presented in this Guide).



Example: Budget Components for a Large Research Project

Salary-related costs

Salaries and salary-related costs

- Investigators
- Research staff
- Subcontractors
- Collaborators

Scholarships

- PhD students

Overheads

**3-year research project
NZD \$1.2 million**

Data source: BEATS Natural Experiment

Consumables

Research materials

- Printing, postage, stationery, etc.

Communications

- Mobile phone costs

Minor equipment

- Laptop
- Activity meters (minor research equipment)

Travel and accommodation

- Related to data collection, investigators' travels and conference travels

General expenses

- Rewards for participants
- Symposium catering
- Publication fee

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Communications:

Total: \$2,400

Purchasing two mobile phone devices (\$300 per device x 2 devices = \$600) and mobile phone usage for 2 team members: the principal investigator and project coordinator (36 months x \$25 per month x 2 staff members = \$1,800) (total: \$2,400). The use of smart phones will be essential for extensive communications within the research team and with the schools required for a project of this nature. The implementation of this project and management of data collection in schools will require extensive communications outside of the office. Mobile phone use will be the most convenient and efficient way for the principal investigator and the project coordinator to coordinate communications and study implementation. The project coordinator will use a mobile phone extensively to communicate with study participants - coordinating schedules, performing study data collection appointments throughout the city, and sending text reminders to ensure the return of the physical activity devices.

Source: BEATS Natural Experiment

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Considerations for Your Project

Budget examples presented in this section of the Guide are just that: examples. The budget section for your project will likely look quite different.

When assessing resource requirements and creating a budget for your project, take into account the following considerations:

- Which resources do you require for your project?
- Which of the required resources are readily available to the project team and what is the cost for those resources?
- Which required project resources are not currently available to the project team and what is the cost of securing those resources?
- If required, what is your plan for securing research funding for your project?
- What is your backup project plan if one or more of the required missing resources are not available or you do not secure all required funding for the planned project?

Once you work through those questions, create a list of action points for your research team to secure required project resources.

Familiarise yourself with the requirements of your organisation or the research funders to which you are applying and prepare your budget accordingly. Some research funding bodies require budget sections to be prepared using their customised templates.

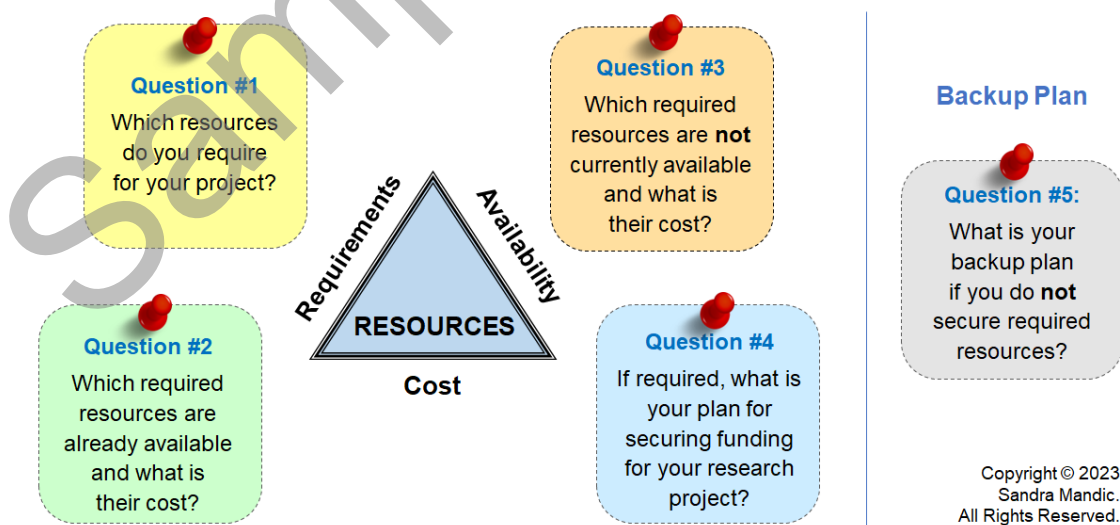
Ensure that you provide all necessary budget-related information that the decision makers need to assess your research funding request – and hopefully fund it.

You may also consider mapping funding opportunities in your scientific field and their specific characteristics. This is particularly helpful for research initiatives where individual funding opportunities may not fund all planned components of the project.

Tool

Check out the [template worksheet for planning project-specific resources and budget](#) on the next two pages. Consider using it when planning your next research initiative.

Considerations for Resource Assessment for Your Research Project



Tool #2: Planning Worksheet for Project Resources and Budget

Project title:	
Prepared by:	
Date:	

Assessment of Resource Requirements for a Research Project			
Resource type	Requirements	Availability	Cost
Research materials			
Research equipment			
Software			
Space for data collection			
Storage of research materials			
Research-related travel			
Research staff requirements			
Specialist technical expertise requirements			
Research funding requirements			
Other resources			

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Your Plan for Ensuring Your Research Project has All Required Resources

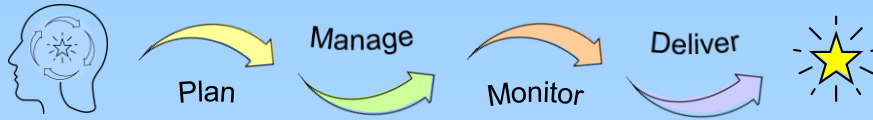
Resource type	Required but currently <u>un</u> available resource	Your plan for securing a required resource	Your <u>backup plan</u> if the resource is not obtained

Project Budget Estimates

Budget item	Justification	Cost
Total:		

Plan for securing required research funding	Backup plan

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Compass Guide Research Training Resources

By AGILE Research Ltd.

Created by Dr Sandra Mandic, PhD, PMP

How to Navigate the Research Process		How to Plan and Manage Research Projects	
<p>Compass Guide for Beginners</p>	<p>Compass Guide for Postgraduate Students (and Their Supervisors)</p>	<p>Compass Guide: How to Plan Your Research Project</p>	<p>Compass Guide for Research Project Management</p>

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