**What’s the Project Management Development Plan (PMDP)?**

**Why work on your PMDP?**

How can you use project management tools and strategies? Are they useful now and post PhD? What makes a great project manager? The Project Management Development Plan is intended to help you reflect on your learning to answer these and related questions.

It’s an opportunity to use the tools and to share and discuss the outputs. You’ll also reflect on your existing planning and organisational skills. Not only that this PMDP aims to help enhance your research and prepare you for life, wherever it takes you.

**What’s involved?**

Your PMDP action plan is located at the end of this document. That’s where you’ll find further instruction. Before you get down to the endless possibilities for developing your project management expertise, here are a few things you can do.

* **Learn to project manage** – Complete the ‘Unleash your project’ online course to learn more about project management, it’s relevance to you and insights into tools and strategies.
* **Reflect and act** – Complete the PMDP learning activities located in this document to help you think about project management opportunities, your strengths and weaknesses and to reflect on the content covered.
* **Unleash your leadership** ­– Set yourself up for success. Put an action plan in place. What do you want to learn? How are you going to develop your leadership skills further? Who can help? When will you achieve your goals?

Once you have completed your PMDP activities and action plan you will need to provide it to your supervisor for review and sign-off. This will be uploaded to Moodle and you’ll receive credits towards your professional development hours.

**Your PMDP Activities**

**Be the project manager**

| **Topic** | **Reflect** | **Activities** |
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| The PhD project  (5 minutes) | Is your PhD, in fact, a project? Is it unique and temporary with a definite beginning and end?  What are the skills and characteristics of great project managers? | **My PhD Project**   1. Please outline the unique nature of your research. 2. Please identify when your research commenced 3. Please indicate when you are due to complete your research 4. Please identify your Research Phases. (for example, Confirmation, Progress Review, Final Review). 5. Identify what you anticipate will be the lasting outcome of your research (which may include the contribution to your research field and the impact that will have on further research). |
| Project manage your research  (10 minutes) | You are working with a very complex team that might include:   * Your supervisors * Research assistants * Other PhD students within your cohort * Research subjects * Faculty administration staff * Laboratory staff * Institutional staff * Co-authors for a journal article * Faculty members from international universities * Ethics panel members * Confirmation panel members   What does your team look like? | My project team   1. Please list the current members of your team 2. Within your team who is the leader? 3. Within your team who is the project sponsor? 4. Identify your research project’s customers and users, as well as their anticipated expectations from your project.  |  |  | | --- | --- | | Customer/User | Expectation | | E.g. Faculty | To complete your research within the expected timeframe | |  |  | |  |  | |  |  | |  |  |  1. What is one example of how you are communicating with one set of customer/users for your research project? 2. List the people (or their roles) that are currently acting as Resource Managers for your project? (For example, supervisors who put you into contact with academics or librarians who provide knowledge about journals) |

**Explore the principles and practices**

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| What’s waterfall?  (10 minutes) | While everyone in your project team will have different preferences for communications tools, should you cater to everyone’s different needs?  Is there a case for taking charge and setting the communication tools according to your own preferences? | Plan your communications   1. Building on the customers and users of your research project that you identified in the previous section, consider the following questions for each of your customers and users and complete the table below:  * What information does each customer/user require throughout your research project? * What will be the best method(s) for satisfying that need? * How frequently do they need to be appraised of your progress? * What form(s) of communication do they require (written, presentation, meeting, telephone, videoconferencing etc)? * Ought anyone other than yourself be responsible for communicating with your customers and users?  |  |  | | --- | --- | | **Customer/User** | **Specific communications plan** | | E.g. Supervisors | Fortnightly meetings, summary emails, ad-hoc telephone calls | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |
| Break it down  (20 minutes) | A WBS is essentially an outline or map of a specific project. Its main purpose is to reduce complicated activities to a collection of tasks.  How is a WBS helpful across all the areas a project manager needs to think about such as: scope, cost, responsibilities and time? | Create a Work Breakdown Structure (WBS)  A WBS is a project management strategy used for organising project work into manageable ‘chunks’.  *Use this series of steps to create a WBS for your PhD project. It can be completed on a notepad, a whiteboard or a tablet.*  ***Step 1***  Refer to your PhD application or, if you have completed it, your completed Confirmation presentation and/or paper, as these define the current scope (what is in and what is out) of your research. In addition, [refer to the guidelines for the completion of your PhD](http://www.monash.edu/policy-bank/academic/graduate-education/grad-research-progress-management-procedures), to identify the specific milestones (effectively high level Summary Tasks) that relate to your PhD pathway.  ***Step 2***  Identify your highest-level Summary Tasks (remember, at the highest level of a WBS, you may have several layers of Summary Tasks). In the *Project management course content* example below, the first two levels of the WBS for the creation of the content for this course are Summary Tasks – yes, in this context “Project management course content” is the highest-level Summary Task.    ***Step 3***  Break down each of the Summary Tasks into smaller pieces. Remember, the rule of thumb is to break them down into chunks of work that take between eight to 80 hours to complete.  Be aware that you may have more levels in some parts of your project than others. That’s okay. You can always re-arrange your WBS after you have first created it.  **Assess it**  Four tests that you may use to assess the usefulness of your Work Packages are:   * Time and effort are easy to measure – *it isn’t hard to identify what you have done* * Status is easy to report *- often traffic lights are used: Green for on track, Yellow for “Caution” and red for off-track* * Task duration is shorter than your reporting periods which means that you can provide a status report – *if you report to your supervisors once every fortnight, and you are using weekly time periods, then it will be easier for you to report progress to your supervisors than if you had chosen 3 week cycles for your time periods* * The detail is at the level that you can and want to manage – *you are in control of the detail and the level you are going to ‘works’ for you* |

| **Topic** | **Reflect** | **Activities** |
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| Monitor the work  (1 hour) | Is having a visual representation of projects tasks useful?  What impact might it have if you are not clear about dependencies between tasks? | My Gantt chart  To create a Gantt Chart, you need to first create your Task Schedule.  ***Step 1***  Take out the WBS that you created earlier.  ***Step 2***  Estimate the time needed to complete each Work Package,  ***Step 3***  Identify your Task Dependencies that you will apply to each Work Package.  Here are a few questions to help you to identify your dependencies:   * Which task controls the other? This tells you which task is first in the relationship * Does the start or finish date of the first task control the start or finish of the second task? This identifies if the dependency begins with Start or Finish * Does the first task control the start or finish of the second task? This identifies if the second half of the dependency is start or finish   ***Step 4***  Now that you have identified a Task Schedule (which is simply the order your tasks will need to be completed in) you can use Excel to create a simple Gantt Chart.  Here are links to a couple of short online tutorials that will enable you to create a Gantt Chart from your Task Schedule.   * <https://youtu.be/TjxL_hQn5w0> * <https://youtu.be/NrfOtqzz_wk> |

| **Topic** | **Reflect** | **Activities** |
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| Consider the risks  (10 mins) | A PhD isn’t a particularly risky undertaking. Or is it?  What’s your attitude to risk and how might it affect your PhD research project? | **Qualitative risk assessment activity**  *Step 1*  Meet with your supervisors and brain storm possible risks associated with your research project.  *Step 2*  Use the list that you have created and rate each risk from both probability and impact perspective.  Rate **probability** as:   * High * Medium * Low   **Impact** is in the context of having a negative impact on your project. Once again, rate each risk as:   * High * Medium * Low   *Step 3*  After each risk has been assessed, insert it in to the following matrix.  **Qualitative risk assessment matrix**   |  |  |  |  | | --- | --- | --- | --- | |  | **Impact** | | | | **Risk Probability** | **Low** | **Medium** | **High** | | **High** |  |  |  | | **Medium** |  |  |  | | **Low** |  |  |  | |

**Create your project management profile**

| **Topic** | **Reflect** | **Activities** |
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| Mapping my skills  (20 mins) | Which are your strengths? Which skills do you need to develop further?  In your discipline what skills do you think are most critical? | **Mapping my skills activity**  ***Step 1***  In the Knowledge Area tables below use a highlighter to identify one of the processes for each knowledge area that you have completed yourself.  ***Step 2***  Identify at least one **skill** that you developed when completing this process.  For example, in the first Knowledge Area Project Integration Management, you might highlight the process ‘Develop project charter’ (because you wrote a description for your research at enrolment). A skill developed could be ‘communication’ and in this context, it would be written communication skills that you developed.  KNOWLEDGE AREA TABLES  **Project Integration Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Develop project charter | Your description of your research at enrolment | | Develop project management plan | Creation of an Excel Gantt Chart | | Direct and manage project work | Assign tasks to others E.g. supervisors, laboratory assistants | | Monitor and control project work | Meet with your supervisors and report on progress (E.g. using a One Page Project Manager report) | | Perform integrated change control | Documenting a change in the detail of how you will collect your data as agreed by your supervisors | | Close project | Acceptance of your thesis |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Scope Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan scope management | This is provided by your faculty and is the description of what is required for your research project to be successfully Confirmed | | Collect requirements | Identifying the customer and user needs and expectations of your research project | | Define scope | The process that you must follow to be successfully Confirmed | | Create WBS | The creation of your WBS | | Validate scope | The feedback that you receive from your Confirmation Panel | | Control scope | Any changes that you must make to your research project because of the feedback that you have received from your Conformation Panel. These changes must be implemented for your Confirmation to be successfully completed. |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Time Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan schedule management | Faculty guidelines and policies that guide you throughout the completion of your research project | | Define activities | The process of identifying the specific tasks that need to be completed (see Section 2) | | Sequence activities | Identifying the task dependencies between tasks (See Section 2) | | Estimate activity resources | Estimating the number of laboratory sessions, performing arts sessions, research participants. | | Estimate activity durations | Estimating the length of laboratory sessions, performing arts sessions, research participant interactions. | | Develop schedule | The process of developing your Task Schedule (see Section 2) | | Control schedule | The evolution of you plan as you update it as new information of progress occurs, E.g. you decide that you need to double the number of research participants which will double your research participant interactions (E.g. if you were conducting interviews) |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Cost Management**  This set of processes is generally a little more difficult for PhD research students to ‘see’, because the costs associated with your research sit largely in the background. However, there are costs associated with your research and your enrolment does affect your faculty’s budget.  Below is a non-exhaustive list of the costs associated with your research project:   * Scholarship value * Office usage * Facility usage * Office equipment (desks, telephone, computer, printers) * Portion of supervisor salary   Please keep these in mind when considering the processes associated with this Knowledge Area.  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan cost management | Conducted at the faculty level, this is where the costs associated with your research project are defined | | Estimate costs | Conducted at the faculty level this is where the costs associated with your research project are estimated under the assumption that you will complete your thesis in the prescribed timeframe | | Determines budget | This is where the specific individual costs associated with your research project are aggregated to form the full cost for your participation in the program | | Control costs | If you fall behind your schedule, then the length of time required to complete your thesis may be extended. The faculty may determine a maximum timeframe within which you must submit your thesis or risk being withdrawn from your research project. |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Quality Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan quality management | Identifying and following your research project methodology and demonstrating how you are complying with the methodology | | Perform quality assurance | Having a paper assessed by a journal panel or conference panel will identify if your paper is reflecting the necessary quality to be included in the journal or conference | | Control quality | Meeting with your supervisors and reviewing the feedback from a journal panel regarding a paper you have submitted, and then making the necessary changes to the paper. |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Human Resource Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan human resource management | The process of identifying the people/roles whom will be required to enable you to successfully complete your research project, and identifying the skills and responsibilities of those people | | Acquire project team | Recruiting your supervisors | | Develop project team | Finding an article that is relevant to your supervisors that helps them to progress their field of study | | Manage project team | Using your One Page Project Manager (or Task Schedule) to remind your supervisor of a task they are required to complete |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Communications Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan communications management | In Section 1 you identified expectations of some of your research project’s customers and users. Taking this further, identify and plan how will communicate with each of your customer and user groups. | | Manage communications | Keeping records of your meetings with supervisors and various updates that you make to your Task Schedule and/or One Page Project Manager | | Control communications | Checking with your supervisors the appropriate amount of time you should leave before following up about an email to which they are yet to respond E.g., they may tell you that they are happy to follow up emails if they haven’t responded within 48 hours. |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Risk Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan risk management | Sitting down with your supervisors and identifying risks and how you initially plan to manage them | | Identify risks | Sitting down and assessing risks as they relate to your research | | Perform qualitative risk analysis | Identifying data collections risks, rating their probability and the impact they would have on your research if they occurred | | Perform quantitative risk analysis | Taking risks identified by your qualitative assessment and quantifying their impact on your research project through some form of modelling tool | | Plan risk response | Working with your research participants to reduce the risk of them prematurely exiting your research group | | Control risks | Meeting with your supervisors and reporting on the steps that have been taken, and how well they are working in terms of mitigating your identified risks |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Procurement Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Plan procurement management | Identifying the resources that you will require to complete your research and determining how you are going to access it | | Conduct procurements | Booking a theatre, office or laboratory | | Control procurements | Maintaining a quality relationship with the staff member who manages the booking system for tutorial/meeting spaces so that you are successful in obtaining the bookings you require | | Close procurements | Using the room you have booked and everything goes to plan in terms of the use of the facility. |   Skill developed was:  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Project Stakeholder Management**  The processes involved in this Knowledge Area are:   |  |  | | --- | --- | | **Process** | **PhD Research Project example** | | Identify stakeholders | Identifying your customers, users and any other person, group or organisation that could be impacted by your research | | Plan stakeholder management | Planning to provide regular progress reports and/or update for any external scholarship provider, such as a foreign government | | Manage stakeholder engagement | Providing regular progress reports to a scholarship provider | | Control stakeholder engagement | Recognising that a key academic is not responding to emails, so you book in a face to face meeting with them and they attend that meeting. |   Skill developed was: |

| **Topic** | **Reflect** | **Activities** |
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| PMDP Action Plan  (1 hour) | Has the investment you’ve made in using the tools and strategies of project management been useful?  How can you further develop these new learnings?  What was of specific interest to you that you can follow up on? | **PMDP Action Plan**  ***Step 1***  Complete the PMDP Action Plan below.  ***Step 2***  Organise to meet with your supervisors so that you can:   * Discuss your WBS and Task Schedule * Review your risks * Review your communications plan for your customers, users and other stakeholders * Review your PDMP Action Plan   ***Step 3***  Then:   * Continue to consciously develop your skills as you progress your research project * Complete the other online courses in this series |

**Unleash your PMDP action plan**

**Plan for the present. Prepare for the future.**

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| **What do I want to learn?** | **How will I go about it?** | **Who can help? What resources will I need?** | **How will I measure my success?** | **What’s my timeframe?** |
| E.g. How to do a OPPM | Download the templates and examples | Supervisor | Feedback from my PhD group and supervisor | May |
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