



Module 8: Project Closeout

Introduction

This module reviews the nature and significance of project closeout, an essential, although sometimes neglected, aspect of research project management. By 'closeout' we mean: the finalisation of all aspects of the project; assessment of its success or otherwise; formulation of lessons learned; and, ideally, the forging of opportunities for subsequent projects.

This module thus links in particular with the project management ideas and techniques addressed in topics in Modules 1 and 2, where the emphasis is on strategic context, commencement and planning. In working through the material on project finalisation in this module it may therefore be useful from time to time to review the project management guidelines of those earlier modules.

In addition, the closeout/acquittal and reporting procedures outlined in this module relate to, and provide a project management context for, issues addressed in topics in Modules 5 and 6. Again, it may be useful to refer to those modules in working through some of the topics below.

Closeout is a critical component of the research project that is not just about ticking boxes and transferring responsibility. Of course the time and effort expended in closeout needs to be proportional to the size, value and nature of the project that has been completed. For example:

- A project that has been done for the first time will generally receive greater review and scrutiny than something that is more routine in nature, with the review possibly more focussed on the search for better and more efficient future approaches
- A project that has cost a lot of time, effort and human resource will generally receive more effort in review, with the review possibly more focussed on the search for answers on how to put together more effective teams
- A project that gives organisational profile and therefore may represent a reputation risk to the organisation may be reviewed more closely, possibly more focussed on the search for how best to present project outcomes to key stakeholders and the public

Project closeout and review is not a one-size-fits all recipe. Thought needs to be put into defining the process and approach to project closeout in the initial planning and definition stage of the project (answering questions like, "How will I know when this project is finished and/or has been successful?"), and of course, budget provision for the closeout and review processes should also have been made, otherwise closeout and review is unlikely to happen in a rigorous way.

A good project closeout and review process is dependent on having had good processes for setting goals, priorities, project definitions, scope, schedules and budgets as well as having effective controls for monitoring and tracking changes during the life of the project. Without this, closeout and evaluation become a subjective view of how the project has gone against what was originally proposed to be delivered (as changes have not been recorded and communicated) that is unlikely to measure up to external scrutiny or satisfy key stakeholders or lead to any substantive benefits to the organisation in terms of lessons learned.

This module comprises online learning material and a workshop.

You are expected to devote time to reading the online material and carrying out compulsory activities before attending the workshop. This module should take less than three hours to read and you may need to devote up to another hour and a half to carry out the compulsory activities.

The workshop is based on the assumption that you have completed the reading and carried out the compulsory activities.

Aims

The aim of this module is to provide you with an efficient and structured approach to project closeout. This approach will enable you to meet minimum client/sponsor obligations and capture ways by which they can improve your future approach to overall research project design, development and implementation.

The module also aims to illustrate some of the different requirements of different project types that university researchers need to be aware of as well as the benefits of using the closeout process to identify future research opportunities and improved research practices.

Learning outcomes

After completing this module you should be able to:

- Identify the major components of project closeout in a university research context;

- Explain the benefits of properly closing out a project, as well as the potential consequences of ineffective closeout;
- Explain the relationship between project closeout and project planning and management generally;
- Identify obligations to a client/sponsor at, and leading to, project finalization;
- Identify obligations to project team members at, and leading to, project closure;
- Structure a review and evaluation report for a project that has closed;
- Make and prioritise recommendations for other activities that could be undertaken to add value to the research investment that has been made.

Content overview

The module comprises 4 topics and workshop preparation materials that it is expected will take approximately 4 hours to work through online:

Topic 1: The importance of closing out

This topic explains the importance of closing a project, including who is responsible for doing it, how the information is used, the benefits of doing a proper project closeout and the possible consequences of not meeting requirements.

Topic 2: Project closeout compliance requirements

This topic addresses what must be done, in other words, the key compliance issues that apply to all projects and that are generally a condition of funding.

Topic 3: Project review and evaluation

This topic is focused on improving understanding of the need for and importance of review and evaluation. It is broken down into four key sub-topics which in themselves provide a template approach to a project review and evaluation.

Topic 4: Using project closeout to your advantage

This topic details some value adding activities that will help position your research and research team for the future, looking at things like celebrating success, how project assets could be further used, using media and promotion to best effect and further leveraging research results in various commercial activities.

Topic 5: Project closeout at your university

In this section please find any specific information about project closeout procedures, policies and issues at your university that may have been provided by your local Future Research Leader Program facilitators.

Workshop details

The 4-hour workshop for Project Closeout takes a real project funding proposal and contract as the information with which to develop a closeout template for that project. In the first part of the workshop, the project is framed to be at the time the project starts and documentation provided includes:

- The original application for funding by the university to the funding agency
- Selected components of the contract for services following approval of the project
- The contract schedule, with deliverables and budget

In the second part of the workshop it is assumed that the research project is now finished. Groups discuss whether, from their perspective, the project has been successfully implemented. Documentation provided to inform this discussion includes:

- An external review of the project application by a third party expert appointed by the funding agency
- Project final report cover letter and financial acquittal from the research organisation
- Funding agency report on project status and intellectual property
- Various correspondence that took place after the project was completed

In the final part of the workshop, based on previous discussions, groups make recommendations for future projects and develop a key message/recommendation for each of the other groups, along with the response they derived from this communication (i.e. the 'hook' that will lead to improvement for future projects).

For all parts of the workshop participants work in one of three groups (the research organisation, the research team or the funding agency) to ensure that multiple perspectives are considered and discussed in the development of a project closeout template, the project review process and the development of recommendations for future projects.

Aims of the workshop

During this workshop participants will further develop the example project closeout template from the module materials, experience an approach for post-project reviews and develop recommendations for different stakeholders.

The specific aims of this workshop are for participants to:

- Develop a draft for a project closeout template that integrates contributions made by all workshop

participants (therefore reflecting the needs of 3 different types of stakeholders) and provided the basis for project closeout templates for use in other research projects

- Summarise the key points of a post-project review and have an approach for post-project reviews that can be used on other research projects in the future
- Develop recommendations for future projects with messages and defined responses targeted at specific stakeholder groups

Workshop participant manual

Please download this file, print it out and bring it to the workshop if used.

[Participant manual](#) (MS Word format)

[Participant manual](#) (same file in rtf format, if you prefer non-proprietary format)

Acknowledgements

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Project management

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Accessing the module material







Now that you have read the module introduction you can access and navigate your way through the module content via the Module 8 Organiser link in the navigation bar at the top left of this page or in the bar below.

If you wish to print this page you can generate a pdf file via this printer icon []. A pdf file for each topic in this module can be generated using the printer icon to the left of each topic title on the Organiser page.

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Organiser

Topic	Sub-topics	Activities	At your university
 1. The importance of closing out For each topic, read the topic material via the link in this column before reading the subtopic material.	1.1 Benefits of effective project closeout 1.2 Implications of ineffective project closeout 1.3 Project closeout and the project capability maturity model 1.4 Project management & project closeout support	Optional Activity: Reviewing Closeout Checklists	
 2. Project closeout compliance requirements	2.1 Implications of not meeting project closeout compliance requirements 2.2 Client/sponsor obligations management 2.3 Reporting obligations 2.4 Acquittal of assets and materials 2.5 Acquittal of confidential material 2.6 Publications 2.7 Higher degree research students 2.8 Indemnity and insurance 2.9 Managing project staff 2.10 Financial data management 2.11 Data management 2.12 Intellectual property management		
 3. Project review and evaluation	3.1 What is a successful project? 3.2 Types and timing of project reviews 3.3 How to do a good post-project review 3.4 The structure of a post-project review report 3.5 Getting students to do a post-project review	Optional activity: Planning a review meeting	
 4. Using project closeout to your advantage	4.1 Following through on your communication plan 4.2 Maintaining publishing impetus 4.3 Celebrating success	Optional activity: Research project websites	
 5. Project closeout at your university			At your university
 Module review and completion	Frequently Asked Questions Checklist Record of completion	Quick quiz	At your university
Module workshop			

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Topic 1: The importance of closing out

It is important to bring research projects to a proper completion. This is important from an institutional perspective, as future funding is often dependent on track record, not only of research success but also of fully meeting contractual obligations. In addition, the lessons that can be learned from an effective closeout provide valuable insights into managing projects better in the future.

This topic explains the importance of closing a project, including who is responsible for doing it, how the information is used, the benefits of doing a proper project closeout and the possible consequences of not meeting requirements.

Learning outcomes

After completing this module you should be able to:

- Describe the benefits of undertaking an effective project closeout process
- List some of the services and support available from your own organisation to assist with project closeout
- Describe some of the consequences of not undertaking an effective closeout process.

Topic content

Read the following notes.

1.1 Benefits of effective project closeout

1.2 Implications of ineffective project closeout

1.3 Project closeout and the Project Capability Maturity Model

1.4 Project management & project closeout support

Pursuing the topic further

Project closeout is a concept developed within the field of project management. If you wish to look further into project closeout in particular, or project management more broadly, you may find the following references useful. Note that these are optional supplementary references, and not a necessary part of your preparation for the workshop.

Hanisch, Bastian & Waid, Andreas (2011) A project management research framework integrating multiple theoretical perspectives and influencing factors. *Project Management Journal*, 42:3 pp4-22.

Meredith, Jack R. & Mantel, Samuel J. (2011) *Project Management: A Managerial Approach*. Hoboken, NJ: John Wiley & Sons.

Payne, Janet M, France, Katherine, Henley, Nadine, D'Antoine, Heather A, Bartu, Anne E, Elliott, Elizabeth E. & Bower, Carol (2011) Researchers' experience with project management in health and medical research: Results from a post-project review. *BMC Public Health*, 11. Available at: <http://www.biomedcentral.com/1471-2458/11/424/>

Pearce, Meryl, Clarke, Beverley & Gannaway, Deanne (2007) Developing informal project management skills in a collaborative learning environment. *Geographical Education*, 20 2007: 48-57.

Project Management Institute (2008) *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) - Fourth Edition*. Available at: <http://www.pmi.org/Resources/Pages/Library-of-PMI-Global-Standards.aspx>

Singer, Susan L. (2010) Project Management in the Research Environment. Available at: http://www.bestthinking.com/articles/science/applied_science/project-management-in-the-research-environment

Wikipedia (2012) Project Management. http://en.wikipedia.org/wiki/Project_management This is a useful short article which gives a brief overview of a range of project management approaches.

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1.1 Benefits of effective project closeout

An effective project closeout offers the following managerial and organizational benefits:

- Insights into methods and approaches that might be useful (or perhaps are to be avoided) in the conduct of other projects;
- Reliable and well-considered data that can be utilized for organisational accountability and performance measures;
- Reliable and well-considered data that meets requirements for external accountability to stakeholders and funders;
- Information to aid in the selection of future research projects for funding;
- Information to assist in the planning and budgeting of future research projects;
- Improved levels of project management capability in the organization.

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1.2 Implications of ineffective project closeout

And what can happen when projects aren't closed out properly? The sorts of things that might go wrong include:

- Having to make up shortfalls in funding from other funding sources (such as income gained from consulting work);
- Having to find additional salary for project staff at the end of contracts because, for example, severance pay based on length of service has not been factored into the original budget or the relevant HR forms are not completed and submitted for processing at the right time;
- Having to return funds because they are spent on different things to those that are specified in the project plan, contract and agreed milestones;
- Having to return money because of failure to deliver against milestones;
- Losing entitlement to the final installment of project funds because the final report milestone is not satisfactory and there is insufficient time or resource available to revise it;
- Reputational damage to the research team and institution, with consequences for future research funding and individual careers.

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1.3 Project closeout and the Project Capability Maturity Model

The Capability Maturity Model was originally developed to assist in the development of software, but has evolved to become a useful tool in describing the overall capability of an organisation in terms of project management systems and processes. Five levels are used:

Level 1 – Initial	ad hoc systems and processes, with success largely dependent on the efforts of capable individuals, but if they leave there is no inbuilt continuity and as a consequence the business could collapse because there is not replication or repeatability of what is done.
Level 2 – Repeatable	Some systems and processes are documented, which enables successful activities to be repeated, as long as they are similar to past activities.
Level 3 – Defined	Standard processes are in place for documenting procedures and management systems with processes widely integrated into the decision-making processes of the organisation.
Level 4 – Managed	Decisions are made using formal management processes. This includes resource and decision planning, context setting, risk identification and management and monitoring of outcomes for feedback.
Level 5 – Optimised	Continuous improvement is possible due to the capture of quantitative information and feedback from decision implementation. New ideas and technologies can be trialed and risk associated with doing new things managed. Review processes provide information that is used to improve current systems and processes.

Using the Capability Maturity Model as the framework, Von Zedwitz (von Zedwitz, 2002) proposed that organisations at different levels of project management maturity also display different levels of maturity in the project closeout process. Von Zedwitz's description of what is in place in organisations at different levels of organisational maturity in terms of project closeout maturity is summarised in the table below.

Table 1.1: Typical support in place for project closeout in organisations at different levels of organisational maturity

Maturity of Post-Project Review Processes (PPRs)	Description of what's in place for organisations at different maturity levels
Level 5 - Optimised	Organisation-wide post-project review Consistent inter-project learning Proactive review of PPR processes
Level 4 - Managed	PPR goals quantified and measurable Corrective action can be taken Quality of transferable knowledge predictable
Level 3 - Defined	PPR processes standardised Establishment of sound and consistent review criteria PPR responsibility assigned to a unit
Level 2 - Repeatable	Establishment of PPR policies Introduction of sound review practices Based on experience with similar reviews
Level 1 - Initial	Ad hoc PPR Reaction-driven reviews Based on capabilities of project individuals

Note that it is estimated that less than 10 per cent of organisations around the world have achieved Level 5 maturity.

1.2.1 The Project Capability Maturity Model and research projects in general

Just like products, organisations and industries, projects go through a similar lifecycle profile: that of definition, planning, execution, delivery and closeout.

Thinking about projects in terms of their lifecycle and understanding the different skills and capabilities that are required at each stage can greatly assist research managers in delivering successful projects at the same time as using available resources to their greatest advantage.

A skilled project manager will understand that the capabilities required to initiate a project are different to those required to manage project implementation, and are often not found in the same person. Equally, giving someone responsibility for detailed quality control checking and the processes required for project closeout when they prefer to initiate and plan is unlikely to excite them. On the other hand, they are likely to be interested in the lessons learned from completed projects and how they can be applied to new projects and the initiation of new projects.

Understanding the work preferences of a research team in the context of the project lifecycle and the different phases of a project therefore provides a powerful combination of information that can be exploited not only for project implementation success, but also to create project teamwork satisfaction.

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1.4 Project management & project closeout support

Universities generally have a range of established offices and personnel to advise and assist researchers with meeting both external and internal project closeout requirements, and they have policies for dealing with staff, IP, research conduct and so on. This advice is typically available from a university's research branch, commercialization unit and/or senior professional staff in the faculties. The guidelines and policies used in this respect vary in detail from university to university, but are based on common principles and practices, deriving from Federal and State legislation or from agreements between governments, granting agencies and research institutions.

Researchers on a leadership career trajectory should proactively seek to familiarise themselves early in their careers with the various rules, policies and resources related to project closeout in particular, and to project management more broadly. Project closeout brings together a range of concepts, skills and particular institutional knowledge, and an effective understanding of it is only acquired over time and with experience of a range of different projects. Researchers are therefore well advised to become practised in this area before taking on leadership positions.

Heads of departments and chief investigators have an important role in the coaching and mentoring of project staff in these matters, as building internal capability benefits everyone. At the same time while universities have a range of personnel to assist with aspects of project closeout, there are not always programs available that bring all the requisite skills and understandings together in one place. Researchers may therefore consider whether it is useful to undertake third-party professional development in project management.

Optional Activity

Reviewing Closeout Checklists

Download the *Project Closeout Checklists* document. This document contains four tables:

- Table 1 - a generic closeout procedural checklist
- Table 2 - a project closeout template
- Table 3 - a financial closeout template
- Table 4 - a blank closeout procedural checklist, which you can fill in to suit the particular needs of your university / faculty / unit.

It will be useful for you to have these tables close at hand as you work through the rest of this module.

Look through Table 1. For each item on the checklist do you know (a) where in your university to locate the relevant policies, procedures, guidelines, proformas etc., and/or (b) what unit/person to contact to seek advice and support re the action you are required to take? Write down your answers in brief note form. Also note those items for which you cannot locate documents or assistance.

Now look through Table 2. One of the main take-home lessons from this module is that successful closeout depends on good forward planning and effective management from the outset, and throughout the life of a project. For each item in this table, then, identify – briefly, with a few succinct dot points - the prior planning / management / reporting activities that would support successful closeout.

You may wish to bring these notes along to the workshop, as they may value add to the discussion.

(Note that on the final subtopic page of each topic, the Next > link in the navigation bar below returns you to the first page for this topic, so you can review the topic as a whole and complete any activities listed there before moving on to the next topic via the Organiser page.)

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Topic 2: Project closeout compliance requirements

Generally project closeout steps are heavily biased towards meeting funding agency requirements. These are usually well described in the Deed of Agreement or Funding Agreement of the granting agencies. However, there are additional requirements that need to be met at closeout that relate to the employment contracts of project staff and these require knowledge of the relevant university policies and employment legislation. In addition, university IP management policies and rules on publishing research results need to be well understood in order to not jeopardise the possibility of future commercialisation of research outcomes.

This topic focuses on the essential compliance items that every research leader needs to address when completing a research project.

Learning outcomes

After completing this module you should be able to:

- Describe the key obligations of a researcher in closing out a project, particularly with regard to finances, assets and people
- Explain the common issues caused by incorrect project budgeting for staff and resources
- Develop a project closeout template that addresses the requirements for records management and access to records for closed projects
- Describe the obligations regarding intellectual property and publication at the end of a project

Topic content

Read the following notes.

- 2.1 Implications of not meeting project closeout compliance requirements
- 2.2 Client/sponsor obligations management
- 2.3 Reporting obligations
- 2.4 Acquittal of assets and materials
- 2.5 Acquittal of confidential information
- 2.6 Publications
- 2.7 Higher degree research students
- 2.8 Indemnity and insurance
- 2.9 Managing project staff
- 2.10 Financial data management
- 2.11 Data management
- 2.12 Intellectual property management

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2.1 Implications of not meeting project closeout compliance requirements

Granting agencies generally have clauses in their funding agreements that specify the implications of not meeting obligations, e.g. the researcher, the department or the whole institution may become ineligible to submit new applications until obligations from completed projects have been met in full.

Another consequence of not meeting project closeout compliance requirements on time and with an appropriate standard of quality are loss of reputation, initially for the researcher but also for the institution, as the funding agency implies that the institution was not able to control or manage the researcher and the project sufficiently.

When the project end date is approaching it is important to assess existing results against the deliverables agreed. If it is clear that the research cannot be completed in the agreed timeframe there are two options available:

- Seek an extension with a carry forward of funds
- Seek additional funds for a follow-on project

Either way, it is necessary to contact the sponsor/client and negotiate the way forward. It is not appropriate to wait to the last minute to submit a request for an extension. If the funding agency has no reason to suspect that the project is doing anything other than going according to original plan, then the chances are budgets will have been closed off and it will just not be possible to provide additional funding for the project, as funding has already been committed to other new and continuing projects.

Some research institutions may have the facility to send out reminders to the chief investigator or the department manager for each approaching milestone. If this facility does not exist, the chief investigator should use electronic calendars and other tools to ensure that milestones and reporting requirements are met on time.

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2.2 Client/sponsor obligations management

The requirements for fulfilling client/sponsor obligations are usually clearly defined in the project funding agreement or deed of agreement between the funding organisation and the research institution. Although the chief investigator is the person responsible for the management of the grant, the funding agreement is not with the chief investigator but with an authorised representative of the university, such as the Deputy Vice Chancellor (Research), who signs the deed of agreement.

However, in reality it is the chief investigator's responsibility to ensure that client/sponsor obligations are met in full throughout the lifetime and at the end of the project. It is advisable that all project staff and not only the chief investigator are fully aware of what these obligations are.

It is also advisable, if the university does not provide a project closeout checklist of things to complete at closeout, that the chief investigator makes such a list to ensure each item is ticked off once completed. Each organisation needs to develop their own project closeout checklist though, based on their own organisation's internal systems and processes.

2.2.1 Project closeout checklist

The following is an example of a project closeout checklist previously used by a research and development organisation.

Table 2.1: Example project closeout checklist from a research and development organisations

Section No. and Title. Content & Reference	
1. Project objectives	Check Project Definition in [research project management system]. Note here that the project objectives are up-to-date
2. Summary of activities completed	Check in Technology Development Strategy in [research project management system]. Note here that the completed activities are up-to-date
3. Project key deliverables/outcomes: Achieved Not achieved	Refer to original milestones in [research project management system] and milestone reports where available. List status of each milestone here.
4. Business Plan and Benefit Cost Analysis (BCA)	<ul style="list-style-type: none"> Confirm Business Plan (if one prepared) is in [research project management system]. Confirm most recent BCA is in [research project management system] and provides Net Present Value (NPV) and BCA calculations and assumptions.
5. Reason for terminating or shelving.	Short explanation <ul style="list-style-type: none"> normal: project ended as planned, premature; project ended early with some parts eliminated perpetual; project extend due to increases in scope failed; project could not be completed changed priority; shifts in organisation priorities due to changes in market or technology
6. Project Team and Steering Team	Refer to Resources in [research project management system]. Note here that project team members list is up-to-date. List Steering Team members and contact details
7. Total project expenditure and effort.	Expenditure (\$), effort (research person years) by financial year. <ul style="list-style-type: none"> Research Organisation/Supplier contribution (\$) [Organisation] contribution (\$) Contributions from other sources (\$) (include cash and in-kind contributions separately).
8. Income received	Any income received from consultancies or other external activities by members of project team during the course of the project.
9. Outstanding payments	Report outstanding payments by third parties to Research Organisation/ [Organisation] and by Research Organisation/Supplier to [Organisation].
10. Commercial	List commercial partners/external contacts who participated in

partners/contacts	the project and briefly the way in which they contributed to the project.
11. Agreements	Brief description of all agreements (e.g. licensing, NDA, etc.) with commercial partners or other external parties. Report any obligations to or expectations of third parties to these agreements.
12. Detailed documentation of technology/know how/findings to end date.	Include descriptions of software, source codes, algorithms, hardware, chemical/mechanical processes, specifications, drawings, designs, prototypes, formulas, etc. Attach copies of all documents to Document Storage in [research project management system] or to the final report if not available in electronic form, and provide a list of these attachments.
13. Intellectual property	<ul style="list-style-type: none"> List all patents/trademarks, their status, countries where applied and costs to maintain. Recommendations for maintaining or abandoning patents/trademarks. Recommendations for dissemination of project outcomes.
14. Publications/Reports	List all publications and Research Organisation/Supplier reports prepared and relevant to the project. Place in Document Storage of [research project management system] or attach to report if not available in electronic form.
15. [Organisation] Funded Assets/Equipment	List assets and major items of [Organisation]-funded equipment purchased from the project budget.
16. What steps/activities and capabilities would be required to re-start the project?	Concise description.
17. Who would be potential partners to take the project further?	Name of key prospective companies and brief description of their business.

(Note that items in parentheses have replaced specific organisation system tools with the generic description of the tool.)

Another example (taken from *Module 1: Research Strategy and Planning*) provides a checklist based on major project management areas.

Table 2.2: Example project closeout checklist based on major project management areas

Knowledge areas	Evaluation/Closeout Phase Checklist
Scope management	<ul style="list-style-type: none"> Evaluate the achievement of the project milestones. What work is still to be completed? Is there an opportunity to further collaborate with your partners?
Time management	<ul style="list-style-type: none"> Review the timeline and plan and ensure all necessary tasks will be completed prior to project closure.
Cost management	<ul style="list-style-type: none"> Update the budget summary. Aim for full expenditure of the grant by the conclusion of the funding period.
Quality management	<ul style="list-style-type: none"> Prepare the final report for the granting body. Submit via your research grants office for closeout of your project. Prepare a final summary of the project, lessons learned, expenditure, time management and other observations to apply to subsequent projects.
Research management	<ul style="list-style-type: none"> Copy all data files to CD and other storage devices. Ensure confidential records are secure. Continue writing publications from the project – keep your stakeholders apprised of these. Monitor project impact over the coming years. Clean up records and prepare an archival file to be stored in the university.
Risk management	<ul style="list-style-type: none"> Summarise lessons learnt from the project. Share with other researchers.
Human resources management	<ul style="list-style-type: none"> Celebrate the project's successes. Review the project and identify learning that has been drawn from the project experience. Ensure staff have expended their leave allocation prior to project closure. Assist team members in planning for transition to new roles. Plan for redeployment or transfer of team members to other projects or roles. Interview project team members on their project experience and suggestions for future projects. Conduct an exit interview for each team member to review their contributions, affirm their achievements and assist in exiting the project.
Stakeholder management	<ul style="list-style-type: none"> Celebrate the project successes. Invite relevant local colleagues and stakeholders. Canvass stakeholder feedback on the benefits of the project and its potential impact.
Communications management	<ul style="list-style-type: none"> Present a seminar on the project outcomes to interested parties and peers.

- Develop a media release on the project and its value.
- Update your website to profile the outcomes.
- Continue to maintain your media archive.
- Communicate the project closure to all stakeholders and provide a forwarding contact address.

Procurement management

- Dispose of equipment and resources.
- Ensure confidential material is not accessible by subsequent users of the equipment.

Integration management

- Ensure the final stages of the project are understood by all team members and assist them in completing their agreed commitments.

The Project Closeout Checklist would normally be aligned to the set up of the organisation's research project management system, and the content of the checklist will be driven to an extent by this. The benefit of a standardised approach becomes apparent when, for example, a search needs to be done on the status of all intellectual property in the research portfolio, or to list all the current commercial partners in the research portfolio. From an organisational point of view knowing all your research partners, their usage level and pattern has been can become an extremely important tool in research strategy development.

Each granting agency, including the universities themselves, has their own specific guidelines for application and acceptance processes, and the deeds of agreement are funding agency specific.

Whilst it is worth investing the time in becoming familiar with the different granting agency agreements each time a grant is applied for, it is critical to be familiar with these documents and requirements once a grant has been awarded.

Granting agencies do change their agreement templates on a frequent basis and having had an agreement with a specific agency before does not mean that the contract will still be the same as last time. The rules may have changed and there may be new obligations that need to be met at project closeout.

It is easy to meet client/sponsor obligations at the time of project closeout if the project has been planned and managed well throughout the project and client/sponsor obligations have not already become an issue. The major focus of the closeout process in this context is on meeting all financial obligations and it ensures that an audit trail exists that may be followed up in the future. Key compliance obligations of project closeout are discussed in more detail in the following sections. You may also wish to refer to [Module 3, Grant and Contract Administration](#), for further information.

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2.3 Reporting obligations

Reporting obligations must be met in full for both the financial and the research aspects of the project. Some clients/sponsors require separate financial and technical final reports.

It is extremely important that all reporting is done on time, both throughout the project and at the end of the project. Sometimes unforeseen circumstances may lead to a deadline not being met. However, it is vital that the client/sponsor/granting agency is notified and a request for a later submission of the final report be made **well before** the deadline is due. As a guide, if an extension of the final report deadline is sought two days prior to the deadline, the extension requested should not be for more than two days. It is not reasonable to ask for a two months extension two days before the deadline. It should have been obvious to the chief investigator several weeks before the deadline that two months more time were needed. If this happens it is a sign of poor research management.

2.3.1 The final report

Generally, the deadline for submission of the final report is set in the funding agreement, but is usually not earlier than six months after the end of the project. Chief investigators must plan sufficient time for the analysis of data and evaluation of the project information. This time should be built into the project plan, even though there might not be a high cost attached to this part of the project. It is not appropriate to hand in a final report where most of the data evaluation is incomplete or missing. The funding agency or the client/sponsor may interpret this as an important obligation that has not been met and, on this basis, can request return of funds due to lack of progress. Alternatively, a final instalment of funds may be withheld.

The final report that deals with the technical achievements of the project needs to be of a high standard and comply with the client/sponsor's formatting requirements. It should not be overly wordy and should use language that allows a non-expert, as well as an expert in the field, to understand the results. It is dangerous to assume that the report reader will know anything about the project, and in fact, it should be assumed that the report will be read by someone with no knowledge of the project.

The sponsor is usually not concerned if the results of the research project are negative or positive in themselves. Both are equally valuable, and if the research disproved or proved a hypothesis, this should be reported in a factual and objective style. The important thing is that the report reflects that the research was conducted in a thorough and reproducible way according to the aims, objectives and methods outlined in the funding application and the funding agreement.

If, however, the project has made less than desirable progress and the aims have not been achieved due to poor project management (such as delays in starting the research or not meeting milestones as promised), excuses for the chief investigator's lack of control over the project should not be made in the final report. It is especially important not to assign blame for lack of achievement of results to the sponsor/client and in doing so give the impression that the lack of achievement was a result of the funding agency not providing, for example, sufficient funding. Everything required to do the project, including finances, should have been negotiated prior to the start of the project and a reduced project scope accepted (or rejected) with the funding agency if the chief investigator felt there were insufficient resources to carry out the project. Similarly, other investigators in collaborative organisations should not be blamed or slandered in the final report.

The chief investigator also has to be aware that some funding agencies have clauses in their funding agreements that entitle them to publish the final report, or publish components of the final report. It is advisable to liaise with the specific university department responsible for IP issues regarding what the implications might for the ability to commercialise the project IP prior to the final report being submitted so this can be managed sensitively.

There are differences in the approach of agencies concerned with fundamental research such as the ARC to those with a more commercial focus, such as Rural Industry Research Corporations. Each funding organisation will have a different strategic focus and therefore the tone and focus of the final report needs to reflect the need of the stakeholder to extract value from the final report. It is advisable for the chief investigator to become familiar with the strategic outlook of the funding agency or client that funds the research. An industry funding agency will look for high quality research, but they will additionally focus on the potential impact of the research and how the results might be implemented in reality. These differences in strategic direction should be kept in mind when writing the final report.

Module 8: Project Closeout

2.4 Acquittal of assets and materials

When closing a project, equipment and research material must be acquitted appropriately. Therefore there must be a closure of assets, i.e. equipment that has been purchased by the client/sponsor should be either handed back to the client or handed over to a project they specify. The asset needs to be handed over in a functional state that is similar to when the asset was taken over, taking into account normal wear and tear. If the equipment is not functional or broken it needs to be repaired to return it to a functional state. If the granting agency does not want the physical asset returned it may need to be sold and the proceeds from the sale returned to the agency, if that is what was specified in the agreement.

Generally granting agencies, sponsors and industry clients have policies about the disposal or return of project materials to their rightful owners. These rules must be complied with. They are usually listed as annexes to the funding agreement. If there is no mention about how to dispose of materials, the relevant intra-university policies apply and must be adhered to. It is important that a record is kept about:

- Who authorised disposal of materials on a project
- The method of disposal
- Any other information about the disposal of assets and materials

Module 8: Project Closeout

2.5 Acquittal of confidential information

Confidentiality is an important consideration in many research projects. Some confidentiality requirements may be specified in the agreement with the granting body; others may derive from institutional or departmental policies. Good research project management involves creating awareness of, discussing, as necessary enforcing, and finding suitable strategies for implementing, confidentiality requirements throughout the life of a project. Then at the end of the project it is important that each project staff member is made aware of which components of project information are subject to ongoing confidentiality provisions. There should be policies in each department that outline these procedures and they must be strictly applied.

The non-disclosure provisions of research project contracts and agreements may have lengthy expiry timeframes, and may bind researchers to confidentiality for a lengthy time, often extending well beyond the official end date of the project.

The chief investigator has to ensure that all confidential information received by or created through the project is handled in an appropriate manner in accordance with the deed of agreement, the requirements of the university and the law. Information includes paper copies of documents, videos, images, sound files and any electronic files and any copies thereof. Note that all types of information are typically covered by confidentiality agreements, not just formal or official records; personal emails, meeting calendars, notes of phone calls etc. are also included.

Module 8: Project Closeout

2.6 Publications

Publication of project results may be subject to the agreement with the granting body, and may be constrained by commercial, IP, confidentiality and other considerations. On the other hand, some agreements may require the research project team to publish and promote their work in particular ways, perhaps in consultation with the granting body.

Effective project management involves an awareness from the outset of end-of-project publication limitations/requirements, and steers the project so as to achieve those required outcomes. A good manager also remains alert to commercialization possibilities that may arise in the course of the project, consulting on this at an early stage with the university's commercialization unit, and discussing with team members the potential impact on planned publications.

Leading and managing the publications regime of a research project can present many challenges. Researchers may be keen to push the boundaries on confidentiality and commercialization restrictions, in order to maintain their publication record and research profile. And much of the key publication work may take place after the formal completion of the project, as the initial research results become subjected to further analysis. It is therefore important that these issues are discussed openly and regularly, and that a team consensus and ethos develops around them.

Publication may also be an issue for PhD or Masters by research students employed through research projects – see the following section.

Module 8: Project Closeout

2.7 Higher degree research students

In principle we would wish to avoid having higher degree candidates pursue their chosen topics in commercial or other IP-sensitive areas, as this may have undesirable consequences for an emerging researcher: restrictions on ability to present at conferences and to publish; embargoing of the thesis; constraints on continuity into subsequent projects. In practice, however, many key research areas have commercial ramifications, and a significant amount of external funding of higher degree projects relates to commercialisable outcomes.

Most universities now have procedures in place to identify, as early as possible, those higher degree projects that may be subject to confidentiality constraints, and to advise higher degree candidates and their supervisors as to what is required of them.

Chief investigators, project managers and research staff generally have strong ethical and professional obligations towards higher degree candidates engaged in their projects, recognizing that they have a collegial responsibility to support the student's timely and successful degree completion while at the same time seeking the best outcomes for their research project. The two aims – supporting the student's research degree progress, and advancing the team's overall research goals – may not always appear to align nicely, and some accommodations may need to be made. In particular, if project closeout does not coincide with completion of the research degree, ongoing provision for mentoring and supervision may need to be made.

Module 8: Project Closeout

2.8 Indemnity and insurance

In the context of a research contract it is usual for certain provisions of an agreement to survive termination of the agreement. Typically these might include confidentiality, indemnities, publication, and even obligations to pay ongoing patent management fees. Such on-going obligations are clearly specified in the agreement.

Insurance and indemnity are linked because, if you indemnify an organisation against some action or event that might, for example, cause them economic disadvantage, then you will need to have the insurance cover to pay any damages. This is why agreements tend to specify the minimum level of professional indemnity insurance that should be in place. Such a requirement is a typical feature of Government contracts.

For contract research this is a particularly important consideration. The entity that is entering into the contract needs to consider not only the level of professional indemnity insurance that is required when the work is being done, but how far into the future such insurance is required. This is a point that is often not well understood or appreciated as one of the significant benefits of undertaking research through a major institution.

Other ongoing obligations relate to financial acquittals and the need for externally audited accounts. Subject to the terms of an agreement, it may be a requirement to have financial acquittals signed-off by an auditor. This can be time-consuming and costly. Funding agencies tend to make this a requirement so that the financial accounting is undertaken independently of the department where the research has taken place. In a university context this degree of independence would normally be achieved through the university's finance area.

Module 8: Project Closeout

2.9 Managing project staff

It is not uncommon for project staff to be employed on a contract basis. An individual staff member who had a succession of employment contracts would accumulate sabbatical leave entitlements for each year of employment and superannuation and severance pay entitlements would increase for each year of service. It is critical that the project budget takes into account the accumulated liabilities of each individual who is employed on the project, or there may be insufficient funding at the end of the project to meet financial obligations to project staff.

Wherever possible, staff get rolled over into a new project or into a new position when a project finishes. If there is a gap in funding until a new project starts, they may get funded using 'soft money' such as income derived from consulting services by the research team.

Highly competent research and technical staff usually find a new position on a new project and in this way an individual can easily accumulate 15 years of consecutive contracts. Some departments have almost all of their research staff, and up to a third of the academic staff, on short contracts. Accumulated liabilities are important to understand and quantify.

If it is known that there will not be a further position for a staff member on a new project, the staff member must be notified at least two months prior to the end of the project that employment will end. Staff are usually aware that a project is about to end, but they may still hope that there will be a roll-over opportunity. The chief investigator needs to take an active role in managing people at this stage of the project and should encourage staff to update their resumes and seek other available support to maximise the opportunity of continued employment. Most universities have on-line job alert newsletters where the staff member can register as available for new projects.

Managing staff is a major aspect of project management and the chief investigator should undertake professional development in this areas to develop skills and expertise in communication and dealing with people, beyond the technical competencies in their chosen scientific fields. The Chief Investigator must be comfortable managing other people so that they provide feedback effectively and fairly to all staff members regularly during the project and don't avoid letting them know that their contract is about to end. If the management of the project relating to the end of specific staff contracts is delayed to the point that the minimum time that notice has to be given is not complied with, then there will be financial consequences for the project.

2.9.1 Common people management issues

Generally there are three major categories of problems that occur when dealing with staff who leave before the end of a project, or whose contracts are due to finish at the end of the project:

- Severance pay has not been budgeted correctly into the project. Severance pay is part of the salary cost of the project and it has to be paid out of the grant and therefore should be budgeted correctly. If the chief investigator wants to employ a person on a short-term contract and the person has already worked at the university for 15 years, the severance pay has to be calculated on the basis of a 15-year employment history rather than a short-term employment history.
- Chief investigators forget to tell project staff about whether the grant will be renewed (or not). This has two possible implications.
 - Should the grant be renewed, but project staff have assumed it will not, staff may have secured employment elsewhere. This means replacement staff must be found to complete the project.
 - Alternatively the grant ends and the staff member has not been alerted to this information in time, having made the assumption that the chief investigator would provide this advice in a timely fashion. This leaves a staff member in the position of having to find new employment in a hurry. It is hard to know how often this actually occurs as staff do not generally complain openly about it, because they need references from their supervisors. In the long run however, chief investigators with poor staff management habits and poor departmental processes are likely to lose good staff to other departments with better people management practices.
- The chief investigator does not return the appropriate paperwork to the HR department. This is likely to leave staff in a financially vulnerable position.

Another key issue regarding staff leaving a project (either at the end or prior to the end of a project) is intellectual property. All staff who have signed confidentiality agreements need to be reminded in an exit interview of the time sensitive nature of confidentiality agreements. This is dealt with in more detail in [Subtopic 2.5 Acquittal of confidential information](#)

2.9.2 Early termination of staff

The early termination of staff is a rare event. Reasons for early termination may include:

- Death of the grant holder
- Running out of money due to poor budgeting or planning
- Loss of project assets (such as equipment, field sites or laboratories), for example, destroyed by bushfires

All of these examples may lead to being unable to undertake the project as contracted and so the project and staff need to be terminated.

In addition, there are numerous forms of misconduct that could lead to termination of staff, including serious misconduct, such as falsification of data or IP theft and inappropriate use of funds, for example double-claiming of travel expenses or lodging of false invoices for purchases that were not made. This list is not exhaustive and in addition, each institution will have terms and conditions of employment that are reflected in staff contracts.

The Project Funding Agreements of most funding agencies include clauses that deal with misconduct and they generally stipulate that if a person is accused of or investigated for misconduct their eligibility for applying for a new grant ceases. At the end of a project, project information and data needs to be stored securely so that any query about potential misconduct can be investigated and dismissed on examination of recorded data. If data has gone 'missing' due to poor procedures this then makes it extremely difficult for a staff member accused of misconduct to clear their name.

2.9.3 Conducting exit interviews

Conducting exit interviews is an important part of managing staff who leave or who are terminated early. Whilst these interviews are sometimes difficult to undertake, because of the circumstances surrounding exit, they are a significant opportunity to provide closure for the staff member and the organisation. This can potentially diffuse any bad feelings as well as be seen by existing employees as a sign of a positive culture that is open to feedback.

Effective exit interviews will draw out relevant and useful information that can be integrated into planning processes, for example to improve recruitment and retention practices, as well as extract useful knowledge, contacts and other information from an employee that may be required by their successor.

Exit interviews may also provide the opportunity to retain a valuable employee, if the reasons for their leaving can be sensibly addressed. Good people can often leave because they can't see opportunities to grow and advance. Organisations need to know about why people leave to be able to respond appropriately.

Exit interviews can be done face to face as well as by survey. In the context of a research project, a face-to-face process would be preferred, but that does not preclude capturing some information through a survey as well.

An approach may include:

- Introducing the purpose of the meeting and the person/people conducting it and their roles/positions
- Questions about the organisational environment and how it is perceived (such as, why did you come here to work and how has that changed or is different to what you expected? Would you recommend others to come and work here?)
- Questions about the job role and its strengths, weaknesses, opportunities for development (i.e. what is most/least satisfying about your job, what would change/keep? Did you get enough feedback on your performance?)
- Any specific barriers of sensitive workplace issues, such as discrimination
- Questions about reasons for leaving (what triggered you to leave?)
- Requests for feedback to improve the research team environment (if you could change one thing, what would it be?)
- Requests for feedback to improve the department/institution environment (if you could change one thing, what would it be?)

The exit interview is not a grilling for the person who is leaving, rather it is an opportunity for the organisation to improve and professionally manage the people who have worked for them. Once you are clear about your specific objectives for conducting exit interviews and the information you need, there are many questions that can be asked. To maximise the chance of getting this information in a meaningful format:

- Keep a consistent and structured approach from interview to interview so any trends and commonalities can be picked up easily and noted for action
- Organise a neutral and comfortable venue where they can relax and where you won't get interrupted, especially by other employees they know
- Get someone else to attend with you, preferably an objective third party
- Don't debate or be defensive about what is said. Their perception and opinion is their reality. Clarification should be sought only for the purposes of understanding what is said
- Keep a written record but guarantee confidentiality

2.9.4 Finishing positively

The project closeout period is the time to ensure that your team can move on to their next opportunity. It is important you provide them with appropriate references to enable them to do so. You may also offer support in reviewing their CVs and in connecting them with other potential employers. It is very important to take time to meet with each individual to affirm their contribution to the project team and to ensure they are able to look forward to the future.

Module 8: Project Closeout

2.10 Financial data management

Project closeout focuses heavily on the financial compliance obligations of the project. It is absolutely essential to complete all items on the financial checklist prior to the end date of the project. Once the end date is reached no further expenditure can be made against the project.

Table 2.3: Example of financial closeout checklist

Question	What needs to be done
Are there any discrepancies between revenue and expenditure?	If revenue and expenditure do not match up, or if there is a variance compared to the project agreement or if the project is financially over- or under-committed, you should seek advice from your research office or financial officer.
Are there any outstanding purchase orders.	Outstanding purchase orders need to be costed to another project or finalised prior to the funding end date.
Are there any outstanding accounts payable invoices (invoices on hold and invoices requiring approval)?	Invoices on hold need to be released prior to the funding end date.
Are there any outstanding internal transactions?	Outstanding internal transactions need to be costed to another project or finalised prior to the funding end date.
Are there any outstanding accounts receivable invoices?	If there are any outstanding invoices for which the payment has not been received these invoices need to be followed up immediately. If these invoices are not paid in time before the project ends they maybe regarded as "bad debts" and be charged to the department's operating account.
Are there any outstanding staff commitments?	Any outstanding staff commitments need to be paid and need to be either transferred to another project or finalised before the funding end date. Any staff commitments extending past the funding end date are going to be transferred to the departments operating account.
Are there any outstanding stipend commitments?	If there are currently any scholarships paid by the project they either need to be transferred to another project or finalised before the project end date. Any commitments past the funding end dates are going to be charged to the Department's operating account. If the scholarship stipend needs to be changed the appropriate office in the university needs to be engaged to help with that.
Are there any outstanding fixed assets?	It is advisable to discuss with the university finance office the rules pertaining to fixed capitalised assets. It is important to be able to account for assets and identify their location at any given time.
Are there any outstanding deliverables?	If there are any outstanding deliverables against milestones the possibility exists that funds will need to be returned.

Some funding agencies and sponsors require audited financial reports and therefore the time to do an external review has to be factored into the closeout process. Generally the finance or research office of the university is able to advise chief investigators about the necessary steps at project closeout if an audited financial report is required.

Financial issues arise if the chief investigator had not asked for permission to carry over funds when there has been a late start to the project. If permission has not been asked to alter the end date and carry over funds, the project will be treated according to its original funding agreement with the end result that deliverables are not met at the time the project and the funding ends.

It is vital that all requests to the funding agencies for changes to the schedule, scope or budget be made in writing and not only over the phone. Even if the initial conversation and a verbal agreement were by phone this has to be followed up with a written statement by email or in hard copy so that a variance to the agreement can be made. Requests for variances to the project agreement should not be made for trivial reasons.

You may wish to consult *Module 5: Financial, Resource and Risk Management* for more information.

Module 8: Project Closeout

2.11 Data management

The *Australian Code for the Responsible Conduct of Research*

(http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/r39.pdf) sets out the broad requirements for data management, retention, storage, and confidentiality (see Part A, Section 2 of the Code), with clear implications for long-term retrievability. All Australian universities are bound by the Code, and it has ushered in a change of culture in respect of data management in research projects, with the imperative now on rigorous and systematic capture of data throughout a project, and high levels of accountability at all levels for the ongoing maintenance and accessibility of that data, typically extending well beyond the life of the project itself. This has implications for research project management and leadership, right from the early planning phases, with particular obligations applying at the project closeout stage. The implementation of these obligations will vary from university to university.

Supplementary to your university's general requirements may be specific undertakings in respect of data management as set out in the agreement with the granting body. In addition, commitments to data storage, confidentiality and/or disposal arising, for example, from ethics approvals, as well as data management requirements in respect of research undertaken for a higher degree thesis, will have to be taken into account.

Module 8: Project Closeout

2.12 Intellectual property management

Accurate capture of intellectual property (IP) at the conclusion of a project is important for a number of reasons:

- It can be a requirement of the project that all IP generated is captured and reported
- If there is to be any commercialisation of IP it will be important to be able to verify in future what IP was generated during this particular project, and what stage of development it was at when the project ended
- If there is to be a follow-on project in a similar area, or involving similar personnel, it is extremely useful to have a record of the status of any IP at the conclusion of the prior project

Module 7 goes into more detail on the principles of good IP management. With regard to project closeout, the specific actions which should be taken regarding intellectual property include:

- Ensure all project documentation is well-secured and in good order (see previous section for details). As part of this, it is particularly important that documentation relating to any registered IP (e.g. patents) is easily accessible – an index or lookup guide can be helpful for this purpose
- Ensure that a complete and up to date record exists of all registered rights (e.g. patents, trademarks, etc.), including the countries in which they have been applied for and their current status. You should also note which agents (e.g. patent attorneys) have been involved with the applications
- Ensure that a process is in place for managing any of the registered rights identified above, including who will meet any costs, how decisions on maintaining or abandoning registration will be made, and how any proceeds from commercialisation outcomes will be distributed. It is important to be mindful of any upcoming deadlines imposed by registering bodies (e.g. patent offices) and ensure that sufficient time is made available to reach any required decisions
- Ensure that a list of all other forms of intellectual property (e.g. publications, conference presentations, etc.) is compiled to enable efficient reporting of activities and dissemination of the project outcomes

The process of commercialisation of intellectual property can (and usually does) take a long time and involve a number of different players, including non-research personnel. The guiding principle for project closeout should therefore be to picture someone you have never met trying to determine several years in the future what IP was generated during the project and by whom. If you are diligent in the way you handle IP at project closeout, you will significantly increase the probability that any IP generated in the project will eventually be successfully commercialised.

Module 8: Project Closeout

Topic 3: Project review and evaluation

It is important to review all projects (to varying degrees, depending on size, value, strategic importance and other considerations as appropriate), including those that have been successful as well as those that are perceived as not:

- Successful projects provide the information to inform what needs to be done again (or done more often)
- Unsuccessful projects provide the information to inform what should not be done again (or done less often)

However, reviewing successful and unsuccessful projects only has value as long as the systems and processes exist whereby the information captured from the review is integrated into operating procedures. A review does not create value unless the recommendations it contains can be actioned and used by others.

This topic is focused on improving understanding of the need for and importance of review and evaluation. In particular it addresses concepts such as project success and criteria for acceptance from different stakeholder and organisation perspectives. It provides some tools and templates for approaches to undertaking a project review as well as ranking recommendations and structuring a post-project review report.

Learning outcomes

After completing this module you should be able to:

- Describe the process for undertaking a post-project review, including who should be involved and what preparation is required
- Be able to describe the difference between different types of review and recognise points in a project when additional reviews may be required
- Be able to integrate recommendations into a structured post-project review report

Topic content

Read the following notes.

- 3.1 What is a successful project?
- 3.2 Types and timing of project reviews
- 3.3 How to do a good post-project review
- 3.4 The structure of a post-project review report
- 3.5 Getting students to do a post-project review

Optional activity

Planning a review meeting

Conducting post-project reviews can be something of a balancing act. You want to generate informed, complex understandings of the ways in which, and the reasons for which, a project did or did not succeed. But at the same time you need ideally to distil these understandings into relatively simple, succinct summaries that have as much buy in from the project team as possible, and you need to formulate an optimal set of practical, implementable and – perhaps – politically palatable recommendations.

Download the *Post-project Review proforma*. This is similar in form to many such proformas that you will find on the web and in the project management literature; you might compare its content, for example, to the 'typical post-project review questions' set out in Table 3.2 (Topic 3.3). This particular proforma is in fact a public domain document published on the website of an Australian university, at: <http://www.projects.uts.edu.au/resources/templates/PostProjectReview.doc>

Look over this proforma. Imagine that, as an emerging research leader, you have been called in to facilitate a four hour (9am – 1pm) post-project review meeting in a discipline similar to yours. The project is an industry funded one that had an eighteen-month life span, employed 10 people (half academic, half technical and professional) and utilised a range of specialist computing equipment. The project appears to have been generally successful, but you understand that there were some personal rifts in the project team. Your task, then, is to set up a plan for how you would facilitate the project meeting. How would you structure the morning? What activities would you have the participants undertake? What time will you allocate to each activity? What output will each activity have? What preparation would you ask participants to undertake? What materials do you need to have available at the meeting? How will you

ensure that all the required areas have been covered by the end of the session? What steps will you take to address the potential tensions/conflict that might arise?

Prepare a set of notes, dot points etc, in a format and medium that you would be able to refer to in the process of facilitation. You may wish to bring these notes along to the workshop, as they may value add to the discussion.

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Module 8: Project Closeout

3.1 What is a successful project?

Project success is defined by the project's various stakeholders. Different stakeholders, including the project team, will have different views on what represents success for them. Their various requirements (critical success factors) should have been documented and built into the overall project plan from the outset. If they were, it will be possible to objectively evaluate whether the project has met all the critical success factors for each of the stakeholders specified. If they weren't, assessing success will be much more problematic and generally more subjective in nature.

The difficulties involved in assessing project success from several points of view have traditionally led to a focus on success being measured in terms of budget and schedule. These are more easily quantifiable and tangible measures than, say, measures of awareness, and are important internal measures of efficiency. However, they do not reflect the activities of the whole project and, assessed in isolation, can be misleading because:

- A project can be run efficiently but not meet customer or organisational expectations

Conversely:

- A project can deliver the specified technical outcomes but can run over time and over budget.

Therefore, a project closeout needs to include an evaluation of several criteria that contribute to the success of a project, not just measures of efficiency and equally, not just measures of technical success.

3.1.1 Success criteria measures

Criteria for assessing the success or otherwise of a project must be measurable and must have the same meanings for both granting agency and the members of the research project team. Criteria for success should ideally be agreed at the project definition phase. A common approach for developing such criteria is to use the so-called *SMART* method, where SMART is an acronym standing for:

- Specific
- Measurable
- Achievable/Attainable
- Realistic
- Time-bound

The SMART method is widely used in checking and evaluating goals and objectives, but can be usefully applied to developing success criteria. Criteria such as "high quality" should not be used, as quality is subjective. Criteria such as target dates, performance levels, accuracy and functionality can all be quantified and are therefore preferred for inclusion in success criteria and to enable the project funder to accept that the project requirements have been met and that the project can be considered to be finalized.

The table below gives examples of measurable criteria, in a business / service delivery context.

Table 3.1: Examples of measurable criteria

Benefit	Quantified Metrics
To comply with legislation	Sign off by compliance authority Avoided fines
Provide a more efficient and effective operation	Number of patients seen per day Staff cost per patient
Provide better service to the public	Response time for enquiries Time required to obtain information
Avoid or reduce future costs	Estimates of capital cost Estimates of running cost
Modernise the working environment and conditions for staff	Benchmark against standards and guidelines for relevant work environment
Improve communication within and beyond the organisation	Speed and cost of communication Number of communication channels and communications Awareness of key communication messages Number or % of people who can access services remotely
Reduce the effort required to follow up mistakes and complaints	Cost of servicing complaints Number of people and time assigned to managing complaints/mistakes
Improve the quality of information and	Speed of access to information

decision-making	Completeness and timeliness Accuracy/precision
Take advantage of new technology	Operational gains and cost savings for each specific business division
Increase the motivation of staff	Staff turnover measures Number of errors Recruitment costs Sick leave

Source: Department for Business Enterprise and Regulatory Reform, UK, Guidelines for Managing Projects, August 2007 <http://www.berr.gov.uk/files/file40647.pdf>

3.1.2 Achieving all the target outcomes from research projects

Research projects do not usually lead to immediately realisable products and services. There are usually other steps necessary to realise such outcomes. The impact of timing therefore on project success is much more difficult to assess for research projects. Nonetheless, for the organisation doing the research the possible benefits can also be split into two components.

- The immediate [and possibly commercial] outputs of the project,
- The potential outcomes created by the project in the future.

Whilst the immediate success of achieving specified project outputs is obvious, the potential outcomes of a research project are often a long way in the future and assessing their impact is challenging. Some organisations have policies in place for dealing with research projects where it is not expected that the desired outcomes would be achieved in less than 5 years from project closeout. Clearly they do not expect the project team to still be in place after this period of time, so strategies have been developed to ensure that the benefits are assessed. This can include scheduled reviews undertaken over a period of time.

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Module 8: Project Closeout

3.2 Types and timing of project reviews

The project closeout review is part of the project closeout process. It is much easier to conduct a good project closeout review (post mortem) when the whole project has been planned and executed well from start to end, with regular progress reviews having taken place, with recorded actions and responsibilities for actions assigned, throughout the project. The frequency of progress reviews should, as a guide, be for:

- A 6-month project – weekly
- A 12-month project - fortnightly
- A 2-year project – monthly.

Each meeting should have an agenda, purpose and recorded actions with assigned responsibility.

- A weekly meeting might only require 30 minutes most of the time, with longer meetings scheduled at specific decision-making points in the project
- A monthly meeting on a 2-year project might be a couple of hours, again with longer meetings scheduled at more critical decision-making points of the project

The duration and timing of meetings needs to be agreed in the planning phase stage of project development.

In terms of content, given the post-project review requirements, it is important that:

- Evidence as to project effectiveness in delivering the technical outcomes required is collected throughout the course of the project so that corrective action can be taken
- Individual and team performance is monitored and managed throughout the course of the project. The post-project performance review is not the time or place for a team member to find out that their performance was considered unsatisfactory

3.3.1 Additional project reviews

Additional project effectiveness reviews and evaluation can take place at a number of trigger points in the lifecycle of the project including:

1. **Incident reviews:** Triggered by something not going according to plan, this is a short review (usually less than 2 hours) and covers:
 - What was supposed to happen?
 - What actually happened?
 - Why were there differences?
 - What can you or others learn from this experience?
 - How does the plan need to change to reflect the incident and what other impacts will there be?
2. **Significant milestone review:** Often triggered by a funding requirement which is either time or deliverable based, this review (usually less than 4 hours) covers:
 - What went well or not?
 - Why did it succeed or not?
 - If you were to start again, what would you do differently?
 - What did you learn that is specific to this project?
 - What could others learn from your experience?
 - What needs to happen next, particularly if the decision is to stop the project?
3. **Post-project review:** Triggered by the end of the project and is usually done as a team review (usually less than 8 hours) that covers:
 - What were the key objectives of the project and how well were these achieved?
 - How will the project results be utilised?
 - What lessons were learned during the course of the project?
 - What lessons are the most important?
 - How should future efforts be modified based on lessons learned?

The post-project review takes place when the project is finished and should integrate the information from any incident or significant milestone reviews that have taken place during the project. There should be no surprises.

Module 8: Project Closeout

3.3 How to do a good post-project review

Having a defined structure that is available to all project team members (and even stakeholders) during the project is important in demonstrating that the review is clear, transparent and objective.

Typical questions that should be worked through during the project closeout meeting are detailed in the following table.

Table 3.2: Typical questions to ask in a post-project review

How well has the project been planned?	<ul style="list-style-type: none"> • Were scope, time, cost and technical goals clear at the beginning and have they all been listed in the project plan? • Were the goals discussed with the project sponsor/funder? • How realistic was the project plan when the work started? • Did each group in a collaborative project have involvement in the project's planning and did they know what was expected of them? • Were cross-functional/cross-group activities clearly defined from the start?
For applied projects: How well have the intended users/customers been consulted?	<ul style="list-style-type: none"> • Have the needs of the user/customers been considered at the project planning stage? • How well has the project met the expectations of the users/customers? • Was the project process in line with the specific requirements of a sponsor?
Has the project delivered satisfactory results?	<ul style="list-style-type: none"> • Has the project delivered results that can stand up to scientific scrutiny? • Have the methods that have been used been verified? • In collaborative projects – did each group understand what was expected and was it delivered to expectation? • What are the variances between the planned outcomes and the achieved outcomes and what caused these differences? • What was done to control these variances during the project lifetime? • Were the corrections timely and effective?
Was the project scheduled and budgeted satisfactorily?	<ul style="list-style-type: none"> • Was the project budget realistic in the project plan? • Were the resources sufficient? • Was the project timeline realistic? • Were the milestones realistic and meaningful? • Did the milestones help with tracking and controlling the project? • Was there a significant variance between the planned and the realised project timeline and budget?
Was there a risk management plan?	<ul style="list-style-type: none"> • Were any risks to the project identified and were the assumptions about the risks realistic? • Were the management options and contingency plans appropriate and were they implemented? • How effective was the risk management plan?
Was the project team appropriate for the project?	<ul style="list-style-type: none"> • Did the members of the project team have the right skill levels to carry out the project? • Did the team work well together? • Did the team members know their roles and perform appropriately?

How effective was the communication during the project?	<ul style="list-style-type: none"> • Was there a clear process for communicating with stakeholders? • Was there a clear process for communicating with team members? • How effective was the process?
Did the project management processes help or hinder the project?	<ul style="list-style-type: none"> • How effective was the process of progress reviews? • Were the reviews timely and were their recommendations implemented in a timely manner? • How did the organisational IT and other processes and resources perform to help run the project efficiently and effectively? What can be improved for the next project? • What are the recommendations for the organisation?
What needs to be done with the results of the project?	<ul style="list-style-type: none"> • Publication – who needs to authorise publication (i.e. is sponsor permission necessary?) • Is IP protection required? • Commercialisation – who will lead this? • Is a media plan needed? • Final report writing for granting agency and sponsor – who is responsible?

It is important to remember that whilst some of the information will be used in the final report to the funding agency, the real value in completing this process is to be able to run a research project better next time.

3.4.1 Suggested rules for conducting post-project reviews

The way in which a post-project review is conducted plays a part in getting constructive, useful and objective feedback. The following table provides some useful guidelines that will facilitate getting feedback from all project team members.

1. Use a facilitator – someone impartial who did not have anything to do with the project but is knowledgeable about the review process. The facilitator is more likely to give everyone an equal time to contribute.
2. Hold the review in a large enough room so people do not feel crowded.
3. Use a recorder to record the recommendations, issues and important points made during the discussion and read back what is being recorded at appropriate points. An electronic whiteboard helps.
4. Invite key participants and stakeholders of the project, both from the successful and the unsuccessful areas. The views of both are important to work out how to improve the next project.
5. Prepare for the workshop and explicitly state the purpose and outcomes required – write an agenda and stick to the agenda.
6. Ensure that everyone knows, well before the review, what is expected in terms of data and fact gathering so that statements and discussion are based on facts, not opinions.
7. Do not finger-point and blame people for things that went wrong. The post-project review is not an occasion to publicly embarrass or blame colleagues. Be professional.
8. Concentrate on facts and issues that can be supported by metrics. Sentences starting with "You always" or "You never" or "We never" are not allowed.
9. Discuss the bad and the good points – what went well and what did not?
10. Discuss whether there were any early warnings for things going wrong and whether they could be obvious predictors identified for future projects.
11. Talk about what made things go well.
12. Identify and agree practices that should be employed as standard in future research projects.
13. Agree what should be done differently next time.
14. Make a list of recommendations relating to good practices and processes and another list of recommendations relating poor practices and processes.
15. Review and rank issues.
16. Write a short post-project review report (one page for most projects is sufficient) with issues and recommendations that are actionable in dot points.

All of these reviews require a review document as an output, or it is unlikely that the knowledge gained from the review process will be used. The review document needs to be succinct and accessible to team members and others, and the actions that will be implemented from the review distributed and communicated widely. Failing to update standard operating procedures through this knowledge and experience is probably the single biggest reason why project management practices and capabilities do not improve faster than they do. Learning from mistakes is a useful life experience, but repeating the same mistakes over and over again is not only tedious, it is poor management.

Module 8: Project Closeout

3.4 The structure of a post-project review report

A post-project review report typically contains five sections:

- **The classification section** – would typically include information on project type, size, number of staff, technology level, and whether the project is strategic or support?
- **The analysis section** – includes succinct, factual project review statements of the project such as, project mission and objectives, procedures and systems used, and organisational resources used
- **The lessons learned section** – serves as a reminder of mistakes easily avoided and actions easily taken to ensure success for future projects
- **The recommendation section** – documents major corrective actions that should take place as well as positive successes that should be continued
- **Appendices** – supporting information to the previous sections

Recommendations should be formulated carefully, and with an eye to their capacity to be taken up and implemented. Recommendations need to be precise, succinct and practical. They also need to be constrained to an optimal number. Recommendations that are too vague, too overwhelming or too costly are likely to be dismissed out of hand. Similarly, the worth of advancing recommendations which serve no other purpose than to make ideological, political or motherhood statements needs to be seriously considered. Recommendations are fundamentally pragmatic; they are about what should (or should not) be done, by whom, when, and how.

At the same time, it is important to bear in mind that not all recommendations are created equal. Recommendations should be grouped into appropriate categories and ranked for importance, with the primary emphasis being on those recommendations that derive from factors that had a high impact, positive or negative, on the project.

Module 8: Project Closeout

3.5 Getting students to do a post-project review

Given that two of the most common reasons for not completing a post-project review are lack of time and budget, it seems that universities are actually well placed to have post-project reviews completed by student groups that are not associated with the project (such as students from business-related departments and faculties).

Post-project reviews are discrete activities and students can offer a good opportunity to have an objective post-project review completed at little or no cost, apart from an investment of time from a key contact person on the project.

Objectivity and lack of knowledge about the technical content of a project can be a major advantage in being able to communicate project benefits. Project staff working closely on the project often assume that people external to the project have more understanding than they actually have, and so what seems obvious to project staff often goes unexplained in communications.

Student review can therefore be a very useful and cost effective approach, whilst at the same time providing the benefit of a project for students to complete their training requirements.

Module 8: Project Closeout

Topic 4: Using project closeout to your advantage

Undertaking project closeout and review usually provides insights for the immediate participants of a project. The challenge, particularly for a university, is how to get those insights integrated into general research project management practice.

There are several approaches that organisations use to embed experience into practice:

- Requiring that post-project reviews are presented formally to key staff and at other presentations;
- Summarising key findings on an organisational intranet;
- Linking lessons learned to strategic and project planning by referring reports to senior staff, for example on an intranet;
- Integrating post-project reviews with a broader knowledge management database or process;
- Making formal consultation with others who have done similar or related projects a requirements hurdle for project approval.

The challenge is collating knowledge and experience into a meaningful and accessible resource that others can benefit from and use, rather than a huge repository that people contribute to for compliance reasons.

This topic focuses on outlining strategies which can be undertaken to exploit the outcomes from a research project to gain recognition, motivate your team and attract further funding.

Learning outcomes

After completing this module you should be able to:

- Develop a basic marketing communications plan
- Outline some strategies for celebrating project success

Topic content

Read the following notes.

- 4.1 Following through on your communication plan
- 4.2 Maintaining publishing impetus
- 4.3 Celebrating success

Optional activity

Research project websites

These days it is essential for a research project of any significant size to have an accessible, functional and visually appealing website, as the website is a principal means for profiling and disseminating your research, to industry and community audiences, as well as to your academic colleagues. How do the research project websites that you are working on, or that you are familiar with, measure up in this respect? And what kind of criteria might you measure them by? The European Commission has set out [guidelines for website construction for projects funded under the EU Framework Program for Research**](#). Read through these guidelines critically. What would you adopt, prioritise, amend, reject etc. for the purposes of designing (or revising) websites for research projects that you are associated with? How would you ensure that the project website was maintained both during and after the project? What resourcing would you allocate to it?

Make some notes capturing your ideas about this, perhaps illustrating with screen shots from current websites or sketches of what you would like to see on a research project website. You may wish to bring these notes along to the workshop, as they may value add to the discussion.

** Available at: http://ec.europa.eu-research-environment-pdf-project_website_guidelines_en.pdf & download included with Module 8 WebsiteDesign.pdf

Module 8: Project Closeout

4.1 Following through on your communication plan

As part of the preparation for a project, it is a good idea to develop a communication plan (see *Module 2: Commencement and Collaboration – Putting Ideas Into Practice* for more detail on this tool). This document should assist in identifying how project publicity may be dispersed throughout the project lifecycle.

At project closeout it is most important that any outcomes from the project be disseminated and publicised. The project closeout plan should focus on building some robust avenues for marketing which can be maintained past the closure of the project. The following strategies might form part of that plan:

- Convene a meeting with your key stakeholders and review the findings and draft report. Ensure a photograph is taken of the group and retain this as part of the archival material for use as required. Identify any elements of the project that require further marketing. Agree on a plan to ensure that marketing is completed.
- Prepare a report on the project and place a copy in the library and on the website as well as in the archive of the project. You may also wish to send a copy to all of your stakeholders. Ensure a follow-on email address is provided.
- Review the website to ensure it is likely to remain engaging and current once the project closes. Ensure all major findings and reports are retrievable. Ensure there is a suitable email contact address where enquiries can be forwarded for ongoing consideration.
- Develop a short feature article highlighting the project achievements and arrange for its publication in your university magazine, local paper or the national paper.
- Speak to your public relations department about a media release to highlight the project outcomes. They will assist you with matching the right strategy with a suitable media outlet.
- Continue to maintain the archival record of the project as new press clipping and other artifacts are generated.

Module 8: Project Closeout

4.2 Maintaining publishing impetus

A major risk at the end of the project relates to your publishing. It is possible that some elements of the project may have lagged and that this may have compromised the completion of all of your planned publications. It is also possible that the review process took far longer than you hoped. In either case, there may be outstanding articles awaiting final resolution. The following strategies may therefore prove useful in managing the ongoing publication of articles under review or awaiting development/review.

- Make a list of outstanding papers out for review or in progress and ensure they are monitored on a regular basis
- Budget for a focused working time away from other distractions to work on any outstanding papers that still require development. This can help progress the paper to the point where revisions can be undertaken via email
- When a review response is received, convene a meeting within a week of receipt. Allocate jobs to the authors and set tight deadlines to turn around any responses. Ensure all members are kept informed of any progress
- Keep a file on each outstanding article so that the history and memory of the paper is readily retrievable as required
- Maintain a record of the progress to see how long each step is taking. Pull the team together for a working period if the progress is too slow
- Arrange a quarterly meeting of the authorial team to monitor progress on articles and their publication
- Maintain a record of contact details of all contributors so that you can locate them if necessary
- Maintain the team's focus on any unfinished papers. Meet fortnightly and generate a sense of urgency to ensure the paper is completed
- If members leave before a paper is completed, review the authorial agreement that was previously established. Do the members still wish to contribute? If so, discuss how this will occur and what expectations will exist

It is most important that you do not lose the impetus on papers. The role of the leader in generating and sustaining the team commitment to writing up the results is a very major contribution to the outcomes of the project.

Module 8: Project Closeout

4.3 Celebrating success

While there are many ways to celebrate project success, the first reward for team members should be to have some free time to celebrate finishing a project before starting work on the next project.

The purpose of recognition, acknowledge, and celebration in a project is to thank and appreciate the team for their work, to reinforce their initiative and results, and to inspire them to continue delivering similar results in the future.

4.3.1 Team rewards

Whilst not everyone may have contributed equally to the success of the project, it is difficult to provide rewards for some team members and not others. So it is better to be inclusive and expansive in team celebrations, and organise events that include all the team members and even their families if appropriate. Investment in team celebrations creates a lot of goodwill and camaraderie.

Sometimes it is also worth organising a team photo, a certificate or a personal note from someone relevant in senior research management, to be presented to each person attending.

4.3.2 Peer acknowledgement

It is also possible to create systems whereby team members can reward other team members who make a difference to the project and support the goals of the team. Successful systems of peer-to-peer reward include buying movie vouchers and allowing team members to allocate tickets to other team members based on their contributions to the project. This is an inexpensive way of recognising effort and carries a lot more weight than when a manager confers the award. There need to be rules about this sort of thing, such as maintaining a register of who gets the rewards and why to ensure the system isn't used inappropriately and insisting that whoever confers the reward hands it over personally, explaining why they are making it.

4.3.3 Recording success and motivating the team

It's important to keep pictures and stories of the project during its lifecycle. Images and stories are an important component of a project closure, to celebrate success, remember the good times and provide closeout for the people so they can move onto new things.

4.3.4 Timing of celebrations

If celebration, recognition, and appreciation are truly going to be motivating it can't be left to the end of the project.

Research leaders have to notice and acknowledge what's going well constantly and offer encouraging words to team members. However, unless you can be sincere don't bother. It is better to not provide recognition and feedback unless it is sincere, because team members can tell whether you are truly interested or not.

4.3.5 Celebrating failure

In research, not everything goes according to plan (otherwise, by its very nature it would not be research). Research is a risky process and it is guaranteed to fail from time to time, so why only reward success? Failure is frequently the foundation upon which future successes are built. Only celebrating success may inadvertently discourage experimentation and the taking of appropriate risks. If your organisation wants a change in culture and wants to encourage managed risk-taking, this can be demonstrated by a visible celebration of a dismal failure (from which critical information was learned). This is not about celebrating repetition of the same mistakes that have been made in previous research projects. It is about celebrating new and more exciting mistakes that may lay the groundwork for the next breakthrough.

Module 8: Project Closeout

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Module 8: Project Closeout

Frequently asked questions

1. Why are post-project reviews (PPR) important?

The post-project review is an instrument for supporting continuous improvement and quality management. It aims to identify what went wrong and what went right and identify changes to improve the delivery of future projects.

2. What are some of the benefits of post-project reviews?

- Insights into scientific methods and approaches that might be used in other projects
- Data for upwards accountability, including program and unit reviews and organisational performance measures
- External accountability to stakeholders and funders
- Information to aid in the selection of future research projects for funding
- Information to assist in the planning and budgeting of future research projects
- Improved levels of project management capability in the organisation

3. How can you describe the 5 levels of project closeout maturity, using the Capability Maturity Model (CMM) as the framework?

- Level 1 - Ad hoc PPR: Reaction-driven reviews, Based on capabilities of project individuals
- Level 2 - Establishment of PPR policies: Introduction of sound review practices, Based on experience with similar reviews
- Level 3- PPR processes standardised: Establishment of sound and consistent review criteria, PPR responsibility assigned to a unit
- Level 4 - PPR goals quantified and measurable: Corrective action can be taken, Quality of transferable knowledge predictable
- Level 5 - Organisation-wide post-project review: Consistent inter-project learning, Proactive review of PPR processes

4. What are some of the possible problems that can be caused by ineffective project closeout?

- Having to make up shortfalls in funding from other accounts
- Having to return funds because they haven't been accounted for (even though they are spent)
- Losing entitlement to the final instalment of funds
- Reputation damage to the project teams and organisation

5. What is the major focus of most project reviews?

Projects that are perceived to have not been successful.

6. What needs to be in place to ensure that learning from post-project reviews is captured?

Systems and processes to capture information from reviews and update and integrate learning into operating procedures.

7. Who defines whether a project is successful or not?

The project stakeholders.

8. What does a review need to include and why?

- An assessment of technical deliverables to see whether the project has delivered what it said it would – i.e. project effectiveness
- An assessment of the project process in terms of how it was run, how the team worked etc – i.e. project efficiency

9. Why are criteria for acceptance important to define and agree upon clearly?

Because if the stakeholder does not think the project is finished additional work may be required beyond budget available (or time and people).

10. In terms of measurable performance criteria what do the letters in the SMART acronym stand for?

- **Specific**
- **Measurable**
- **Achievable/Attainable**
- **Realistic**
- **Time-bound**

11. Why is the commercial model of a balanced portfolio approach difficult to implement in the university research context?

University research is undertaken by fragmented research groups funded from a number of different sources and who are often competing for the same bucket of money. The research is primarily focussed at the fundamental end of the research value chain. Projects are started in response to funding becoming available, and the 'portfolio' is an ever-changing mix of projects.

12. Why should researchers take the time to understand the research strategies of their funders?

Because their project is likely to be only a small component of a much larger portfolio of R&D and understanding context will help align research efforts to what the funder wants.

13. How would you decide how frequently to hold project review meetings?

This will depend on the size, length, scope, risk profile and so on of the project.

14. What events might trigger additional reviews?

- **Incident Reviews:** Triggered by something not going according to plan
- **Significant Milestone Review:** Often triggered by a funding requirement which is either time or deliverable based
- **Post-Project Review:** Triggered by the end of the project

15. What is the key output of the review process?

A review document with ranked recommendations.

16. What are the two types of recommendation that can arise from a post-project review?

- Recommendations on how to do less of the things that lead to projects going off track
- Recommendations on how to do more of the things that lead to projects being successful

17. What three criteria must recommendations meet?

- Recommendations need to be actionable and implementable by the project team;
- The chief investigator or the team needs to be able to influence the project management process so that the recommendations can be implemented.
- Where the problem is outside the sphere of influence of the project team, arrange to meet with the source of the problem and attempt to influence changes in practices in those groups, using post-project review data to support your request for change.

18. What 5 sections does a post-project review report typically contain?

- The classification section
- The analysis section
- The lessons learned section
- The recommendation section
- Appendices

19. If research cannot be completed in the agreed timeframe what two options are available?

- Seek an extension with a carry forward of funds
- Seek additional funds for a follow-on project

20. Where are the requirements for fulfilling client/sponsor obligations usually defined?

In the project funding agreement or deed of agreement between the funding organisation and the research institution.

21. What is a project closeout checklist normally aligned to?

The organisation's research project management system.

22. When seeking an extension, what guide would you use to work out how much extra time to ask for?

As a guide, if an extension of the final report deadline is sought two days prior to the deadline the extension requested should not be for more than two days i.e. ask for no more time than the notice you are giving.

23. When disposing of assets at the end of the project, what records should be kept?

- Who authorised disposal of materials on a project

- The method of disposal
- Any other information about the disposal of assets and materials

24. On what basis are sabbatical leave, employment and severance pay entitlements calculated for project staff on short-term employment contracts?

You need to check on the basis of number of years service. You need to check on the specific HR policies.

25. What are the 3 most common issues that cause staffing budgets in projects to be incorrect?

- Severance pay has not been budgeted correctly into the project.
- Chief investigators forget to tell project staff about whether the grant will be renewed (or not).
- The chief investigator does not return the appropriate paperwork to the HR department.

26. Why is it essential to complete all items on a financial checklist prior to the end of a project?

Once the end date is reached no further expenditure can be made against the project.

27. What records are used to investigate a project after it has finished?

The investigation is undertaken using the original records.

28. What are the problems with financial rewards for performance?

- They are quickly forgotten, especially if paid at the same time as regular salary payments and are too easily perceived as extra compensation for underpay during the project
- Team members may compare what each member received so it's difficult to reward better performers with a better reward

29. Why is celebrating failure a good idea for R&D projects?

R&D is not guaranteed success and failing is also a result. If an organisation wants to encourage a culture of innovation it needs to celebrate failure (as well as success) so that people can move onto new challenges.

30. What are the differences between an in-process project review and a post-project review?

The in-process project review concentrates on progress and performance and checks whether conditions have changed. It tends to be oriented to the short-term. The post-project review tends to include more detail and emphasises improving the management of future projects, with a focus oriented to the longer term.

31. What are the two perspectives for a post-project review?

- Organisational view
- Project team view

32. What are the five most common classifications for the way that projects end?

- **Normal** - project ended as planned
- **Premature** - project ended early with some parts eliminated
- **Perpetual** - project extended due to increases in scope
- **Failed** - project could not be completed
- **Changed priority**- shifts in organisation priorities due to changes in market or technology

33. What are the five major wrap-up activities involved in closing down a project?

- Getting delivery acceptance from the customer, shutting down resources and releasing to new uses
- Reassigning project team members
- Closing accounts and seeing all bills are paid
- Evaluating the project team, project team members, and the project manager

34. Should a project review include comments about individuals or groups involved in the project if they are relevant to the project and verifiable with other sources?

No. In a project review, comments about individuals or groups participating in the project should not be included under any circumstances.

35. What is the major goal of a post-project review?

It is to improve the way future projects are managed.

36. What is the most common circumstance for project closure?

A completed project.

37. What are the 5 Ws and how are they used?

Who, what, where, when and why – to position a story for media attention.
