

Project Management Toolkit

A Guide for Regional Literacy Networks in Ontario

Sponsored by Literacy Network of Durham Region

Version: 1.0

Last Revised: November 22, 2009

Table of Contents

<u>1</u>	<u>INTRODUCTION</u>	<u>1</u>
1.1	BACKGROUND	1
1.2	PURPOSE	1
1.3	HOW TO USE THIS DOCUMENT	1
<u>2</u>	<u>PROJECT MANAGEMENT CONCEPTS</u>	<u>3</u>
2.1	WHAT IS A PROJECT?	3
2.2	WHAT IS PROJECT MANAGEMENT?	4
2.3	PROJECT MANAGEMENT DEFINITIONS AND CONCEPTS	5
<u>3</u>	<u>DESCRIBING A PROJECT (WHY AND WHAT)</u>	<u>7</u>
3.1	OVERVIEW	7
3.2	PROJECT OVERVIEW STATEMENTS	7
<u>4</u>	<u>PROJECT GOVERNANCE AND THE TEAM</u>	<u>10</u>
4.1	OVERVIEW	10
4.2	ORGANIZATION CHART	11
4.3	ROLES AND RESPONSIBILITIES	12
4.4	AN IMPORTANT NOTE ABOUT ACCOUNTABILITY	14
<u>5</u>	<u>THE PROJECT LIFECYCLE: FROM BEGINNING TO END</u>	<u>15</u>
5.1	WHAT IS A PROJECT LIFECYCLE?	15
5.2	WHAT IS A PHASE WITHIN THE PROJECT LIFECYCLE?	15
5.3	WHAT ARE THE PHASES OF THE PROJECT LIFECYCLE?	16
5.4	WHAT STEPS ARE INCLUDED IN EACH PHASE?	18
5.5	WHAT ABOUT PROJECTS THAT DON'T FOLLOW THIS MODEL?	18
5.6	A REAL WORLD EXAMPLE OF THE PROJECT LIFECYCLE	20

6	<u>DETAILED DESCRIPTION PROJECT LIFECYCLE</u>	21
6.1	PROPOSE	21
6.2	PLAN	29
6.3	CREATE	37
6.4	DELIVER	45
6.5	CLOSE	51
7	<u>MANAGING A PROJECT (HOW)</u>	57
7.1	WHAT IS A PROJECT MANAGEMENT PROCESS?	57
7.2	WHAT ARE THE PROJECT MANAGEMENT PROCESSES?	57
7.3	WHAT ARE THE STEPS IN EACH PROJECT MANAGEMENT PROCESS?	59
7.4	WHY DO THE LIFECYCLE MODEL AND PROCESS MODEL OVERLAP?	60
8	<u>DETAILED DESCRIPTION OF THE PROJECT MANAGEMENT PROCESSES</u>	61
8.1	SCOPE	61
8.2	CHANGE	68
8.3	BUDGET	76
8.4	PEOPLE	83
8.5	WORK	90
8.6	COMMUNICATION	97
8.7	RISK	104
9	<u>WHAT ABOUT QUALITY?</u>	111
10	<u>THE NEXT STEP</u>	112
11	<u>LIFECYCLE-BASED TOOLS AND TEMPLATES</u>	113

1 Introduction

1.1 Background

In August 2009, Jennine Agnew-Kata, Executive Director for the Literacy Network of Durham Region (LiNDR) approached MD+A Consultants (MD+A) to develop and deliver project management training to Executive Directors of Ontario's literacy networks.

Based on its previous experience in providing project management training to literacy and other agencies in the past, MD+A recommended the development of a project management methodology to complement and support a two-day training course. This approach would provide more immediate value through the training along with long-term benefits through a methodology that could be referenced and applied for years to come.

MD+A met with the Executive Directors and key literacy project funders to determine the specific project management needs of the networks. Using this assessment MD+A developed a simplified, step-by-step methodology and the associated training course, based on industry standards and best practices and tailored to meet the specific challenges experienced by the literacy community.

1.2 Purpose

This project management methodology will assist networks in delivery of literacy projects. The methodology is a simplified toolkit that takes tried and true project management theory and summarizes it in a step-by-step guide to delivering a project in the literacy sector in Ontario.

By applying a formal methodology, project managers can help to ensure that their projects are truly successful and avoid or at least minimize the number of headaches that are often associated with projects.

This methodology will benefit not only those with limited project management knowledge or experience, but also those who have delivered their share of projects. It will provide an overview and detailed steps successfully managing a project, and provide helpful tips that can turn a good project manager into a great one.

1.3 How to Use This Document

This toolkit is divided into different sections, each focusing on a different project management concept. While we have attempted to include some training information within this document, it is important to note that it does focus on the methodology of project management (i.e., the steps one takes) and less on the how (i.e., how to execute the steps). The reader of this document will benefit greatly by taking a basic project management course.

The methodology represents a comprehensive approach to project management, and we recommend that you review the document in its entirety. This will provide you with the most comprehensive understanding of the methodology.

The document can also act as a quick-flip or reference tool, particularly sections 6 and 8 where the project phases and project management processes are described in step-by-step detail.

It is recommended that you first read the full document so that you'll be familiar with the basic concepts and approaches that are used. Later, when managing your project, you can use this document as a reference guide, helping you to complete specific activities.

The sections of this methodology are as follows:

#	Section	Description
2	Project Management Concepts	Describes the basics of project management, including key terminology and concepts
3	Describing a Project (Why and What)	Outlines how a project goes from an idea to a more concrete outline
4	Project Governance and the Team	Identifies the roles that are needed to complete a project, including those that do the work and those that oversee and guide the work
5	The Project Lifecycle: From Beginning to End	Outlines the different phases that a project passes through, from the proposal to the final evaluation
6	Detailed Description of Phases and Steps in the Project Management Lifecycle	Describes the specific steps that are taken to move through each phase of the project lifecycle
7	Managing a Project (How)	Outlines the processes that a project manager uses to keep a project on task, on budget and on time
8	Detailed Description of the Project Management Processes	Provides a detailed explanation of each of the project management processes
9	What About Quality?	Offers tips for ensuring that the results of a project meet or exceed expectations
10	The Next Step	Gives some final tips on putting this methodology into practice
11	Lifecycle-Based Tools and Templates	A list of the various project management tools that are included with this methodology, with descriptions

2 Project Management Concepts

2.1 What is a Project?

There are many, many different definitions for what a project is. There are as many definitions as there are methodologies and even more! Defining a project is important because the project management processes expressed in this toolkit are more relevant to projects than they would be to organizational management or other, more traditional areas of management.

For the purpose of this Toolkit, we will draw upon the common elements of those definitions to create our own definition of a project.

A project is a set of **related activities** intended to deliver a **unique product, service, or result** within predefined **constraints** for the purpose of achieving an **outcome**

- Related activities
 - The activities within a project are related in that they are all intended to bring about the same outcome. If the activity is not related, one must consider whether that activity should be truly part of the project.
- Unique product, service, or result
 - Defined simply, a project is intended to create something – a product, service, or result. This “something” is unique in that it has not been created, at least by you, before. It could be a new training program or a new curriculum for example. If it is not unique, it is more appropriately considered regular operations (e.g., a training course that one delivers year after year).
 - The product, service, or result is also important because it is the marker of project completion. A project is determined to have been completed when it has delivered the product, service, or result.
- Constraints
 - Traditionally, there are considered to be three project constraints: money, time, and quality. It must be delivered within a particular budget within a certain timeframe and meet a particular level of quality.
- Outcome
 - All projects have an intended outcome. The outcome is “why” you are delivering the project. Why are you creating the product, service, or result? The answer to this question is your outcome. A project is judged to be successful if it has achieved the outcome.

2.2 What is Project Management?

There are also many, many definitions for project management. Most simply though, project management is the process of directing and managing the work required to deliver the project. This is important because it distinguishes the management of a project from the subject matter experts who work on a project. The subject matter experts (e.g., trainers, curriculum specialists) bring a certain set of skills and knowledge to enable project delivery. Similarly, the project manager brings a certain set of skills and knowledge to enable project delivery.

Imagine a service-delivery agency. The agency comprises literacy practitioners, but it also includes some managers and/or directors. The managers or directors may not be responsible for delivering programs, but are likely responsible for creating budgets, helping manage staff time, and other administrative and strategic responsibilities. So too is it with project management. Project management is not providing subject matter expertise. It is managing the project activities to successful completion.

We draw upon a definition from that the Government of British Columbia used in the Project Management Information System Project (1997):

The art and science of managing a project from inception to closure as evidenced by successful product delivery and transfer

We choose this definition because it highlights an important concept. Project management is both art and science. It includes execution of particular processes as expressed in this toolkit (i.e., the science). It also includes using good judgment and decision-making, the ability to positively influence others and communicate effectively, and a range of other “soft” skills that cannot be expressed in a toolkit (i.e., the “art”). Effective project management requires rigor and process, but it also requires intuition and interpersonal skills.

The key, high-level activities that a project manager conducts are:

- **Planning** – Developing the approach in consultation with the project team about how to most efficiently and effectively deliver the project. Planning is a phase unto itself in the project lifecycle, but is more importantly an activity in which the project manager will be continually engaged as issues or changes arise.
- **Monitoring and controlling** – There will be much work involved in monitoring the project health and making small adjustments along the way. Is the project on budget and on schedule? What is the quality of the work being produced? What can we do to get it back on track? The project manager is responsible for monitoring and controlling the project activities to ensure that they are going to plan, and making adjustments when it begins to get off track.
- **Managing issues and risks** – Projects are filled with challenges. This is a normal part of project delivery. A project manager needs to be able to navigate his or her way through these, and will spend much time doing so!

- Maintaining momentum and energy – The team often loses momentum and energy as a long project continues on. People get bored. The work is not as exciting. They get “issue fatigue” – tired of addressing issues. These are all challenges to a successful project. The project manager needs to be the cheerleader who encourages the team and keeps their spirits high.
- Communicating – The project manager also spends much time communicating with people. She or he will communicate with the team, funders, other network agencies, vendors, the steering committee, and the list goes on. Communication is important because it ensures that everyone has the same understanding of the project outcomes and the process for getting there. Without effective communication, the project can rapidly descend into chaos.

The above points provide a basic summary of the many activities that you will execute as a project manager. The remainder of this toolkit will give you more details regarding those processes and a step-by-step guide that will help you follow them.

2.3 Project Management Definitions and Concepts

2.3.1 Outcomes

The project outcomes are the “why” of the project. Outcomes are one-sentence statements and summarize what you hope to achieve by delivering the project. Let’s look at following sentence: “We are creating this literacy course because we want to improve workers basic literacy skills and improve their employment chances.” Why are we doing this project? We are doing this project *to improve workers’ basic literacy skills and to improve their chances of employment*. Don’t forget that you need to be able to measure this!

2.3.2 Scope

The scope of a project is the “what” of the project. It is what you will create and the activities required to create it. The scope is a very, very important part of understanding what the project is all about. Scope comprises two elements:

- Deliverables – the products, services, or results that the project aims to produce and any key deliverables supporting that
- Effort – the activities needed to create the deliverables and the activities need to manage the creation of them

2.3.3 Constraints

Constraints are the “boundaries” of the project. The project must be delivered within these boundaries. They are:

- Cost (Budget) – the project must be completed within a certain cost
- Time (schedule) – the project has a fixed timeframe within which to complete the work
- Quality – the project needs to meet a certain level of quality

2.3.4 The Scope Triangle

There is an important relationship between the scope and constraints. The constraints act as the boundaries of the scope. As they change, so too must the scope. As the scope changes, so too must the constraints. The project manager will spend much time ensuring that these maintain a balance and investigating the impact of changes in one area on other areas of the project.



2.3.5 Product Deliverables

Product deliverables are the product itself or deliverables that directly relate to the product, and are produced typically by members of the project team. For example, the product deliverables for a new literacy course would be the course itself and may be the training materials or the curriculum that acts as a guide when developing the course.

2.3.6 Project Management Deliverables

Project management deliverables are almost always produced by the project manager, and relate more broadly to defining the project scope or constraints as well as ongoing project management and control. For example, the Project Charter produced at the beginning of the project is considered a project management deliverable. The agendas and notes produced for meetings are also project management deliverables.

2.3.7 Project Deliverables

Project deliverables is a term that is used to reference both the product and the project management deliverables.

3 Describing a Project (Why and What)

3.1 Overview

The first step in delivering a project is describing it. You need to be able to briefly describe it so that you are able to clearly communicate the project to others. It is also the definitive guide to indicate when you have completed the project and whether you have been successful.

How would you describe a house? You might talk about the number of rooms, the number of floors, the colour, whether it has an attached garage, and so forth. These are standard ways to describe a house. Similarly, there is a standard way to describe a project. It's called the Project Overview Statement.

The Project Overview Statement includes the “why” and the “what” of the project, and answers questions such as:

- Why are you doing this project?
- What are you creating?

Answering these questions allows us to understand the broad framework of the project. Also very importantly, it allows us to communicate effectively so that everyone knows why we are doing the project and what we are going to do.

The Project Overview Statement includes:

1. Vision Statement
2. Outcomes
3. Scope
4. Assumptions

3.2 Project Overview Statements

3.2.1 Vision Statement

Most organizations within literacy will be familiar with vision statements. Often, an organization has a vision statement that encapsulates what it is all about. In one paragraph, the vision statement identifies the mandate of the organization as well as the key services that it provides. A project vision statement is similar.

The vision statement should be a short, one-paragraph summary of why you are doing the project and what you will create within it. It does not need to be detailed or explain everything about the project. It really is just to provide your audience with a quick understanding of what the project is all about. Imagine someone asking you at a cocktail party about your project. They likely do not want all of the gory details.

They just want to know in thirty seconds or less what the project hopes to achieve and how. This is your vision statement.

3.2.2 Outcomes

Why are you doing this project? What do you hope to achieve? Could you summarize this in three or four bullet points? If so, these are your outcomes. They are summary statements of why you would like to deliver the project – of what you hope to achieve.

When writing your outcomes, it is important to distinguish the “why” from the “what”. The outcomes are not statements of *what* you are going to do, but a statement of the *why*. If you were developing a project toolkit for the literacy sector, why would you do it? You might create the toolkit to help people learn about project management or you might do it to make project delivery more efficient or you might do it to standardize the process for delivering projects. All of these statements relate to *why* you are doing the project and can be encapsulated in the outcomes.

Importantly, outcomes need to be SMART:

- Specific – Outcomes should be specific. They should be clear and definable
- Measurable – Outcomes should be measurable. One should be able to accurately measure whether the outcome was achieved.
- Agreed Upon – Outcomes need to be agreed upon.
- Realistic – The outcomes need to be realistic. Are they reasonably achievable?
- Time-based – The outcomes also need to have an “end date”. That is, when will you achieve these outcomes by?

Let’s look at a few examples of SMART outcomes:

- Increase the number of literacy learners in the program by 20% by January 18
- Increase number of successful literacy projects by 10% by March 31
- 80% of the literacy learners will increase their literacy and basic skills by 1 level

3.2.3 Scope

If the outcomes of your project are the *why*, the scope is the *what*. What are you going to do and create in this project? The scope comprises the project deliverables as well as the activities required to create them.

Scope is important for two key reasons. First completing the project is dependant on completing the scope. The project is done when you have produced the major product deliverables. Second, describing the scope is important because we know that changes in the scope may impact the budget or schedule. Changes in the budget or schedule may impact the scope. Clearly understanding the deliverables and activities in your project is an important step in describing your project.

Scope statements are usually short bullet points that describe the activities and deliverables, and are no more than a page in length. Although they are short, they are as specific as possible! Look at the following scope statement as an example:

1. Delivery of a two-day, best practice workshop to 15 participants
 - Preparation and delivery of 5 focus groups with service-delivery agencies of no more than 4 hours in length
 - Preparation and delivery of a Web-based survey on teaching best practices for up to 100 respondents
 - Development of one training presentation based on the focus group and survey results
 - 15 paper-based copies of the training presentation
 - Up to two days of training and/or facilitation

The above scope statement is very short, but is quite specific and provides good insight into the nature of the project. In the above example, you will notice that we only highlighted the major product deliverables. There may be many minor product deliverables that you create during the course of the project also. For example, you will likely create an agenda for and notes from the focus groups. You will likely do an outline of the training presentation before starting it. Minor deliverables are not typically put into the scope statement because project completion is not dependent on them. It is not required to create an agenda or notes for a meeting! It's just good practice!

The final step in creating your Project Overview Statement is asking yourself whether the deliverables will achieve the outcomes. Although you likely considered this when conceiving the project idea, it is important to do a final check on this. Will this project meet the outcomes if we create the deliverables?

3.2.4 Assumptions

When you develop the project outcomes and scope, you base it on specific assumptions. The assumptions must be true for you to deliver the project and successfully achieve the outcomes or at least to deliver it within the budget and schedule. For example, if you are developing a new curriculum for literacy training and the Ministry is simultaneously developing new methods of measuring literacy skills, one assumption may be that the Ministry publishes the new methods before you begin the project. If the Ministry delays in publishing the new methods of measuring literacy skills, it could affect your project. You make an assumption that must be true for your project to be completed on schedule.

The assumptions should be short, bullet-point statements that you assume to be true to successfully deliver your project. For example:

- Training seminar will occur during the network conference in June
- The training session will include no more than 20 people
- The best practice toolkit will be completed prior to September

3.2.5 Summary

Let's summarize the above very briefly because it is very important.

When describing a project, you discuss the *why* and the *what*.

1. Why - Expressed in the **outcomes** and is what you hope to achieve through the project
2. What – Expressed in the **scope** statement and includes what you will create through the project and the activities required to create it

Putting these together forms the **Project Overview Statement** and is a simple but very important first step in delivering a successful project!

4 Project Governance and the Team

4.1 Overview

Creating an appropriate project structure is also very important in delivering an effective project. This is particularly true with the literacy networks because many of your projects will be related to one another and can often affect the way other networks do things. With so many different people, networks, agencies, and even government bodies involved in a project, appropriately structuring a project can be challenging, but is nonetheless key to success.

Composition of the project team is usually quite clear. It will involve various subject-matter experts who are able to provide expert knowledge and skills in a particular area. The project manager is one of these people, but so too are the curriculum developers, the researchers, the trainers, and anyone else who is responsible for creating some of the product deliverables. The size of the team can range from a couple of people to even dozens. The common thread among all of the project team members is that they are responsible for creating some of the product deliverables.

The project governance can sometimes be less clear. In Ontario, there are many, many players who work together to deliver literacy services – networks, agencies, government, volunteers, and the list continues. Many of the projects will be interrelated, and your project may impact the way others do things. What is the appropriate role for these other groups? The role will change depending on the project, but they will most often be members of an advisory committee or subcontractors to the lead network. The reason for this is that they are not accountable for the project. You are. Therefore, you need to have the final authority on what happens within the context of the project.

4.2 Organization Chart¹

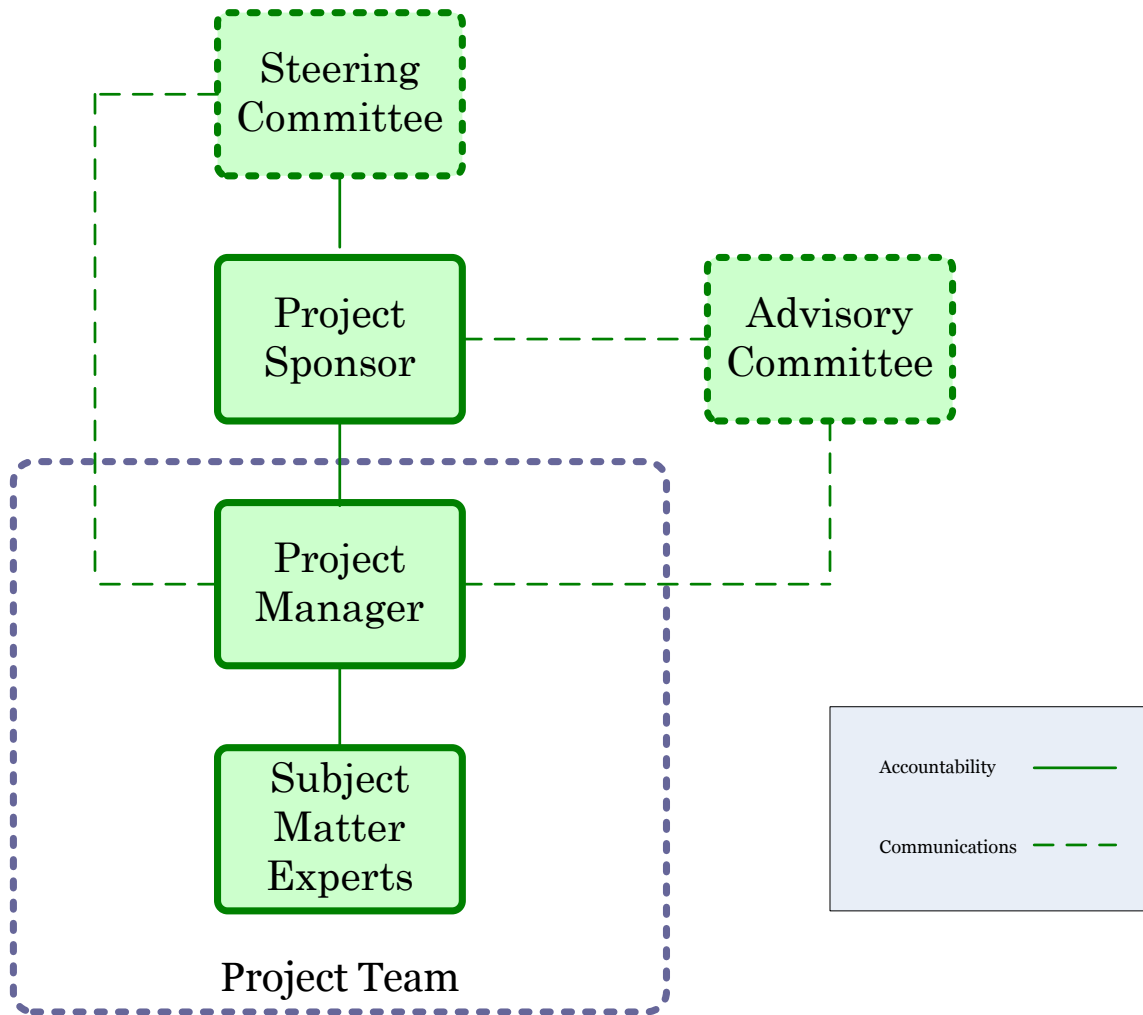


Figure 1 Project Governance and Team

¹ The project organizational chart demonstrates **roles** within a project. Note that there are many instances in the literacy sector where the project sponsor, project manager, and project team are the same person, usually the executive director of the literacy network.

4.3 Roles and Responsibilities

4.3.1 Project Team

Role	Notes	Responsibilities
Project Manager	<ul style="list-style-type: none"> • Usually the executive director, but could be a staff member or even a contractor • Provides specialized skills related to managing cost, work, and people 	<ul style="list-style-type: none"> • Creating the project management deliverables • Meeting and communicating with the project team on a regular basis • Monitoring the project health to identify issues • Managing the scope, schedule, cost and quality on a day-to-day basis • Making project changes under direction of the project sponsor • Reporting to the project sponsor on a regular basis
Subject Matter Experts	<ul style="list-style-type: none"> • Anyone producing work for the project is a subject matter expert • Provides specialized skills related to creating the deliverables 	<ul style="list-style-type: none"> • Creating the product deliverables • Meeting and communicating with the project manager on a regular basis • Working with the project manager to identify a realistic schedule for completing work • Identifying issues that challenge the project • Tracking effort spent on the project

4.3.2 Project Governance

Role	Notes	Responsibilities
Project Sponsor	<ul style="list-style-type: none"> • Usually the executive director • Overall accountability for the project • Operational representative of the Steering Committee if one exists 	<ul style="list-style-type: none"> • Provides overall direction and guidance to the project • Sets the project budget and the overall scope • Approves changes to broad project scope, budget, and schedule • Works with the project manager to identify and address issues • Approves major project management and product deliverables • Reports to the funders as required • Reports to the steering committee as required
Steering Committee	<ul style="list-style-type: none"> • Group of stakeholder representatives who have final authority over a project • Create a Steering Committee of representatives if multiple organizations are financing the project • Most projects will not have a Steering Committee 	<ul style="list-style-type: none"> • Provides leadership and the project vision • Provides overall direction and guidance to the project • Sets the project budget and the overall scope • Approves changes to broad project scope, budget, and schedule • Communicates with the Project Sponsor and Project Manager to ensure effective operationalization of the project vision
Advisory Committee	<ul style="list-style-type: none"> • Group of stakeholder representatives who can provide advice and guidance on the project • Most projects will not have an Advisory committee 	<ul style="list-style-type: none"> • Provide advice and guidance to the project team • Provide input into product deliverables

4.4 An Important Note about Accountability

A project will involve and affect many people and organizations – the literacy network funded to deliver the project, other literacy networks, service-delivery agencies, funders, and ultimately literacy learners. What is the appropriate role for these people, if any, within the project team or governance?

An important consideration is “accountability”. The organization to which the funds have been awarded is accountable for the project. It is legally and financially accountable for the project. Therefore, it must have the final authority over the goings-on within a project. It must be the one who approves the project deliverables and sets the budget and schedule within the parameters set out by the funders. If multiple networks are funded to deliver a project, they all share accountability and therefore a Steering Committee would be created to govern the project and signoff on the project.

Many projects delivered by literacy networks involve other networks, and they play a valuable role in successfully delivering the project. But what is their appropriate role on the project team or governance? If they are going to be consulted regularly and provide valuable input, you may consider forming an advisory committee or simply consulting with them on an as-needed basis. They do not have authority for the project, but can give you some important input. If your network is going to pay another network to create some of the product deliverables, that network is considered a vendor or subcontractor, similar to when your network hires a consultant. Similarly, it should be governed by a contract and a Statement of Work that explicitly defines what the sub-contracted network will provide, when they will provide it, and the financial payment for doing so.

5 The Project Lifecycle: From Beginning to End

5.1 What is a Project Lifecycle?

All projects, regardless of size or complexity, follow a lifecycle.

A **lifecycle** is the set of **phases** that a project moves through from the **initial idea** for the project to the **final task** done to complete the project.

Like much of project management, there are no hard and fast rules when it comes to the project lifecycle. The specific steps that a project follows as it moves through the lifecycle can vary from one project to another. And a variety of terms have been used by different project management methodologies to describe each phase and step of a lifecycle.

But all project lifecycles share the same basic concepts. A project:

- begins with an idea,
- a plan is developed to turn that idea into reality,
- that plan is put into action, and through it one or more products or services are created,
- those products or services are evaluated and put into use, and
- the project comes to a close.

If the products or services need to be changed or further developed after the project closes, a new project lifecycle begins.

5.2 What is a Phase within the Project Lifecycle?

A **phase** is a major period within the project that comprises a related set of sub-activities intended to create a product or project management deliverable.

Organizing a project's activities into phases makes it easier for the project team to understand:

- where the project is at,
- what activities need to be performed next, and
- how the results of their efforts all fit together to create a successful project.

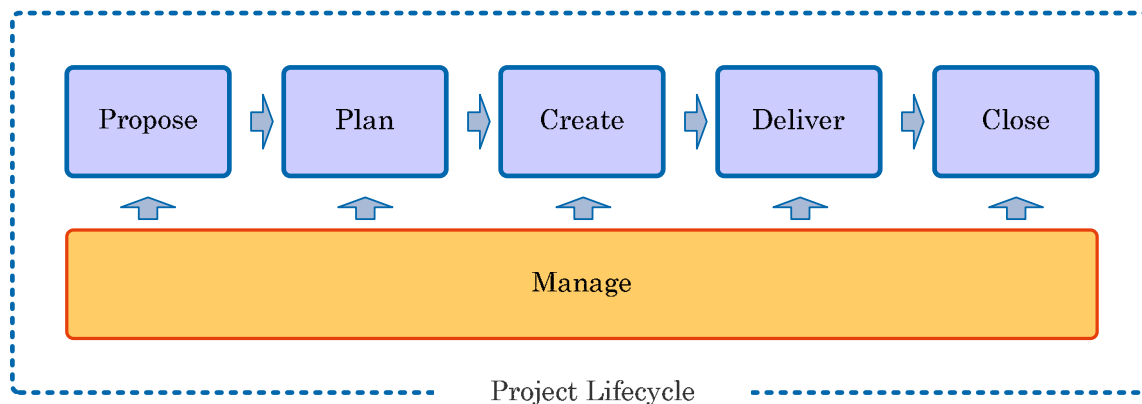
Each phase of a lifecycle also follows a standard path. Each begins with reviewing the actions that need to happen during that phase with the project team in order to ensure that everyone is working towards the same end goals, and ends when those goals has been achieved.

Within each phase, there is a set of steps that need to be followed, often in a specific order, to develop the products or services needed to complete that phase.

5.3 What Are the Phases of the Project Lifecycle?

Countless variations of lifecycle models have been used in project management, but they are all based on the same key concepts. This methodology has taken the key concepts from these models and customized them into a model that more closely fits the needs of literacy projects. Although there may be variations in the steps for any one project, the basic concepts can be found in any project.

For this methodology, **five** separate phases are being used for the project lifecycle:

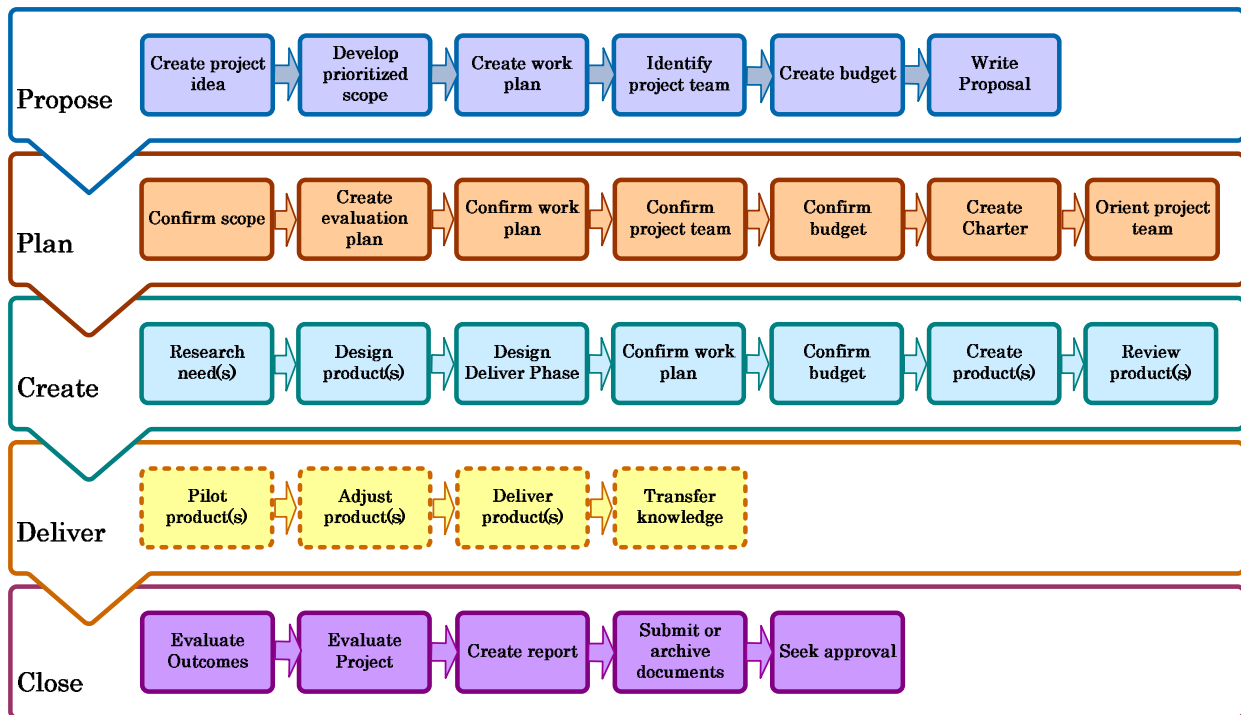


Phase	Description
Propose	The Propose phase starts with a project idea and includes the development of this idea into a vision for the project and the creation of a proposal for funding. The phase is completed when the proposal is completed and submitted.
Plan	After a proposal has been submitted and funding for the project has been confirmed, the Plan phase can begin. This phase involves gathering the project team, confirming the scope of the project and the approach that will be used to complete the project and officially getting the project under way.
Create	In the Create phase you'll move from "planning" to "doing." During this phase the project team will design the product or service that the project is meant to create, and carry on with developing the actual product or service. It also involves any reviews and editing that may need to be done (e.g., a peer review of a new curriculum).

Phase	Description
Deliver	<p>Once the project team has finished creating the products or services, they must be put into use, or at least made available for use. This is the purpose of the Deliver phase.</p> <p>The activities the project team performs during this phase will vary significantly depending on the nature of the products or services, but they typically involve either transferring knowledge (e.g., through a conference), introducing a new product or service for use (e.g., a curriculum) and/or helping an individual or organization to change the way it operates (e.g., a client database).</p>
Close	<p>An important, but often overlooked phase is the Close phase.</p> <p>During this phase the project team evaluates the success of the project, meaning not only the quality of the products and services that were created but also how well the project was managed.</p> <p>Evaluation information may be required by funders, but it can also be an invaluable resource for the project team.</p> <p>This phase also involves getting final approval that the project is completed from the funders and the project sponsor.</p>

5.4 What Steps are Included in Each Phase?

Each phase can be broken down into sub-steps. The key steps within literacy projects are:



5.5 What about Projects That Don't Follow This Model?

After reviewing the steps in the previous diagram, you may think “But my last project had different steps than that!”

The lifecycle model used in this methodology is a basic model, used to help readers understand the key concepts of project management. It is often referred to as the **waterfall lifecycle model**. While the model will directly fit with many literacy projects, there are other ways to deliver projects. Each has its advantages and disadvantages.

A few of the other ways to deliver a project are:

Modified Waterfall

Description Follows the same phases as the waterfall method, but phases can overlap or activities can break off into entirely separate projects

Advantage Greater flexibility than the waterfall model

Can save time by allowing for the overlapping of phases (e.g., planning the second half of a project while the first half is being created)

- Disadvantage Greater management complexity
Milestones are less clear and interdependencies can be missed

Staged Delivery

- Description All of the planning for the project happens during the Plan phase, but the products or services are created and delivered one after the other (i.e., in a staged approach)
- Advantage Enables “early wins”
Works well when you are creating two (or more) fairly distinct products or services (e.g., a curriculum and a training course)
Allows users to get familiar with on one product or service before you deliver the second
- Disadvantage Requires more thorough planning up front and more careful ongoing management of the project
Plans may change over time and require re-work

Iterative

- Description High-level planning of the project’s overall scope, budget and schedule happen during the Plan phase, but then the project is broken into separate parts which are each planned, created and delivered separately from the others.
- Advantage Works well when a project can easily be split into separate parts and there is a value in doing so
Can make the planning of large projects easier by breaking it into more manageable chunks
Provides “early wins”
- Disadvantage Does not work well for projects with a set budget or deadline
Highly complex requires and therefore requires experienced project manager

While each of these models can be helpful in certain circumstances, the most commonly used and easiest to use model for literacy projects is the waterfall model described in the previous section. The remainder of this toolkit is based on the waterfall model.

5.6 A Real World Example of the Project Lifecycle

Building a House: Project Management in Practice

A commonly used metaphor for project delivery is building a house. At the end of each of the sections on phases you'll find an example illustrating how the main concepts are applied in a real-world example – a woman name Lola who has decided to build a house.

The building of a house goes through the following phases:

- ✓ **Propose** The house starts with an idea (“I’m going to build myself a house!”), and is fleshed out to a broader idea (how many stories and rooms it will have, how many square feet it will be, how it will be heated/cooled, etc.). Lola then decides how she will get funding to build the house (e.g., through a bank, through a rich uncle), and applies for that funding.
- ✓ **Plan** Once funding is secured, Lola needs to determine more specific details for building the house. How many square feet will each room be? Which rooms require plumbing? How many windows will there be? How much will the drywall cost? When will the house be finished? Lola takes this information and creates an architecture diagram, a budget and schedule for building the house.
- ✓ **Create** Building begins. While other people will be involved, Lola needs to keep a close eye on the work being done to make sure the house is built well, built on schedule and built within budget.
- ✓ **Deliver** Move in day! Like any move, Lola needs to plan in advance when the move is going to happen and how it will done. She should also be prepared to show her family around their new home, helping them to become familiar with the house and anything they may need to know to live there comfortably.
- ✓ **Close** Lola has come to the end of her house-building days and is now completely moved into her new home. She needs to meet with the contractors to let them know that the project is complete and make final payment on their work. She will also need to report back to the bank that the house is completed. And if she plans to build another house any time in the future or help a friend build a house, it would be wise for her to make notes on which steps in the house building process went well, and which should have been done differently. Did she grossly underestimate the cost of wiring? Did the building crew finish framing ahead of schedule because they had nail guns? This information could save Lola (or her friend) thousands of dollars and days of work for the next house.

6 Detailed Description Project Lifecycle

The previous section introduced you to the concept of the project lifecycle and identified the key phases and steps that the project follows. This section will describe those phases and steps in greater detail as well as identifying some of the tools and templates that can help you as you work through your project.

6.1 Propose

6.1.1 What is the Purpose of this Phase?

The main goals of the Propose phase are:

- to turn an idea into a project concept,
- to decide whether or not the project is worth pursuing,
- to determine what specific products or services will be created through the project,
- to determine the cost, schedule and people needed to complete the project, and
- to create and submit a proposal for the project.

All projects start with an idea. An idea usually comes from either:

- a need that you feel you can meet, or
- an opportunity that you feel you can take advantage of.

During the Propose phase an idea is fleshed out in enough detail for a proposal for funding to be written. But the purpose of this phase is much more than just to complete a proposal – it is to think clearly about how the idea could best be brought to life, the products or services that will be created, and the cost and time it will take to do so.

The project will be constrained by what is in the proposal. It is crucial to be sure that the proposal is as realistic as possible. Unrealistic proposals are a common cause for projects failing, and can result in significant cost or schedules overruns, not meeting expectations, or the project never being delivered at all.

All activities performed in the Propose phase are meant to turn an idea into a project concept, to get a clear understanding of what that project will involve, and to put this understanding to paper as a proposal.

Important note: Ontario's literacy networks often propose and deliver projects that are very closely related to one another and that are interdependent. It would be wise during the Propose phase to ensure

that the networks are effectively communicating with one another, sharing project ideas, and coming to common agreement regarding which networks will propose which projects. This would benefit the literacy sector because the proposals would represent a more comprehensive approach to meeting literacy learners' needs, and would benefit individual networks by ensuring that their proposals are unique and have a greater likelihood of success.

6.1.2 When Does this Phase Start?

The short answer is – as soon as possible.

Ideas can come at any time – through working on another project, while speaking with other literacy networks or while trying to fall asleep one night.

While not all ideas will fit that year's criteria for funding, that should not stop you from starting the Propose phase before the request for proposals is announced.

Even if your ideas don't fit the current year's criteria, they may fit for the following year or you may find a different source of funding. Plus you'll have a head start on creating your proposal once the request for proposals is announced.

6.1.3 When Does this Phase End?

Once a proposal is submitted, one of three things will happen:

- The project will be approved as proposed, and you will continue to the next phase.
- The project will be approved with scope, budget, or schedule changes. You will need to review the changes and determine how it affects the rest of your project. Should you be approved for a smaller budget than you had proposed, the list of prioritized deliverables from your Project Overview Statement is handy because you will be more able to reduce the scope to meet the budget constraints.
- The project will be rejected. But all is not lost! You should be able to reuse much of the knowledge you gained and content you created for the proposal in future proposals or even to submit to other funders.

Regardless of which of the above occurs, the Propose phase officially ends once the proposal has either been approved or rejected by the funder.

6.1.4 What is Created During this Phase?

Product / Service	Description	Tool / Template
Project Overview Statement	<ul style="list-style-type: none"> a summary of a project's "why" and "what" should be created when the project is being conceived (and updated if the project changes) 	Project Overview Statement
Project Proposal	<ul style="list-style-type: none"> used to apply for funding for a project and to guide the rest of the project typically includes the Project Overview Statement in addition to budget, schedule, and roles and responsibilities 	Proposal

6.1.5 What Steps are Taken During This Phase?

Step	Description	Tool / Template
Create project idea	<ul style="list-style-type: none"> identify an idea that addresses some need or opportunity important to focus on the need or opportunity that is being met instead of on the product or service you are creating 	Project Overview Statement
Develop prioritized scope	<ul style="list-style-type: none"> create detailed descriptions of each product or service that will be created, indicating which are most important, somewhat important and least important scope should be detailed so that users and funders will understand exactly what you plan to create should also indicate what is out of scope – e.g., French translation prioritizing the scope helps you to understand the impact and make changes should you only receive partial funding for your project or if you are asked to add additional products or services 	Project Overview Statement

Step	Description	Tool / Template
<p>Create work plan</p>	<ul style="list-style-type: none"> list the activities that need to be completed for the project and the amount of effort each activity will require identify how long a task will take and when it will occur should be detailed – e.g., list the writing of a document, the editing of it, the approval of it and the printing of it as separate activities base effort estimates on past experience and/or the experience of others, but be generous – many activities will take longer than you expect <i>don't forget that your project activities will include project management, sustainability (i.e. transition to operations) planning, and the actual transition to operations itself!</i> 	<p>Work Breakdown Structure</p>
<p>Identify project team</p>	<ul style="list-style-type: none"> identify the roles that will be needed to complete the activities you listed in the workplan (e.g., writer, project manager) use the effort you estimated to determine the number of people you will need in each role (e.g., will you need one or two writers?) note that you do not need to name people to fill each role at this phase 	<p>Roles and Responsibilities chart</p> <p>Work Breakdown Structure</p>

Step	Description	Tool / Template
Create budget	<ul style="list-style-type: none"> • use the activities and effort estimates from your workplan to determine your budget; do other research as needed (e.g., for computer costs) • your project budget should be role-based (e.g., use “project sponsor”, not “Executive Director”); adapt it as needed to fit the proposal • creating an accurate budget is crucial when your project is funded by a government or other agency; in most cases you cannot ask for additional funding if you are over budget • remember that projects always have some unanticipated costs and you should include room for this in your budget 	Budget
Write proposal	<ul style="list-style-type: none"> • use the Project Overview Statement, workplan and budget to complete the proposal • remember that the constraints you list in the proposal will either support or hinder the rest of your project • always leave enough time to have someone review the proposal and to make revisions before it is submitted 	Proposal

6.1.6 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • should not be formed until after a proposal has been approved • a person who approves a proposal before it is submitted may become part of the Steering Committee
Project Sponsor	<ul style="list-style-type: none"> • may: <ul style="list-style-type: none"> • perform each step in the Propose phase, or • assign some or all of these activities to others and coordinates and reviews their work • is ultimately responsible for the contents of the proposal and for ensuring it is submitted on time • may also work with other individuals or agencies to get more information for the proposal or to suggest a collaborative project
Project Manager	<ul style="list-style-type: none"> • should not be named until after a proposal has been approved • a person who assists with the proposal writing often becomes the Project Manager
Project Team	<ul style="list-style-type: none"> • should not be named until after a proposal has been approved • a person who assists with the proposal writing often become part of the project team
Advisory Committee	<ul style="list-style-type: none"> • should not be named until after a proposal has been approved • a person who provides information for a proposal or who reviews it before it is submitted may become part of the Advisory Committee

Person/Group	Role
Other Individuals or Agencies	<ul style="list-style-type: none">• may:<ul style="list-style-type: none">• be asked for information to help you with proposal writing, or• agree to work with you in a joint proposal• it is always valuable to hear the knowledge and experience of others before writing your proposal, especially if they have worked on similar projects in the past• working with another agency on a project can be quite rewarding, but requires a good relationship and shared commitment

6.1.7 A Real World Example in Proposing

Getting Funding to Build a House: Project Management in Practice

Like any project, building a house requires money. Except for those with very large bank accounts, some or all of the money will need to be provided by someone else.

Lola needs a sense of the effort and cost of building a house before she can find the money as well as a very good case for why she needs the money.

Wisely, Lola began to think about these details long before she was ready to apply for funding. She even wrote a detailed description about the house she would like to build, noting which features she felt she absolutely must have and those which she felt would be nice but could be left out if needed.

Lola knows that if she gets the money, she won't be able to go back and ask for more if she runs out. So she carefully calculates the cost – she talks to contractors, researches the cost of building supplies and talks to friends who have built their own houses. Using this information, she makes a list of the work that will need to happen to build her house and determines the approximate cost to build the house. She also calculates the cost of other related expenses such as moving or buying new furniture to fit the new living room. Once she's done, she adds an extra 20% to her estimate because she knows that she may not have thought of everything and wants some room for error.

Lola also knows that there may be additional expenses to run her new house after it's built, including a higher monthly payment amount on the loan than she currently pays on her mortgage. The last thing she wants is to build a house and then not be able to afford to keep it, so she adds a little extra to her calculation to cover these additional expenses.

With no rich uncles in sight, Lola applies for a bank loan to get the money she needs. The loan officer is very impressed with the work Lola has put into her application and approves the loan, but unfortunately it's for a somewhat smaller amount than Lola requested.

Lola is a little disappointed, but because she's thought long and hard about what her house would look like and understands the costs involved, she easily revises her plan to fit the budget. She decides that the guesthouse and third bathroom are niceties, not necessities, and removes these from the plan. This reduces the cost to her budget, and she will also look into green energy rebates to see if she can get some revenue elsewhere.

Armed with a basic plan for her house and the funds she needs to build it, Lola is ready to move forward!

6.2 Plan

6.2.1 What is the Purpose of this Phase?

The main goals of the Plan phase are:

- to confirm the scope, budget and schedule for your project,
- to refine the approach described in the proposal,
- to confirm the members of your project team and help them to understand their roles in the project, and
- to create a plan for evaluating your project, and

During the Plan phase you begin with the proposal you wrote for the project, and flesh it out into a more concrete plan for how you will complete the project. This will include:

- confirming that the scope, budget and schedule you created in the Propose phase are still realistic or that there have been no changes requested by the funder,
- further defining and making adjustments to the scope, budget or schedule as you make it more detailed, and
- filling in any gaps in information that wasn't needed for the proposal (e.g., naming individuals who will be filling the roles on your project).

While at this point the Plan phase may seem like a repeat of the Propose phase, the differences are in the details.

During the Plan phase you're not just making an initial outline for a project as you did in the Propose phase – you're making a detailed, concrete plan that you intend to follow throughout the rest of the project. This will include developing more specific plans for managing the various factors that will impact your project, such as change, communication and risk.

Project managers use this plan to help keep the project on track and to plan the next steps for the project.

A good project manager will use the plan proactively – monitoring it regularly, anticipating when the scope, budget or schedule may be heading off track and making the necessary adjustments before that happens.

The work you do during the Plan phase will shape the rest of your project, and can make the difference between success and failure.

6.2.2 When Does this Phase Start?

The Plan phase starts as soon as your proposal is approved for funding. Because it is such an important phase, you should begin the Plan phase as quickly as possible after your funding is approved so that you'll have enough time to properly complete each activity before moving to the Design phase.

To begin this phase, you will need the following resources created during the Propose phase:

- the approved proposal and a list of any changes that were agreed to with the funder,
- the Project Overview Statement,
- the work breakdown structure,
- the budget, and
- the roles and responsibilities chart.

6.2.3 When Does this Phase End?

The Plan phase officially ends when the Project Charter is approved by the Project Sponsor or Steering Committee.

Unofficially, you shouldn't consider the phase to be completed until you're confident that:

- the plan you've created (particularly the Project Overview Statement, budget and schedule) is complete and realistic, and
- the project team you've brought together understands the goals and activities for the project and they're ready to begin work in earnest.

6.2.4 What is Created During This Phase?

Product / Service	Description	Tool / Template
Project Charter	<ul style="list-style-type: none"> • outlines the goals, scope, approach and participants in the project • helps ensure that everyone who is involved in a project understands the project's purpose, constraints and planned approach • also used as a reference throughout the project to help keep the project on track 	Project Charter
Schedule	<ul style="list-style-type: none"> • a detailed list of all of the activities that are required to complete the project and the dates on which they're expected to begin and end 	Schedule
Budget	<ul style="list-style-type: none"> • a modified version of the budget that was submitted in the project proposal 	Budget
Roles and Responsibilities Chart	<ul style="list-style-type: none"> • outlines the people involved in the project, the role(s) they play and their responsibilities on the project • includes both those who are on the project team and other stakeholders (e.g., Advisory Committee members) 	Roles and Responsibilities Chart

6.2.5 What Steps are Taken During This Phase?

Step	Description	Tool / Template
Confirm scope	<ul style="list-style-type: none"> review and revise the outline of the prioritized scope created during the Propose phase ensure that the scope will be clear to all project stakeholders (e.g., Advisory Committee members) note that only minor changes should be made to the scope at this point unless you have approval from the funders 	Project Overview Statement
Create evaluation plan	<ul style="list-style-type: none"> create a plan for evaluating the project indicating what will be measured, when and how evaluation will be done and any materials (e.g., surveys) that need to be created plan should reflect the funder's evaluation requirements and additional evaluation (e.g., actual project costs vs. budget) that will help you in future projects ensure that evaluation activities are included in your schedule and budget 	Evaluation Plan
Create schedule	<ul style="list-style-type: none"> modify the Work Breakdown Structure created in the Propose phase to include start and finish dates it is important to be realistic but generous with your dates – as with effort and cost, many activities will take longer than you will expect; include extra room for other commitments, illness, etc. 	Schedule

Step	Description	Tool / Template
Form project team	<ul style="list-style-type: none"> review the roles required for the project and identify individuals or agencies that can fill those roles identifying individual team members and communicating roles and responsibilities to them includes signing of contracts with external individuals or agencies who will be working on the project as well as team member agreements with internal staff who will be working on the project also includes forming the Steering Committee and Advisory Committee, if applicable 	Roles and Responsibilities Chart
Confirm budget	<ul style="list-style-type: none"> review and revise the budget created during the Propose phase should be in a format where you can easily track actual and remaining expenses against the budgeted amount if your revised budget exceeds your funding, you will need to reduce expenses, reduce your scope or reduce the amount of effort spent on some activities in your schedule 	Budget
Create Charter	<ul style="list-style-type: none"> use the information included in the proposal plus the revised Project Overview Statement, schedule, budget, roles and responsibilities chart to create the charter fill in project management-related sections (e.g., risk) based on past experiences and the experiences of others Charter should be formally approved by the Project Sponsor or Steering Committee 	Project Charter

Step	Description	Tool / Template
Orient project team	<ul style="list-style-type: none"> • have each member of the team review the Project Charter • then meet to discuss, focusing on the scope, schedule and budget • encourage the team to offer feedback and revise the Charter accordingly before submitting it for approval 	n/a

6.2.6 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • formed during this phase, if needed • approves the Project Charter
Project Sponsor	<ul style="list-style-type: none"> • names a Project Manager, assigns each step to her or him and reviews her or his work • is ultimately responsible for the contents of the Project Charter and related documents and the performance of the Project Manager • also responsible for forming and coordinating the Steering Committee and Advisory Committee, for contracting external individuals or agencies and for managing any funding-related issues, if applicable
Project Manager	<ul style="list-style-type: none"> • writes the Project Charter • named by and reports to the Project Sponsor • completes each step in the Plan phase with support from the Project Sponsor
Project Team	<ul style="list-style-type: none"> • named by and reports to the Project Manager • reviews and provides feedback on the contents of the Project Charter and related documents • commits to adhering to their roles and responsibilities as specified by the Charter

Person/Group	Role
Advisory Committee	<ul style="list-style-type: none">• formed during this phase, if needed• reviews and provides feedback on the Project Charter
Other Individuals or Agencies	<ul style="list-style-type: none">• may:<ul style="list-style-type: none">• be asked to join the project team or a Committee, or• be consulted by the Project Manager when she or he is creating the Project Charter

6.2.7 A Real-World Example

Planning To Build A House: Project Management in Practice

Lola is on cloud nine. She has a loan from the bank to build her house, and a solid outline of what each feature will cost and what work needs to be done.

She's tempted to dive right in, calling an architect and asking him to draw up the plans. But she knows that before she does anything else, she needs to come up with a more detailed plan for building her house.

And it's a good thing she did! While creating a building schedule, she realizes that she had only budgeted for two painters, but that she would need four painters if she wanted the painting to be done before her intended move-in date.

Lola realizes that if she hadn't have stopped to develop the more detailed plan, her house probably wouldn't have been fully painted by the time she was planning to move in. She looks at the rest of her plan and determines that she can solve the problem by hiring 3 painters, buying a slightly cheaper paint and doing some of the painting herself.

Once she has this sorted and feels confident about her plan, Lola gets in touch with the contractors that she'd like to have working on her house. She meets with each, explains the work that she needs the contractor to do and gets each contractor's commitment through a signed contract detailing the work, timeframe and costs that have been agreed to.

But there's another snag – the contractor Lola had in mind to build the stairs in her house isn't available when she needs him. Lola reviews her schedule and knows she can't afford to delay this work, so she calls another contractor recommended by a friend. This new contractor's estimate for the stairs is higher than her first choice, but she knows she can accommodate this in the 20% cushion she included in her budget so she hires the new contractor.

Lola now has a schedule and revised budget for building her house, an understanding of what needs to be done to pass the building code inspection and has gained firm commitment from a team of contractors. She gathers the various pieces of her plan into a binder for easy reference, takes a deep breath, and begins thinking about her next steps.

6.3 Create

6.3.1 What is the Purpose of this Phase?

The main goals of the Create stage are:

- to design the products or services that your project is intended to create,
- to have the design reviewed and approved,
- to create the products or services,
- to review and revise the products or services, and
- to have the products or services approved for delivery.

In the Create phase the project team shifts from preparation and planning of the project to the actual designing and building of the products and services.

“Designing the product” is really just a way to say that you need to identify the particular needs that the product will meet as well as describing the product that you will create to meet those needs. During the Propose and Plan phases, you created a Project Overview Statement that provided a high-level description of why you are doing the project as well as what you were going to create to meet the need. Designing the product takes this high-level description and makes it much more detailed.

Let’s look at an example. You are creating a new curriculum and training materials to increase employability of literacy learners. This would be your Project Overview Statement in a nutshell. During this phase, you need to make that much more detailed. What literacy level is the audience? What training materials will you create? How many classes will be in the course? How will you make people aware of the new curriculum and train them on it? Designing a product takes the high-level project overview statement and makes them into much more detailed descriptions of the product.

The design step is important because it:

- provides a clear direction and shared vision for those who are creating the product or service,
- helps to ensure that the end result will address the need or opportunity that is driving the project and the expectations of those who will use it,
- helps to identify any potential roadblocks that must be resolved before the product or service can be completed, and
- enables one to revisit the project schedule and budget to determine whether the product being designed can be delivered within budget and schedule

Once design has been completed and the product developed, the phase ends with product review and revisions. The purpose of review is to ensure that the product is of good quality, will meet the needs of the people who will use it, and is fully completed. The review process will depend greatly on the nature of the product or service. Reviewing a new curriculum may include piloting the curriculum with some test users. Reviewing a research study may involve meeting with other researchers who can provide an informed opinion of the study. Whatever technique used to review the product, it is an important step in ensuring quality delivery.

Most of the above work will be conducted by the project team. So what does the project manager do? He or she actively monitors the project during this phase – making sure that the amount of effort spent on activities matches what was estimated, that risks and issues are being identified and addressed, that communication is working effectively, and so on, and making adjustments as needed to keep the project on track. These processes are described more fully in Section 6, the chapter on project management processes.

6.3.2 When Does this Phase Start?

The Create phase officially starts when the Project Charter is approved by the Project Sponsor or Steering Committee.

At this point, the following resources should be complete, approved and available to the project team:

- an overview of the scope of the project
- a project budget
- a project schedule (including estimates on the amount of effort required for each activity),
- a plan for managing the project (e.g., managing risk, communication, etc.), and
- a plan for evaluating the project

And most importantly, your project team should be assembled and ready to begin work, including having any contracts with outside individuals or agencies finalized.

6.3.3 When Does this Phase End?

The Create phase ends when the products or services that the project is intended to create are completed, reviewed and ready to be delivered to the people who will use them – either as a pilot program or as the final version.

6.3.4 What is Created During This Phase?

Product / Service	Description	Tool / Template
Design Requirements	<ul style="list-style-type: none"> identifies the specific needs that the product or service should address, in greater detail than the Project Charter helps to constrain the design and keep it focused on addressing the original need or opportunity 	N/A
Design Specifications	<ul style="list-style-type: none"> illustrates what the products or services will contain and how they will work 	N/A
Review Plan	<ul style="list-style-type: none"> outlines how you will review the products or services before you deliver them and the markers of quality that they need to achieve 	N/A
Delivery Plan	<ul style="list-style-type: none"> outlines how you will deliver the products or services after they are designed, created, tested and approved; see Section 5.5.1 for more information on delivery 	N/A
Product or Service	<ul style="list-style-type: none"> a resource that addresses some need or opportunity that the project is intended to create most projects involve the creation of multiple, related products or services you should focus on creating the products or services in order of priority in case constraints prevent you from creating all of them 	N/A

6.3.5 What Steps are Taken During This Phase?

Step	Description	Tool / Template
Research needs	<ul style="list-style-type: none"> determine the specific needs that the products or services should address, and effective approaches to use helps to ensure that your products or services will more effectively meet the needs of those who will use them research can be done through focus groups, interviews, journal reviews, etc. consists of documenting the requirements and specifications of the design requirements should focus on the needs that must be met (the “what”) 	N/A
Design products or services	<ul style="list-style-type: none"> specifications should focus on how the requirements will be met by the product or service (the “how”) it is crucial that the requirements and specification focus on what was promised (and approved) in the proposal; you may come up with brilliant new ideas during this step, but if you include them in the design you will be at serious risk of going over budget or over schedule ensure that your design is approved by the Project Sponsor or Steering Committee; it is much faster and cheaper to change a design than it is to change a finished product or service! 	N/A

Step	Description	Tool / Template
Design review plan	<ul style="list-style-type: none"> • create a plan for how you are going to review your products and services before delivering it, including how you plan to address any feedback from the review • the plan should be realistic in terms of scope and timeframe • the goal for review is to be able to confidently say when it is complete that the products or services are going to work well and meet the needs they were intended to meet 	N/A
Design Deliver phase	<ul style="list-style-type: none"> • develop a plan to deliver the products or services to their intended users • also includes planning any change management and sustaining activities that are included for your project • may also include plans to pilot the product or service before officially delivering it 	N/A
Confirm work plan	<ul style="list-style-type: none"> • review the schedule to see if the effort spent to date and the ending dates for each project task matched what was estimated • if the efforts and/or ending dates do not match your estimates (which they often don't), you will need to revise the remaining schedule and determine any impact on your budget or scope; see Section 6.4 for more information • it is important to do this step before creating the products or services so you can ensure you have enough time left to create them as designed 	Schedule

Step	Description	Tool / Template
Confirm budget	<ul style="list-style-type: none"> it is important to confirm your budget before you begin to create the products or services. Now that you have designed them in a more detailed fashion, you will have a better idea of how much effort and cost they will be. You may need to reduce the scope to meet your budget or request a budget increase. remember that by this time in the project, you will already have consumed money in the planning and design phases. You need to consider this when re-evaluating your budget! 	Budget
Create products or services	<ul style="list-style-type: none"> use the approved design specifications to create your products or services remember to create the products or services in order of priority again it is important that the project team follow the design specifications closely and avoid making additions or changes 	n/a
Test products	<ul style="list-style-type: none"> use your test plan to test the completed products or services be prepared for negative feedback; it happens in every project (or at least it should if testing is done properly) you should carefully consider each recommendation made by the testers and then do one of the following: <ul style="list-style-type: none"> make the recommended change, note the recommended change as something that should be done as a new project (pending new funding, of course), or decide that the change isn't worth making before making any changes, you need to consider the impact on the remaining project; see Section 6.5 for more information 	Test plan

6.3.6 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • approves the Design Requirements and Design Specifications • approves the final products or services after testing is completed • approves any major changes that need to be made to the project plan or design
Project Sponsor	<ul style="list-style-type: none"> • is ultimately responsible for the contents of the Design Requirements, Design Specifications, Delivery Plan and Test Plan and for the final products or services that are created • also responsible for the management of the scope, budget and schedule by the Project Manager • continues to coordinate the Steering Committee and Advisory Committee and helps to manage any contract- or funding-related issues, if applicable • approves any major changes that need to be made to project plan or design during review or to products and services after testing
Project Manager	<ul style="list-style-type: none"> • coordinates the work of the project team in completing each step in the Create phase • also coordinates other individuals or agencies as needed for research and testing • closely manages the scope, schedule and budget of the project; see Section 6 for more information
Project Team	<ul style="list-style-type: none"> • works under the direction of the Project Manager to complete each step of the phase • supports the Project Manager by providing information needed to manage the project (e.g., effort spent on an activity, issues that would prevent an activity from being completed on schedule)
Advisory Committee	<ul style="list-style-type: none"> • reviews and provides feedback on the Design Requirements, Design Specification, Delivery Plan, Test Plan and final products or services • may also participate in research and testing activities, by providing information or acting as testers

Person/Group	Role
Other Individuals or Agencies	<ul style="list-style-type: none"> • may: <ul style="list-style-type: none"> • provide information when the project team is doing research • test and provide feedback on the created products or services

6.3.7 A Real-World Example

Building a House: Project Management in Practice

Lola is excited and nervous. She's ready to begin building her house, but knows that she will need to be careful if she wants it finished on time and within budget. But she also knows she's done the planning she needed to do, so she's confident that she can handle any bumps that come up along the way.

She meets with her architect to create the detailed blueprints. She knows how many rooms she wants and the basic layout, but the architect helps her identify her more detailed needs. Does she like to exercise? Will she need an exercise room? Will this room have hardwood floors or carpet? Does she like a lot of light? Should the house have skylights? The architect is researching and identifying her needs so that he can create the best design for her and her family.

After the architect creates the blueprints for the house and confirms the costing, Lola realizes that the design is costly than her budget allows. She needs to make some hard decisions on how to reduce scope while still meeting her family's overall needs. She eliminates the skylights from her design and plans for larger windows instead. She splits the exercise room in two, and uses the other half for her workshop. Lola has reduced the scope to meet her budget, and will still be able to meet her project outcomes – having a safe and comfortable space for her family.

After the architect makes changes to the blueprints to accommodate her changes, Lola delivers copies of the drawings to her contractors and asks them to take a few days to review them. After asking some questions and addressing some issues, they are ready to begin building.

Lola makes good use of the time. She needs to know more about the building code inspections her house will need to pass, and meets with an inspector to learn exactly what codes will apply and how they are tested. This helps her to review the work that is being done to ensure that it will pass the final inspection. Once the house is finished, she will call the inspector for the final review and approval of the house.

She also comes up with a plan for moving her and her family into the house, including a back-up plan in case there are any delays. Her transition plan is ready to go.

6.4 Deliver

6.4.1 What is the Purpose of this Phase?

The main goals of the Deliver stage are:

- to pilot the product or service (if applicable),
- to revise the product or service based on the results of the pilot project (if applicable),
- to deliver the product or service to its intended users
- to assist the intended users in learning how to use the product or service

By the time you reach this phase, much of the work is done, but it is not quite over yet!

The Deliver phase is all about getting your products or services to the people who will ultimately use it. The key is to do so in the most effective way possible – one that will ensure that your products or services continue to be used after the project is over. Many excellent products and services sit and get dusty on a shelf because they weren't delivered well.

There are many, many different ways to “deliver” your product. That is, there are many ways to ensure that your product or service is distributed and used by people in the literacy sector. It depends on the nature of your project. Delivery for a new curriculum might mean training the literacy agencies who will use it. Delivery for a research study might be presentation at a conference. What is the most effective way to deliver your project?

We have included some standard steps in this phase to provide you with an idea of how a project is typically delivered, but this is where the art of project management and delivery comes in. You need to decide what's best for you! We would like however to highlight two very important considerations:

- Organizational change management – Introducing a new product or service to an organization (or sector) requires more than simply developing it and handing it over. Part of delivery needs to be a consideration of how the product or service will impact the organization and how you can make it easier for them to adopt it. Otherwise, even the best product or service will go unused.
- Sustainability – Similarly to organizational change management, creating the product or service is not typically enough. You need to consider how the product or service will be maintained in the future. Does it require money to maintain? How will it continue to be distributed? These are just a couple of the questions that need to be addressed when you plan for the future of your product or service.

Of course any method of delivery will take time, effort and money, and so hopefully you have factored this into your scope, budget, schedule in the project proposal and Project Charter. You should also have developed a plan for delivering your products or services during the Create phase. So at this point all that should be left to do is to put that plan into action!

6.4.2 When Does this Phase Start?

The Deliver phase starts when the all of the products or services that your project is intended to create are created, reviewed and approved.

6.4.3 When Does this Phase End?

The Delivery phase will end once each of your products or services has been delivered to the users who intend to use it.

This includes any training, organizational change management, or other transition activities required to successfully introduce the product or service to the organization or sector.

6.4.4 What is Created During This Phase?

The products and services created during this phase will vary from one project to another, but may include:

Product / Service	Description	Tool / Template
Pilot	<ul style="list-style-type: none"> allows your products or services to be test-driven by a small group of users before it is officially launched includes training and evaluation activities 	n/a
Sustainability Plan	<ul style="list-style-type: none"> identifies how you plan to ensure that the products or services will continue to be used after the project ends, including: <ul style="list-style-type: none"> how the products or services should be worked into the users' current day-to-day activities how you plan to provide additional materials when they are needed (e.g., copies of a curriculum) any additional support that you will provide users after the project ends (e.g., additional training for new users) 	N/A

Product / Service	Description	Tool / Template
Transition Activities	<ul style="list-style-type: none"> any activities that help users to put your products or services to use includes training as well as any other work that needs to be done to assist users and to overcome barriers to using the products 	N/A

6.4.5 What Steps are Taken During This Phase?

The steps taken during this phase will also vary from one project to another, but may include:

Step	Description	Tool / Template
Pilot products or services	<ul style="list-style-type: none"> arrange for a small group of users to use the products or services as a trial the purpose of piloting is to have users provide feedback which you can use to improve the products or services before you deliver it to all of its intended users the activities for piloting your products or services should be reflected in your Project Overview Statement, budget, schedule, evaluation plan and test plan 	Evaluation Plan
Adjust products or services	<ul style="list-style-type: none"> use the feedback from the pilot to make minor, impactful changes to your products or services feedback that suggests major changes should be saved for a separate project unless the products or services will not work as intended as-is note that the results of your pilot will likely need to be included in your evaluation report 	Test Plan
Deliver products or services	<ul style="list-style-type: none"> make your products or services available to all intended users 	n/a

Step	Description	Tool / Template
Transfer knowledge	<ul style="list-style-type: none"> train users on how to use your products and services and provide any other information they may need to use them after the project is finished 	Delivery Plan

6.4.6 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> informed of the results of the pilot, if applicable may approve release of the products or services after the pilot is complete informed of the delivery of the products or services
Project Sponsor	<ul style="list-style-type: none"> is ultimately responsible for the pilot, training and delivery of the products or services, including any additional transition or sustainability activities that are done also responsible for the management of the scope, budget and schedule by the Project Manager continues to coordinate the Steering Committee and Advisory Committee and helps to manage any contract- or funding-related issues, if applicable approves any changes that are to be made need to products or services after pilot, if applicable
Project Manager	<ul style="list-style-type: none"> coordinates the work of the project team in completing each step in the Deliver phase also coordinates other individuals or agencies as needed for piloting, revising after pilot, delivering and transferring knowledge continues to closely manages the scope, schedule and budget of the project; see Section 6 for more information

Person/Group	Role
Project Team	<ul style="list-style-type: none"> works under the direction of the Project Manager to complete each step of the phase supports the Project Manager by providing information needed to manage the project (e.g., effort spent on an activity, issues that would prevent an activity from being completed on schedule)
Advisory Committee	<ul style="list-style-type: none"> informed of the results of the pilot, if applicable may review any planned changes to the products or services as a result of the pilot and/or the products or services after they have been revised informed of the delivery of the products or services
Other Individuals or Agencies	<ul style="list-style-type: none"> may: <ul style="list-style-type: none"> participate in the piloting of the products or services be users of the products or services participate in training, knowledge transfer and sustainability activities

6.4.7 A Real-World Example

Moving In To A New Home: Project Management in Practice

The hard work is done, but Lola wants to make her family's move into their new home as painless as possible.

She knows her house was well-built, but also knows that once her family and all of their furniture have been moved in, it will be an inconvenience if she has to make any kind of minor repairs or adjustments.

She had decided when first planning to build the house that she would spend a week in it herself, with just the bare essentials, to get a feel for it. If there were any problems that she could fix, she'd know she'd much rather not have to work around furniture to do it.

Lola's caution is rewarded – she finds that there is a bit of a draft coming in around the window in her son's bedroom that she hadn't noticed before, and there's an annoying rattle in the bathroom plumbing that can only be heard when the house is quiet. She brings a contractor back to make the repairs. Once finished, the house is ready.

Long before deciding to build the home, Lola sat down with each member of her family and talked about what the new house would mean to them. She asked for their opinions on what the house should look like, and while she led the show, she made sure each of them felt involved and informed throughout the process.

Because of this, Lola wasn't nervous when she introduced her family to their new home. She knew they were going to love it. She even makes a bit of ceremony of it, having her youngest son cut the ribbon she placed across the front door and letting her oldest son open the door. Lola gives her family a guided tour, showing them each nook and cranny and explaining where she's picturing the furniture will go. Her excitement and enthusiasm is shared. Everyone is excited about the house and looking forward to living there.

Shortly after the grand tour their furniture arrives, and after a few hectic days of unpacking, arranging and rearranging, everything is in order. Lola and her family are home.

6.5 Close

6.5.1 What is the Purpose of this Phase?

The main goals of the Close stage are:

- to complete the evaluation report for funders (if applicable),
- to complete an internal evaluation of the project,
- creating an archive of your project documents, and
- to get final approval from the funders and the project sponsor that the project is

The Close phase of a project is often given short shrift. In fact, unless the project team is required to submit an evaluation report to the project's funder, some projects don't even have a recognizable Close phase.

But from a project management perspective, this is a big loss. In addition to meeting any evaluation needs from the funders and getting approval that the project is completed, the Close phase also gives the project team a valuable opportunity to:

- reflect on and learn from any successes during the project (e.g., finishing the project ahead of schedule),
- learn from any mistakes that were made, opportunities that were missed or ,
- document these lessons in a way that can be easily referenced in the future,
- create an archive of information and templates which can be reused or repurposed for other projects, and

In addition, doing this kind of internal project evaluation can help to build confidence for future projects among funders and other key stakeholders because you'll be able to speak with authority about what worked well and how you'll make improvements next time.

While the results can be quite valuable, an internal evaluation does not need to be time-consuming or complex. The key to successfully evaluating your project is to get feedback from each member of the project team (and others who were involved, if applicable), and to put the lessons learned into a form that can be easily referenced and shared in the future.

If you have to submit an evaluation report to funders as part of your project, you may find that part of their report focuses on lessons learned. However an internal project evaluation should be more detailed in this area, focusing on specific decisions that were made or activities that were performed instead of the broader context or more general examples.

Another important step in the Close phase is to archive your project documents for future reference. The key to doing so is organization – having all of the documents in one place (whether that be a binder or a folder on your computer) and organized in a way that you can quickly find information in the future. Reusing the content or structure of previous project documents can be a great time-saver, and few things are more frustrating in a project than trying to find a document and not being able to do so.

Collectively, the steps involved in the Close phase help you to not only wrap up your project, but will help you to capture the knowledge and experience you gained in a useful way. While every new project will have its challenges and surprises, the work you do in the Close phase can help you to minimize their impact and frequency, and help to ensure that each project is more successful than the last.

6.5.2 When Does this Phase Start?

The Close phase does not start until you have delivered all of the products or services created through your project to their intended users, and any training or change management activities have been completed.

6.5.3 When Does this Phase End?

The end of the Close phase marks the end of your project. A project is considered closed when:

- the evaluation report(s) are completed
- all project documentation is archived
- the project has been approved by the Project Sponsor and the funder

6.5.4 What is Created During This Phase?

The products and services created during this phase will vary from one project to another, but may include:

Product / Service	Description	Tool / Template
Evaluation Report	<ul style="list-style-type: none"> • addresses the funder's needs for project evaluation, if applicable • completed using the Evaluation Plan created during the Plan phase as a guide 	Evaluation Report
Lesson Learned Report	<ul style="list-style-type: none"> • documents the evaluation of the report by the project team • may or may not be shared with stakeholders outside of the project team 	Lessons Learned Report

Product / Service	Description	Tool / Template
Archive	<ul style="list-style-type: none"> an online or printed collection of all relevant project documents for use in future projects 	n/a
Approvals	<ul style="list-style-type: none"> written confirmation from the funder and/or project sponsor that the project is complete and can be closed 	Project Approval

6.5.5 What Steps are Taken During This Phase?

Step	Description	Tool / Template
Evaluate outcomes	<ul style="list-style-type: none"> review the funder's evaluation report template and determine what information needs to be provided, if applicable review your project deliverables and meet with project team members as needed to gather the needed information note that some funders do not require that an evaluation report be submitted, and note that the level of detail and formality of the evaluation will vary from one funder to another; if you're unsure, it's best to ask the funder before proceeding 	Evaluation Plan

Step	Description	Tool / Template
Evaluate project	<ul style="list-style-type: none"> to do an internal evaluation of the project, you should begin by compiling a list: <ul style="list-style-type: none"> review the Project Overview Statement in your Project Charter and identify any areas where the finished product didn't meet the intended scope, review your project's estimated vs. actual budget and schedule and indicate areas where your project was over or under the estimates, identify what went well during the project and what could have gone more smoothly, review the feedback received from review (and the pilot, if applicable) to identify any quality or design issues that affected the project's products or services 	Evaluation Plan
Create report(s)	<ul style="list-style-type: none"> complete and submit the evaluation report requested by the funder, if applicable use the feedback from your review of the project materials and meeting with your team to create an easy-to-reference guide to use for future projects 	Evaluation Report Lessons Learned Report
Submit and archive documents	<ul style="list-style-type: none"> gather all of the relevant materials created during your project into one place organize the materials in such a way that it can be easily referenced in the future by you or others an archive can be created with printed copies in a binder, but it's better to use electronic files burned onto a CD or stored on a server so you can email or copy-and-paste from these files as needed 	Delivery Plan

6.5.6 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> may approve the evaluation report before it is submitted to funders may have a representative sign the approval document to confirm that the project is closed
Project Sponsor	<ul style="list-style-type: none"> is ultimately responsible for the evaluation report for funders and other work done to close the project continues to coordinate the Steering Committee and Advisory Committee and helps to manage any contract- or funding-related issues, if applicable signs the approval form to confirm that the project is closed and/or gets approvals from the Steering Committee and funder
Project Manager	<ul style="list-style-type: none"> coordinates the work of the project team in completing each step in the Deliver phase typically takes a lead role in reviewing project materials for evaluation and archiving materials and securing approvals to close the project continues to closely manages the scope, schedule and budget of the project; see Section 6 for more information
Project Team	<ul style="list-style-type: none"> works under the direction of the Project Manager to complete each step of the phase supports the Project Manager by providing information needed to manage the project (e.g., effort spent on an activity, issues that would prevent an activity from being completed on schedule)
Advisory Committee	<ul style="list-style-type: none"> may review the evaluation report for funders and/or the internal evaluation report informed when all approvals have been given and the project is closed
Other Individuals or Agencies	<ul style="list-style-type: none"> may: <ul style="list-style-type: none"> participate in the evaluation of the project by providing information or insight

6.5.7 A Real-World Example

Closing the House Building Process: Project Management in Practice

The house is built. Lola and her family have moved in and are settled comfortably. After many months of hard work, Lola would very much just like to rest and enjoy her new home. But she there are a few more things she should do before she considers the house finished.

First, she makes an appointment with the woman who arranged her loan at the bank. Lola meets with the woman and tells her that the house is finished. It was built on time and budget and, despite a few surprises, went smoothly. Lola even brings some photos of the house to show the woman. Lola's excitement about the new house infectious, and she knows that the loans officer is likely to give her another loan in the future.

Lola learned a lot about building along the way. She takes some time to think about and write down these valuable lessons. She organizes these along with all other documentation (such as the blueprints, the inspection, and so forth) and stores them in a safe place for future reference. She will share these with her friends who are also planning on building in the future.

With the t's crossed and the i's dotted, Lola knows her work is done. She feels good knowing that she's built a beautiful house, that it didn't destroy her credit rating or her sanity in the process. She looks around at her home, smiles to herself and knows that her and her family will enjoy the house for years to come.

7 Managing a Project (How)

7.1 What is a Project Management Process?

Understanding the lifecycle of a project is only half of the equation. To manage a project successfully, you also need to understand the various processes that can affect each phase.

In project management, a **process** can be defined as an action taken to either plan or control the delivery of a project.

In an ideal world, every project would exactly follow the plan you create. The project would be finished on time and on budget, delivering the expected products or services as they were expected to be delivered. There would be no nasty surprises, illnesses or competing priorities. Everything would run perfectly.

Sadly, it is not an ideal world and a project without challenges is a rare, if not mythical event. To help those of us in the real world, project management processes have been developed to help navigate through the changes, delays, and surprises you will have to face.

In project management, the lifecycle is the “what” – i.e., what steps a project follows from Propose to Close. The processes which are described in the remaining sections of this methodology are the “how” – i.e., how you manage a project to ensure the lifecycle steps are done and are done correctly.

More specifically, project management processes are used to:

- plan the initial scope, schedule, budget and team for the project, and
- to help deal with any issues that threaten or require a change to that plan.

7.2 What are the Project Management Processes?

As with the lifecycle model, there are several different process models that can be used for project management.

This methodology has again taken the main concepts from these other models and tailored them to fit the needs of literacy projects. The end result is a set of straight-forward processes that you can use to manage most any challenge that you may encounter in a project.

Whether your project is small or large, complex or simple, these processes will always apply. You may need to tailor them somewhat to fit your own project, but nonetheless you are encouraged to follow them in some fashion to ensure success ... or at least a really good try!



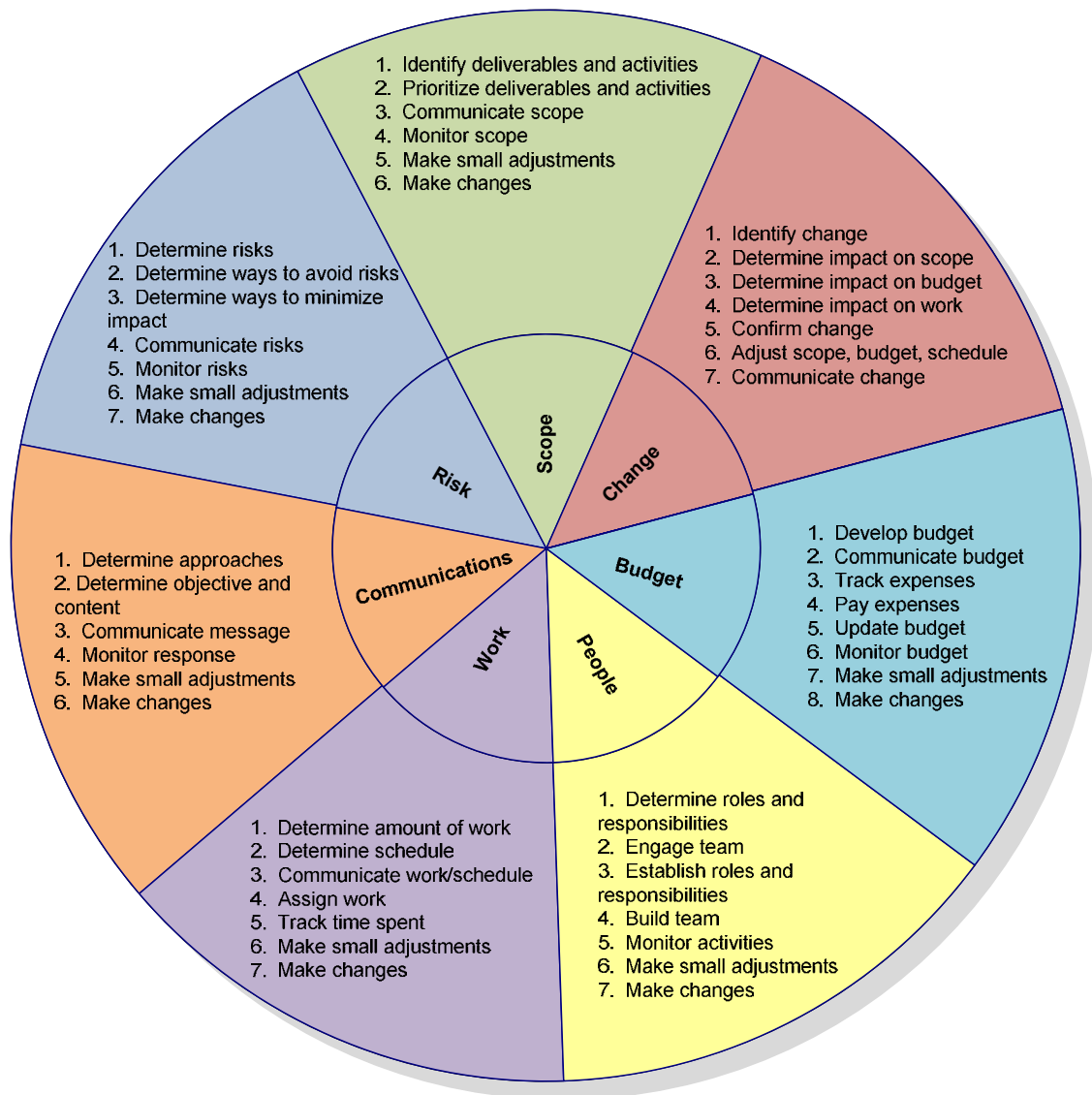
There are **seven** different categories of processes used in this methodology:

Process	Description
Scope	Scope processes are actions taken to define the scope of the project and ensure that the end result matches the original expectations and the project's objectives.
Change	When an issue comes up that is significant enough to require a change to the scope, budget and/or schedule of a project, Change processes are used.
Budget	Budget processes help you to define the budget for a project and to control that budget.
People	Use of People processes help you to manage all of the people and organizations involved with your project, including the project sponsor, the steering committee (if applicable), and members of your project team.
Work	Work refers to all of the effort that is put into a project. You will use Work processes to assign activities to members of your project team, and to ensure that the amount of time and effort used to complete those activities will keep your project on schedule and on budget.
Communication	Communication happens throughout life of a project, in both formal and informal ways. Communication processes help to ensure that the information you send out is relevant, beneficial and appropriate.
Risk	All projects have which can jeopardize the success of the project. Risk processes will help you to identify these risks and to develop plans to avoid or reduce the impact of these risks.

7.3 What Are the Steps in Each Project Management Process?

The processes can be broken down into steps, similarly to the project lifecycle, to help you in moving through each process. We introduce them below, but there a more comprehensive description follows in the next chapter.

The steps are:



Project managers often think of each step as belonging to one of four groups, based on when they occur during the project lifecycle and whether they are repeated. Understanding these groupings will help you to know when you will need to use each step when managing your project.

The steps of course vary from process to process, but can be categorized into one of the following broad areas:

Group	Description
Planning	Steps that are used to come up with the initial project plan. Planning steps are completed once per project.
Initiating	Steps for putting the initial project plan into action and/or communicating it to the relevant stakeholders. Initiating steps are also only done once per project.
Monitoring and Controlling	Steps for ensuring that your project is on track and for making minor adjustments as needed. Monitoring and controlling steps should be done throughout the project.
Changing	Steps for changing one or more parts of the initial project plan because it is no longer valid. Changing steps may be needed throughout the project.

7.4 Why Do the Lifecycle Model and Process Model Overlap?

You may have noticed that some of the processes listed above overlap with the steps that are outlined in the Lifecycle section of this methodology. That is because the Planning and Initiating steps of the project management processes occur during the Propose and Plan phase of the project lifecycle. Once the project is well underway, you will be focused not on planning but on monitoring and controlling the project and responding to required changes.

For example, in the Propose and Plan phase of the project, you will develop the project budget and refine it. While delivering the project, you will be focused on monitoring and controlling the budget, and making changes as needed.

8 Detailed Description of the Project Management Processes

The previous section introduced you to the concept of project management processes and identified the process areas and steps. This section will describe those processes in greater detail as well as identifying some of the tools and templates that can help you as you work through your project.

8.1 Scope

8.1.1 What is the Purpose of Scope Management?

The purpose of scope management is:

- to define a scope that meets the project's objectives,
- to ensure that the project team delivers the scope as defined,
- to ensure that the products or services created are of good quality,
- to manage requests from external stakeholders (e.g., funders) to change the project's scope, and
- to change the scope when it is required.

8.1.2 Overview of Scope Management

8.1.2.1 Planning

The scope of a project is the products and services that will be created during the course of the project as well as the activities required to create those (including project management activities!).

When defining the scope, you should list all products and services that are to be created plus any project key activities that are required to create those. This will help to ensure that everyone involved in the project has the same understanding, and that activities like evaluation aren't forgotten.

Almost as important as defining what is in the scope of a project is defining what is out of scope. Projects have often run into difficulty because the project manager and funder had different assumptions about what would be included in the scope, so you should list any relevant activities, materials or products and services that won't be included in your project. Examples may include French translation, a pilot project or ongoing support for a product or service after it has been delivered.

8.1.2.2 Initiating

Communicating the scope of a project in a clear and concise way is essential. Countless discussions have occurred where one or more people didn't clearly understand what was going to be delivered by the project.

Outlining the scope clearly in a project charter is a good first step, but you should also meet with your project team, the Steering Committee and other key stakeholders to review the scope before the project charter is approved. This will give you a chance to address any questions, concerns or confusion, and help to ensure that everyone is working with the same shared understanding and expectations.

8.1.2.3 Monitoring and Controlling

Scope changes are often required when a project's activities take longer than estimated, which results in not having enough time to complete the activities listed later in the schedule.

For project managers, monitoring and controlling the scope of a project is best done using the project's work breakdown structure and schedule. These documents can help you to make sure that your team is working on the appropriate activities at the appropriate time and in the appropriate way. They will also help you to determine when an activity is taking longer than expected, giving you an opportunity to make adjustments (e.g., helping the person find ways to work faster or splitting the remaining work between two people) before it becomes a bigger issue and requires a change in scope.

Another important aspect of managing scope is ensuring that the products or services that are good quality and accurately reflect what you set out to do in the first place. This is best done once the product or service is completed, by a person or group (e.g., the Advisory Committee) who is familiar with the objectives of the project and the subject matter. And as part of the review, you must be prepared to make minor or even major changes to the products or services in order to address any concerns. Remember though that quality is a constraint for the project. If you have to make a significant quality change, it may impact your schedule or budget!

8.1.2.4 Changing

Changes to the scope of a project generally have the biggest impact on the overall perception of the success of the project. If you've promised to deliver *x*, *y* and *z* for a project, but only end up delivering *x* and *y*, people may think of your project as a failure even if *z* wasn't that important. And if you need to add something new to the scope after the proposal has been approved, it can put the whole project in jeopardy unless carefully managed.

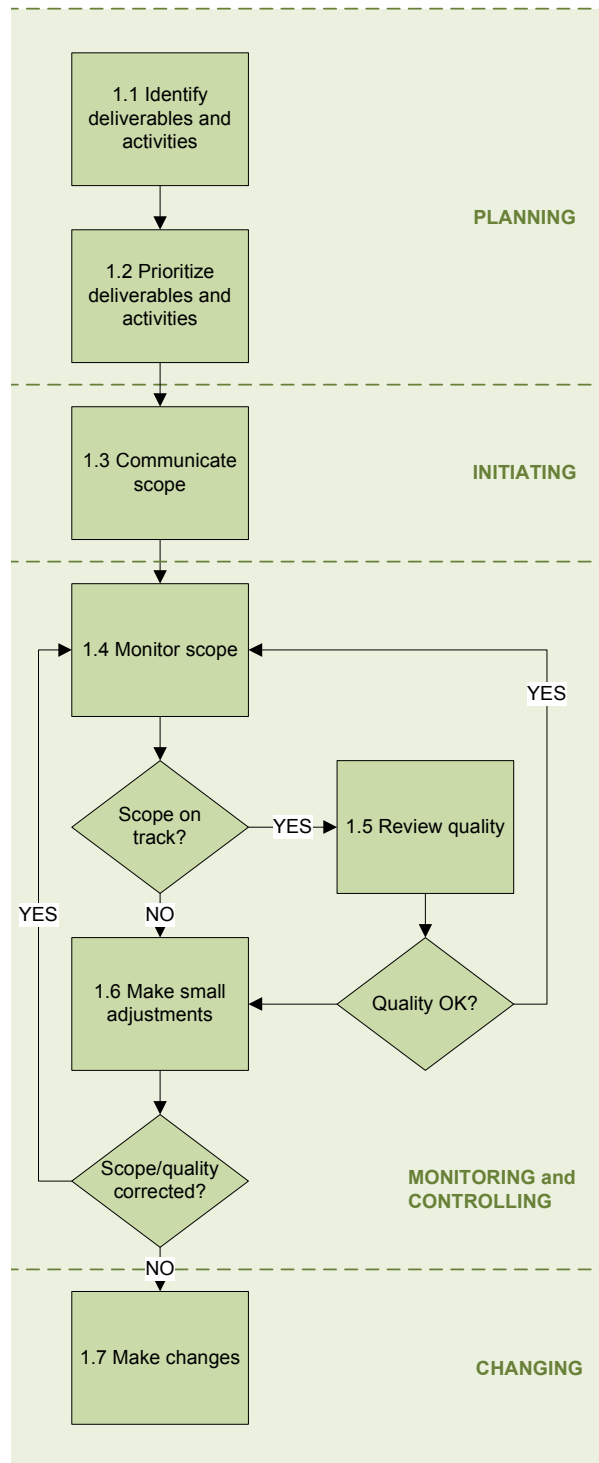
For those reasons, it is very important to ensure that your scope is realistic given your project's timeframe, budget and other constraints you have planned. It's better to deliver a smaller project on time and on budget than it is to try and deliver a big project but not be successful.

But changes to the approved scope may be unavoidable, so it is crucial that everyone involved in the project understand what the change is, how it impacts the project's schedule, budget and products and services, the reason that the change is being made and the value of doing so.

And you should communicate any changes to scope both through a change request document and by meeting with stakeholders – by making sure that everyone has a good understanding of the change and how it affects the rest of the project, you’ll be more likely to get agreement and approval on it.

8.1.3 What Are the Steps?

8.1.3.1 Diagram



8.1.3.2 Description of Steps

Process	Steps	Tool / Template
1.1 Identify deliverables and activities	<ul style="list-style-type: none"> determine the high-level and detailed list of products or services, project materials and activities that will be needed to complete your project performed during the Propose and Plan phases 	Project Overview Statement Work Breakdown Structure Proposal Project Charter
1.2 Prioritize deliverables and activities	<ul style="list-style-type: none"> prioritize the high-level and detailed lists based on expected value and funder priorities performed during the Propose and Plan phases 	Project Overview Statement Work Breakdown Structure Proposal Project Charter
1.3 Communicate scope	<ul style="list-style-type: none"> communicate and ensure understanding of the scope to key stakeholders, especially project team members performed during the Propose and Plan phases 	Proposal Project Charter
1.4 Monitor scope	<ul style="list-style-type: none"> review products or services, project materials and activities being performed to ensure that they are in line with the approved scope and project objectives done on a regular basis, i.e., daily or weekly performed during the Create, Deliver and Close phases 	Project Charter
1.5 Review quality	<ul style="list-style-type: none"> have each product or service peer reviewed as it is completed, with focus on: <ul style="list-style-type: none"> accuracy, completeness, if it meets the intended objectives, and 	Project Charter

	<ul style="list-style-type: none"> • appearance • performed during the Create and Deliver phases 	
1.6 Make small adjustments	<ul style="list-style-type: none"> • make minor course corrections as needed to the work being done to keep the overall project on track • performed during the Create, Deliver and Close phases 	Work Breakdown Structure Products or Services
1.7 Make changes	<ul style="list-style-type: none"> • make more significant changes to the project plan to address an issue which threatens the project being completed on time, on budget or to scope • performed during the Create, Deliver and Close phases • see Section 6.3 for more information on change management 	Change Request

8.1.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • approves the Project Charter • approves change requests
Project Sponsor	<ul style="list-style-type: none"> • is ultimately responsible for the scope management activities of the Project Manager • coordinates the Steering Committee and Advisory Committee as needed for scope management and helps to manage any contract- or funding-related issues, if applicable • approves change requests
Project Manager	<ul style="list-style-type: none"> • performs all scope management activities • also coordinates the project team and other individuals or agencies as needed for scope management • responsible for creating and maintaining all scope-related project materials

Project Team	<ul style="list-style-type: none"> • works under the direction of the Project Manager to complete scope-related activities • may do quality reviews of products or services • supports the Project Manager by providing information needed to manage the scope of the project
Advisory Committee	<ul style="list-style-type: none"> • reviews and provides feedback on the Project Charter • may do quality reviews of products or services • reviews and provides feedback on change requests
Other Individuals or Agencies	<ul style="list-style-type: none"> • may support the Project Manager in scope management activities • may do quality reviews of products or services

8.1.5 A Real-World Example

Managing Scope: Project Management in Practice

After the foundation of Lola's house had been built, materials for the framing, plumbing and electrical began arriving by the truckload and work began in earnest.

After the workers roughed in the frame for the master bedroom, Lola saw that this would not allow adequate room for a closet in the hallway. She looked at the blueprints, and the room had been built to size, but the hallway closet now seemed too small. She asked the builders to move the wall back about a foot so that the closet could be a little bigger. This small scope adjustment right at the beginning was made with minimal effort and added no cost to the budget. Had she made this change later in the process, or made a more significant change, she would have likely needed to initiate a change management process to determine the impact of the change on her budget and the building schedule.

8.2 Change

8.2.1 What is the Purpose of Change Management?

The purpose of change management is:

- to identify how changes to a project's scope, budget or schedule will affect other aspects of the project,
- to get approval for making a change from funders and other key stakeholders,
- to adjust the project's scope, budget, schedule and work based on the change, and
- to communicate the change and its impacts to the project team and other stakeholders.

8.2.2 Overview of Change Management

8.2.2.1 Planning

Few project managers are lucky enough to create a project plan that doesn't require some changes along the way. Change is an inevitable part of most projects, because there's no way for a project manager to predict all of the different factors that could affect the project.

Project changes can generally be grouped into one of three categories:

- changes from within the project (e.g., the deliverable does not quite meet the need and needs to be adjusted),
- changes from outside of the project (e.g., a funder asks you to change the products or services after funding has been approved), or
- miscalculations made during the planning phase (e.g., you underestimated how long it would take to complete an activity).

You will likely have to deal with changes from all three of these categories during any given project. By understanding project management processes, you'll have the tools and knowledge necessary to understand, watch for and address these changes if and when they occur.

The key is to be prepared to make changes. Inexperienced project managers often ignore signs that a change is needed, hoping for a miracle or that the problem will just resolve itself. This rarely happens, and minor issues that only require a minor adjustment can quickly balloon into a major problem that requires a major change to the project plan. You will save yourself and your project team a lot of stress,

and help to keep the project successful, by dealing directly with major or minor changes as soon as you see that they are needed.

Once you have determined that a change is needed, you will need to look carefully at how the change would affect the project's scope, schedule and budget. Usually a change to any one of these constraints will require a change to at least one of the others, if not all three. When a change is unavoidable, it is the project manager's job to determine how the change can be made with the least amount of impact on the rest of the project.

8.2.2.2 Initiating

While change in a project is usually unavoidable, be cautioned that people often expect that changes can be made to the scope of a project without affecting its schedule or budget. This is known as "scope creep", and can quickly challenge any seasoned project manager. The changes are often minor, but a few minor changes can quickly add up to a large impact on your budget or schedule!

By dealing with changes using a formalized process, you will be able to understand the impact of the change and make an informed decision about whether you should make the change. It also enables you to put the processes in place to officially change the schedule or budget, and communicate these changes so

For this reason, you should complete a change request for any change that affects a project's overall scope, budget or schedule, and have that change request approved by the Project Sponsor, Steering Committee and funder.

8.2.2.3 Monitoring and Controlling

Understanding why a change was needed is as important as how you manage the change itself.

For example, if an activity took much longer than estimated and it throws off your schedule, talk to the people involved and figure out why it took longer. Did you underestimate the amount of effort? Was the activity more complex than you expected? Was the person working on it unsure of how to do it?

Once you determine the reasons why a change is needed, you should use this knowledge to resolve future issues. This may include revising estimates, adding or removing activities or reassigning work for the remaining project.

You should then adjust the project plan to reflect its impact on the scope, schedule and/or budget of the project. This is known as "rebaselining" and will help everyone involved in the project to understand how the project will proceed after the change is made.

8.2.2.4 Changing

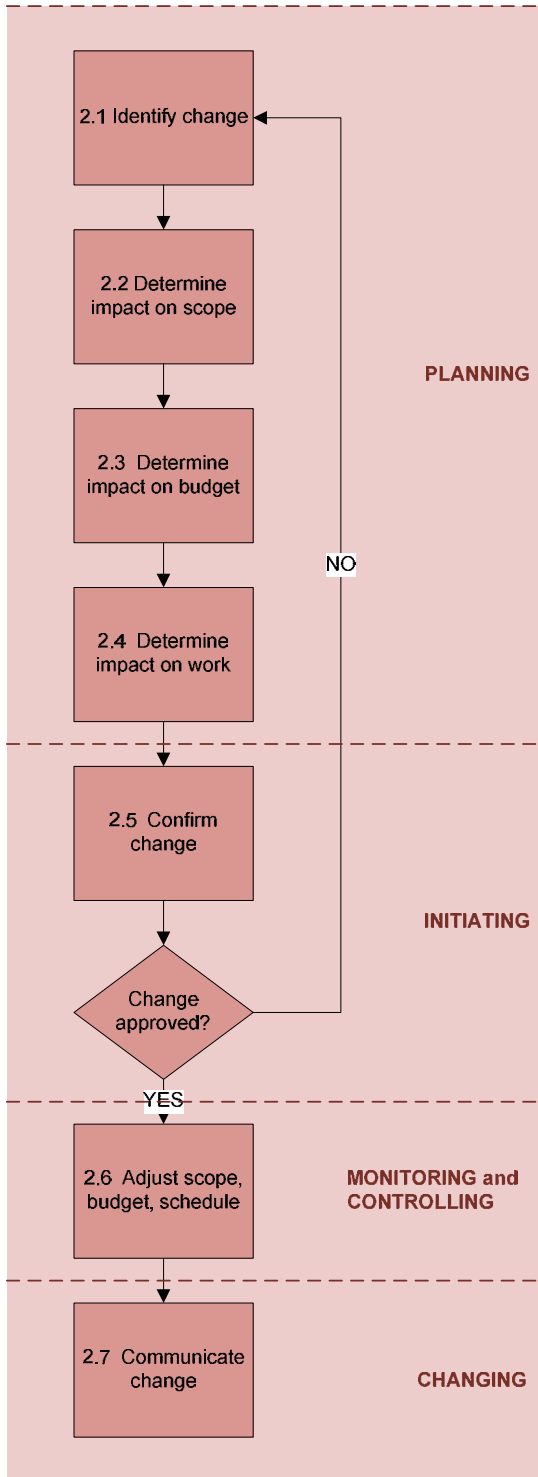
It is important that any changes to a project are communicated once they are approved.

For most changes, this can be done by meeting to review the approved change request and showing the effects of the change in your next status report. For major changes, where multiple, significant changes have been made to the scope, budget and/or schedule, you should also revise the project charter and have the new version approved.

The key to making any change is to make sure that everyone understands the impact of doing so, and that they adjust their understanding of the project accordingly.

8.2.3 What Are the Steps?

8.2.3.1 Diagram



8.2.3.2 Description of Steps

Process	Steps	Tool / Template
2.1 Identify change	<ul style="list-style-type: none"> determine the full extent of the change and the reason for it if the change is being caused by an external stakeholder (e.g., a funder), confirm that no other changes are expected 	Change Request
2.2 Determine impact on scope	<ul style="list-style-type: none"> detailed review of the scope to see how each product or service will be affected by the change you may need to remove one or more of the lower priority products or services to accommodate the change 	Project Charter Change Request
2.3 Determine impact on budget	<ul style="list-style-type: none"> detailed review of the budget to see how each line item will be affected by the change include any additional changes you identified when reviewing the scope you may need to reduce project costs in other areas to accommodate the change 	Budget Change Request
2.4 Determine impact on work	<ul style="list-style-type: none"> detailed review of the work breakdown structure and schedule to see how each activity and amount of estimated effort will be affected by the change include any additional changes you identified when reviewing the scope and budget you may need to delay delivery of products or services or decrease the amount of effort assigned to lower priority activities to accommodate the change 	Work Breakdown Structure Schedule
2.5 Confirm change	<ul style="list-style-type: none"> document the change and its impact on the project's scope, budget and work review the document with the project sponsor, the Steering Committee (if applicable) and the project's funders, and ask for approval of the change and associated changes to the scope, budget and work 	Change Request

2.6 Adjust scope, budget, schedule	<ul style="list-style-type: none"> • if the project sponsor and funders approve the change request, revise the project overview statement, budget and schedule • if the change has a significant impact on the scope, budget and/or schedule for the project, you should revise the Project Charter and get approval of the new version 	Project Overview Statement Budget Work Breakdown Structure Schedule Project Charter
2.7 Communicate change	<ul style="list-style-type: none"> • send the revised project materials and change request to affected stakeholders and explain the reason for and effect of the change • spend additional time discussing the change with affected project team members and be sure that they understand the change and how it impacts their work 	Project Overview Statement Budget Work Breakdown Structure Schedule Project Charter

8.2.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • approves the change request • approves the revised Project Charter, if applicable
Project Sponsor	<ul style="list-style-type: none"> • is ultimately responsible for the change management activities of the Project Manager • coordinates the Steering Committee and Advisory Committee as needed for change management and helps to manage any contract- or funding-related issues, if applicable • approves change requests and the revised Project Charter, if applicable

Project Manager	<ul style="list-style-type: none">• performs all change management activities• also coordinates the project team and other individuals or agencies as needed for change management• responsible for creating and maintaining all change-related project materials
Project Team	<ul style="list-style-type: none">• works under the direction of the Project Manager to complete change-related activities• supports the Project Manager by providing information needed to manage changes to the project
Advisory Committee	<ul style="list-style-type: none">• reviews and provides feedback on change requests• reviews and provides feedback on the revised Project Charter, if applicable
Other Individuals or Agencies	<ul style="list-style-type: none">• may support the Project Manager in change management activities

8.2.5 A Real-World Example

Managing Change: Project Management in Practice

Lola worked very hard on her plan for building her house, and felt quite confident that she was prepared for anything that might occur.

But it wasn't long after the workers started to dig out the foundation that Lola heard the words that no project manager likes to hear: "we have a bit of a problem."

And no amount of planning could have prepared Lola for what the problem was – a two ton rock right where her laundry room was supposed to go. The contractors had the equipment they needed to remove smaller rocks, but they were not prepared for something this big.

Lola had two options:

1. She could reposition her house on the land to avoid the rock, which would require new surveys and another meeting with the architect, or
2. She could find some way to move the rock, which would mean renting a new piece of equipment.

Lola had to act quickly because she had expensive contractors sitting around, but she also wanted to make an informed decision. First, she talked with the contractors to see what they recommended. Next, she made some phone calls to determine how long each option would take, and how much it would cost. Finally, she looked closely to see how each option would affect the rest of the project, and if other changes would need to be made to accommodate it.

Neither option was ideal, but hiring a crane to remove the rock was the cheapest and fastest way to go. It was an expense she hadn't planned for, and it meant that she wouldn't be able to afford a new washer and dryer as she had planned. But her old washer and dryer still worked pretty well, and she knew that giving up one of the little luxuries she had planned was a much better option than having a laundry room with a giant rock in the middle of it.

Unfortunately, there was one lesson Lola had to learn the hard way – that even the most carefully planned and managed project will hit a few roadblocks along the way.

8.3 Budget

8.3.1 What is the Purpose of Budget Management?

The purpose of budget management is:

- to develop a detailed budget for the project,
- to ensure that actual costs stay within budgeted amounts,
- to manage requests from external stakeholders (e.g., funders) that will impact the project's budget,
- to change the budget when it is required.

8.3.2 Overview of Budget Management

8.3.2.1 Planning

Literacy projects typically have a fixed budget, which makes budget management a very important part of this methodology.

Inexperienced project managers sometimes fall into the trap of giving cost estimates that they think the funder wants to hear, instead of estimates that they feel are realistic. Don't fall into this trap! If you think the budget you came up with for a proposal is too high, reduce the scope of your project first and then adjust the budget accordingly. Remember that once a budget is approved you will be obliged to meet it, and the best way to do so is to be realistic up front.

Staffing for a project is often the largest set of expenses in a budget, and it is also the most difficult to estimate and track. People rarely work as efficiently as we plan, and activities are often more complex than we anticipate. For this reason, you should always err on the side of caution when estimating people's time in your budget, and include a margin of error in your estimates.

8.3.2.2 Initiating

It is important that everyone involved in the project understand and appreciate a project's budget. This is particularly important for those doing the bulk of the work because the effort they spend on a project translates into a real cost to the project. You will need to be particularly vigilant on fixed-price projects because if you go over budget, you will not get any more money for the project.

So only should you review the budget with your project team, you should ensure that they take responsibility for ensuring that their work doesn't go over budget.

8.3.2.3 Monitoring and Controlling

Managing a budget doesn't have to be difficult or time-consuming. The key is to keep it up-to-date and to always have it in the back of your mind when discussing the schedule, scope or even the quality of the project. The more you can keep project costs top-of-mind for yourself and your team, the more likely you will be to finish the project on or under budget.

There is a good chance that you will need to make adjustments to your budget at least once to keep the project from going over budget. The easiest way to address small cost overruns is usually to reduce the time spent on any remaining, low priority issues or by dumping low-priority deliverables (but remember to get approval first!). Just be sure that you communicate this to your project team, and use it as an opportunity to stress why it's important that they be aware of and stick to the budget.

8.3.2.4 Changing

In most projects, changing the budget is the most difficult change to make. You may get your funder to agree to reducing the scope, or extending the delivery date, but asking for more money is rarely well-received.

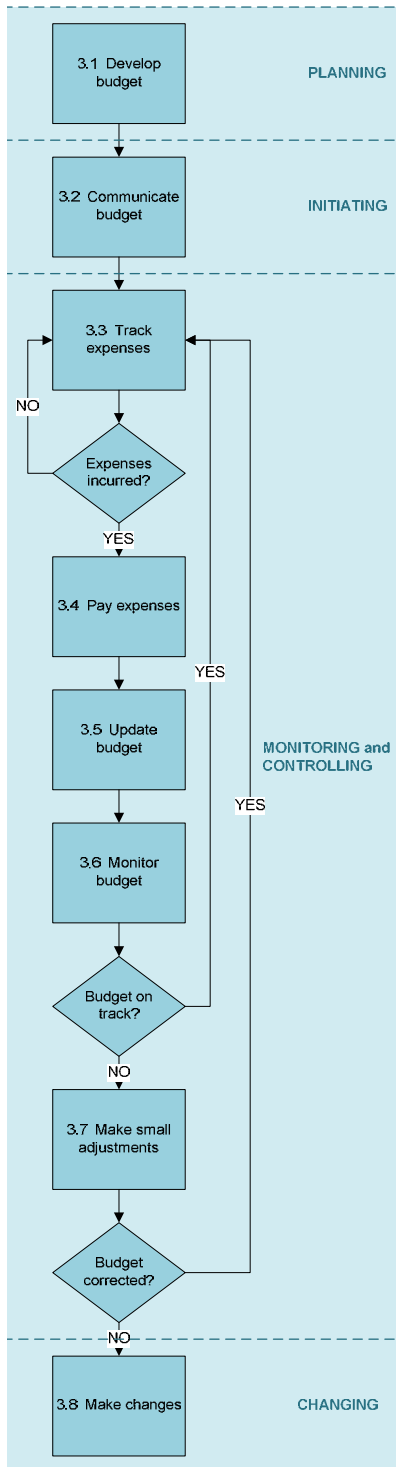
The key to avoiding budget changes is to be proactive.

You may be able to avoid needing to change the budget by catching and addressing small overages before they turn into a bigger problem.

If the change is because the funder or someone else has requested that you increase the scope, be proactive in letting them know the impact on the scope and schedule before saying yes. Often, once people understand that a change will come at a cost, they decide it's not so important after all and that it can either wait until another project or not be done at all.

8.3.3 What Are the Steps?

8.3.3.1 Diagram



8.3.3.2 Description of Steps

Process	Steps	Tool / Template
3.1 Develop budget	<ul style="list-style-type: none"> determine the high-level and detailed costs of staff, materials, equipment and other expenses required to complete your project performed during the Propose and Plan phases 	Proposal Budget Project Charter
3.2 Communicate budget	<ul style="list-style-type: none"> communicate and ensure understanding of the budget to key stakeholders emphasize the importance of not exceeding the budget for project team members; encourage each member to be responsible for ensuring their costs don't exceed the budgeted amount performed during the Propose and Plan phases 	Proposal Budget Project Charter
3.3 Track expenses	<ul style="list-style-type: none"> review and ensure that expected costs do not exceed actual costs before the expenses are incurred for staffing costs, ask team members to confirm that the estimated effort for an activity is realistic before they begin the work performed during the Plan, Create, Deliver and Close phases 	Budget
3.4 Pay expenses	<ul style="list-style-type: none"> pay expenses as they are received to avoid interest penalties performed during the Plan, Create, Deliver and Close phases 	Budget
3.5 Update budget	<ul style="list-style-type: none"> update the budget with actual expense amounts as each expense is paid performed during the Plan, Create, Deliver and Close phases 	Budget
3.6 Monitor budget	<ul style="list-style-type: none"> each time an actual expense is added to the budget, compare it to the estimated amount and note if it was on, over or under budget also note any expenses which weren't in the original 	Budget

	<p>budget</p> <ul style="list-style-type: none"> performed during the Plan, Create, Deliver and Close phases 	
3.7 Make small adjustments	<ul style="list-style-type: none"> make minor course corrections as needed to the budget, work, schedule or products and services to keep the overall project on track performed during the Plan, Create, Deliver and Close phases 	<p>Budget</p> <p>Work Breakdown Structure</p> <p>Schedule</p> <p>Products or Services</p>
3.8 Make changes	<ul style="list-style-type: none"> make more significant changes to the budget to address an issue which threatens the project being completed on time, on budget or to scope performed during the Plan, Create, Deliver and Close phases see Section 6.3 for more information on change management 	<p>Change Request</p>

8.3.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> approves the Project Charter approves change requests
Project Sponsor	<ul style="list-style-type: none"> is ultimately responsible for the budget management activities of the Project Manager coordinates the Steering Committee and Advisory Committee as needed for budget management and helps to manage any contract- or funding-related issues, if applicable approves change requests

Project Manager	<ul style="list-style-type: none">• performs all budget management activities• also coordinates the project team and other individuals or agencies as needed for budget management• responsible for creating and maintaining all budget-related project materials
Project Team	<ul style="list-style-type: none">• works under the direction of the Project Manager to complete budget-related activities• supports the Project Manager by providing information needed to manage the project budget
Advisory Committee	<ul style="list-style-type: none">• reviews and provides feedback on the Project Charter• reviews and provides feedback on change requests
Other Individuals or Agencies	<ul style="list-style-type: none">• may support the Project Manager in budget management activities

8.3.5 A Real-World Example

Managing Budget: Project Management in Practice

Lola worked with dozens of different contractors and placed orders with several suppliers. While it was fairly easy to get accurate estimates on supplies, having the contractors provide, and stick to, estimates for their time proved much more challenging.

Lola encountered a variety of contractors during the process. Some who came armed with a contract, outlining in detail the work that would be done and the cost. A few asked to be paid under the table, and wouldn't commit to anything in writing. But most fell somewhere in the middle – they agreed to sign a contract, but didn't seem overly committed to finishing the work for the estimate or timeframe that had been given.

Lola rose to the challenge. She decided she would only work with contractors who were willing to sign a contract, and that she would work closely with each to make sure they would finish on time and on budget. It was a challenge, and it frustrated more than one contractor, but Lola's positive attitude and encouragement helped smooth things over.

And her effort paid off. Most of the contractors finished on time and their invoices didn't exceed the original estimate. A few even finished under budget. There was only one contractor that went over budget, but it was for legitimate reasons and the contractor had discussed it with Lola before he did the work.

It wasn't the most fun part of the process, but by carefully managing the budget she had created Lola was able to complete her house as she had planned it and without needing to find additional money to pay for it.

8.4 People

8.4.1 What is the Purpose of People Management?

The purpose of people management is:

- to determine each role that will be needed for the project, and the responsibilities of the person who will be in that role,
- to ensure that each person or agency understands their role and responsibility on the project and any project changes which may affect their work,
- to monitor how team members are working individually and as a group, and
- to make changes to the project team when it is required.

8.4.2 Overview of People Management

8.4.2.1 Planning

It's clichéd, but people really are the heart of a project. You can have the best budget and schedule ever created, but if you don't have a good, dedicated team working on your project, you're going to struggle.

Planning for the project team entails ensuring that you understand the roles and responsibilities of the team members and are able to find people who are able to provide those skills. Sometimes, the project manager inherits the people on his or her team, and has little say about who they are. However, try as possible to ensure that the skills of the team members are matched according to the role that they will play.

8.4.2.2 Initiating

As project manager, it is up to you to ensure that your team members also understand their roles and responsibilities. This goes beyond just stating their titles and the products or services they need to create – it also involves helping them to understand their responsibility for the success of the project in meeting its goals and objectives.

By making people feel like they are a valued member of a team, instead of people who have been assigned a job, you will help to ensure that they stay dedicated to the project.

A project team, like an organization or a family, develops its own style and personality. As a project manager, you should work to shape that style and personality into a healthy team by encouraging respect, open dialogue and support.

8.4.2.3 Monitoring and Controlling

Once your team begins working on the project, you should be checking in with them on a regular basis to ensure that they are:

- completing their assigned activities,
- producing quality work within the effort and cost you expect, and
- working in a way that supports the rest of the team.

The key to good people management is to use your soft skills. As a project manager you will need to guide your team, encourage them, support them during stressful times and maybe even act as a mentor to them. They will be looking to you for leadership, and it will be up to you ensure your team stays motivated, positive and engaged.

It's how you manage the people on your team, not what you do to manage them, that is most important. Recognize when problems with an individual or within the team are starting to occur, and work with those involved to find a solution that keeps them happy and keeps your project on track.

8.4.2.4 Changing

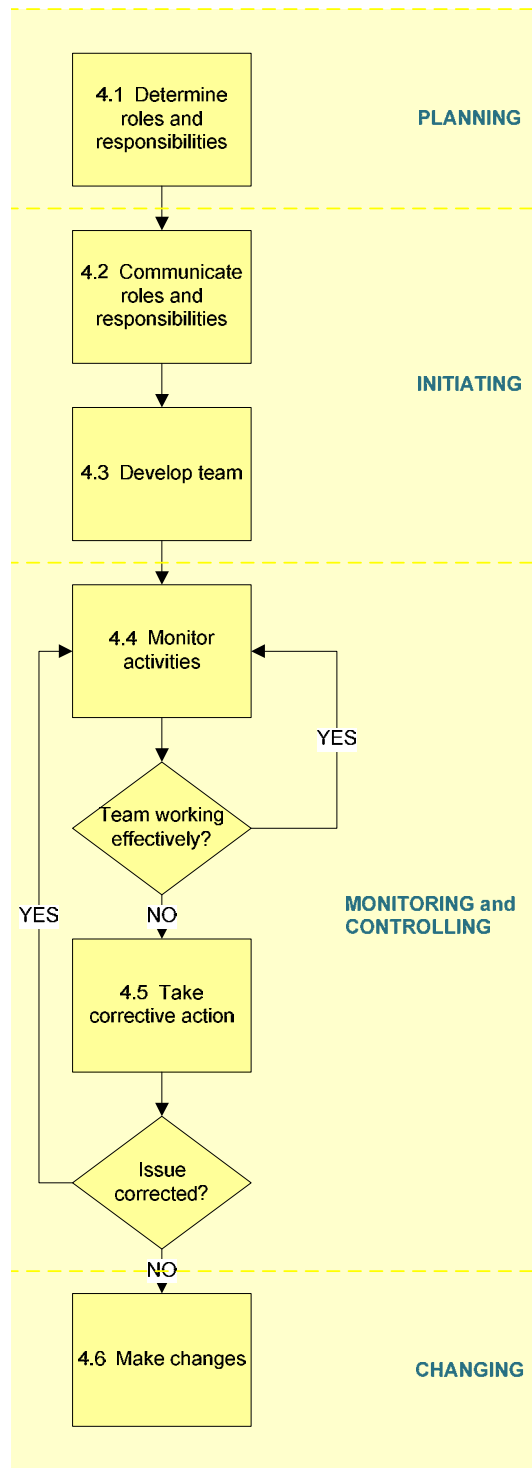
Making changes to your project team, or even a Steering Committee or Advisory Committee can be difficult. Not only will it likely require some confrontation, it may affect the morale of the rest of the team.

If someone is underperforming, or you realize that she or he been given more work than they can complete, you may need to reassign some of that person's work to another team member, or bring a new person in. In such cases, work with person to help them understand why the change is necessary, but put on a positive spin on it. It's much easier to hear "I've given you too much work so I want to bring someone over to help out" than to hear "You're obviously not going to be able to get this done so I'm giving most of it to Bill."

Similarly, if someone needs to be replaced on your team (either because they are leaving the project or because they're not performing), do it in a gentle way. Not only will this help the person you're replacing, it will help the rest of the team feel better about what has happened.

8.4.3 What Processes are Used?

8.4.3.1 Diagram



8.4.3.2 Description of Steps

Process	Steps	Tool / Template
4.1 Determine roles and responsibilities	<ul style="list-style-type: none"> determine the various roles that will be needed to plan, create, review and deliver the products or services for each role, identify the specific areas that the person or agency filling the role will be responsible for includes determining if your project needs a Steering Committee and/or Advisory Committee performed during the Propose and Plan phases 	Roles and Responsibilities Chart Project Charter
4.2 Engage team	<ul style="list-style-type: none"> approach people to fill the various roles you've identified if required, hire vendors and have them sign a services agreement performed during the Plan phase 	Project Charter Schedule
4.3 Establish roles and responsibilities	<ul style="list-style-type: none"> meet with team members and review their responsibilities and the project's objectives, scope, budget and schedule have each team member sign an agreement that they understand are committed to the project provide orientation to the project to the Steering Committee and Advisory Committee, if applicable performed during the Plan phase 	Project Charter Project Team Agreement
4.4 Build team	<ul style="list-style-type: none"> meet with team members on a regular basis (i.e., at least weekly) to discuss what they've been working on, how much they have left to do, how much effort they've spent and any issues that may prevent them from finishing the work on time and on budget encourage team members to share frustrations and concerns and celebrate major and minor accomplishments 	n/a

	<ul style="list-style-type: none"> mentor weaker team members as needed to help them to perform better performed during the Plan, Create, Deliver and Close phases 	
4.5 Monitor activities	<ul style="list-style-type: none"> review each team member's work and activities, both formally and informally watch for signs that the team member will take longer than expected to complete their work, that they're going off scope or that the quality of their work is not adequate also need to monitor the work (e.g., reviews and approvals) of the Project Sponsor, Steering Committee and Advisory Committee, if applicable performed during the Plan, Create, Deliver and Close phases 	Project Overview Statement Budget Schedule
4.6 Make small adjustments	<ul style="list-style-type: none"> make minor course corrections as needed to the work, schedule or products and services to keep the overall project on track may involve talking to one or more team members about work performance issues and working with them to find solutions performed during the Plan, Create, Deliver and Close phases 	Budget Work Breakdown Structure Schedule Products or Services
4.7 Make changes	<ul style="list-style-type: none"> make more significant changes to the project team to address an issue which threatens the project being completed on time, on budget or to scope may involve replacing a team member on a project or reassigning some of her/his activities to other people performed during the Plan, Create, Deliver and Close phases see Section 6.3 for more information on change management 	Change Request

8.4.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • approves the Project Charter • approves change requests
Project Sponsor	<ul style="list-style-type: none"> • is ultimately responsible for the people management activities of the Project Manager • coordinates the Steering Committee and Advisory Committee as needed and helps to manage any contract- or funding-related issues, if applicable • approves change requests
Project Manager	<ul style="list-style-type: none"> • performs all people management activities • also coordinates the project team and other individuals or agencies as needed for people management • responsible for creating and maintaining all staffing-related project materials
Project Team	<ul style="list-style-type: none"> • supports the Project Manager by providing information needed to manage the project
Advisory Committee	<ul style="list-style-type: none"> • reviews and provides feedback on the Project Charter • reviews and provides feedback on change requests
Other Individuals or Agencies	<ul style="list-style-type: none"> • may support the Project Manager in people management activities

8.4.5 A Real-World Example

Managing People: Project Management in Practice

Lola often talked with friends about the interesting crew she had assembled. The contractors she hired were all professionals, hired by Lola because of their experience, good references and willingness to commit to the work. But the personalities!

There were grumpy contractors that never smiled, contractors that got distracted easy, and contractors that always showed up 10 minutes late.

But there were also contractors who were a pleasure to work with, who smiled as they worked and obviously loved what they were doing.

Lola had previously worked as a manager and so she was used to working with a mix of personalities. And she knew the secrets to good people management – to have your people like you but still respect you, and to keep everyone motivated and committed to the work they were doing.

Lola used some old tricks to keep everyone happy – she brought donuts and coffee for the workers each morning, bought them the occasional lunch and thanked everyone regularly for the work they were doing. But she also made it clear that the work needed to be done ontime and within cost, and that if there were any issues, they needed to be flagged as soon as possible so that she could develop a plan to address them. Her approach worked well, and even the contractors who never smiled eventually warmed up to her.

For the most part the contractors worked well, but she did have to remind a few of their deadlines or get them to resolve issues with their work. She did so gently but firmly.

Lola considered her management of the contractors to be the most successful part of her house-building adventure.

8.5 Work

8.5.1 What is the Purpose of Work Management?

The purpose of work management is:

- to determine the activities that need to be performed for the project, and the expected amount of time and effort each activity will take,
- to ensure that each team member does the appropriate work at the appropriate time and within the expected amount of effort, and
- to change the activities, schedule or effort estimates when it is required.

8.5.2 Overview of Work Management

8.5.2.1 Planning

The term “work” is used in this methodology as a catch-all for the set of activities that must be performed in a project and the amount of effort used for each.

In order to successfully plan the work in a project, it is crucial that you first understand the other two constraints – scope and budget. A project’s scope and budget will define the work that can and must be done for the project, and help you to understand:

- the full set of activities that should be done to deliver the scope,
- how budget constraints will limit the work that you can realistically do for a project, and
- how changes to either the scope or budget will affect the work that needs to be done.

When first creating a work breakdown structure during the Propose phase, you may find that the number of days you’ll actually need to complete a project are significantly higher than you would have guessed. This is normal – most people tend to underestimate how long a project will take until they take a detailed look at all of the work that is involved.

However, if you find yourself in this situation you must resist the temptation to reduce the efforts you’ve assigned in the work breakdown structure. Trust your instincts and your experience. If you feel that the amount of work is too much, look for ways that you can eliminate some of the activities that are involved. You may also want to consider reducing the overall scope of the project, by removing some of the lower priority goods and services. Either approach is much better than knowingly underestimating the amount of work involved in a project.

8.5.2.2 Initiating

The importance of helping your team to understand and appreciate the scope and budget of the project, and their roles and responsibilities has already been stressed. But this information will be meaningless if they don't understand the work that they need to do.

This includes both the day-to-day tasks that each person will be working on and how those tasks fit together to meet the goals and objectives of the project as a whole.

By helping people to both understand and appreciate why their work is being done, and why their role in that project is important, there is a better chance that they'll do quality work, make informed decisions, provide useful feedback and stay motivated.

8.5.2.3 Monitoring and Controlling

"How's it going?" is a question often asked by project managers. And if you've worked with your team to create an open and trusting environment, you will usually get an honest response – even if it's one you don't really want to hear.

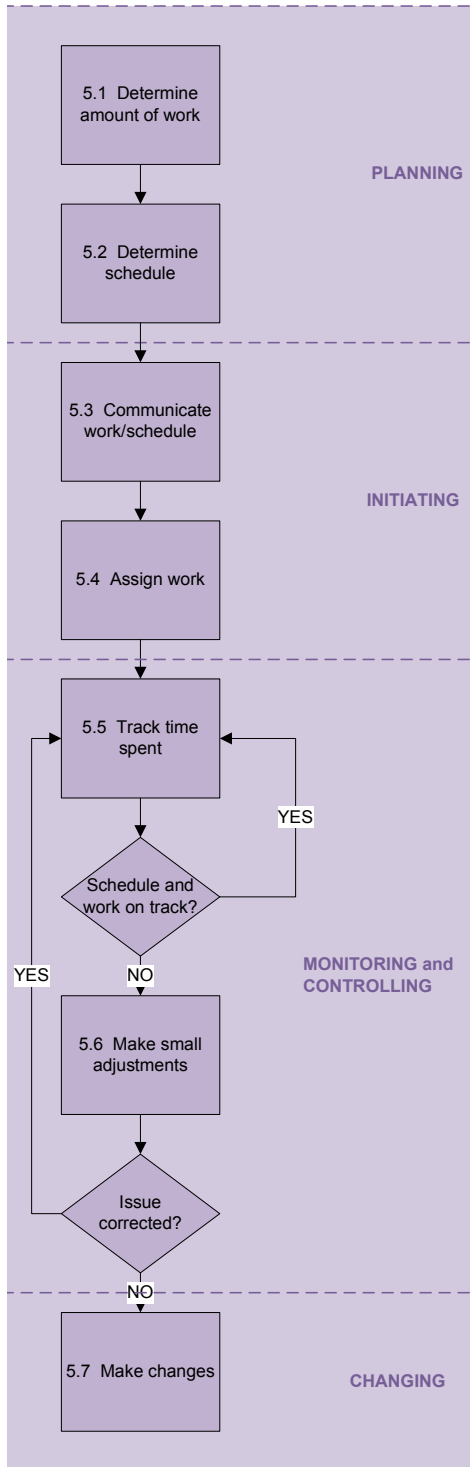
But be prepared to ask more specific questions about how the work is going, how much has been finished, how much time they've spent and if they have any concerns. People can sometimes be a bit too optimistic, and feel that they can recover from a delay or address an issue without help. You may have to pry a little to figure out how things really are going.

Most of this monitoring will be conducted during informal conversations with the person, but they should also occur in a formal environment such as a regular project team meeting. This will allow the entire team to understand how the project is going and work together to address issues that arise.

And like the scope and budget, it is important that you address a minor problem with the work being done before it gets bigger. For example, if a person is writing a document that doesn't really meet the goals of the project, it's better to find out after 5 pages than after 50. Often you can correct minor issues with the work being done by coaching the people involved and helping them to address the issues quickly and efficiently.

8.5.3 What Are the Steps?

8.5.3.1 Diagram



8.5.3.2 Description of Steps

Process	Steps	Tool / Template
5.1 Determine amount of work	<ul style="list-style-type: none"> determine the high-level and detailed activities required to complete your project estimate the number of hours it will take to complete each activity performed during the Propose and Plan phases 	Work Breakdown Structure Proposal
5.2 Determine schedule	<ul style="list-style-type: none"> begin by identifying the date on which the project will start and end for each activity in the Work Breakdown Structure, identify the date on which the activity should start and finish you will need to consider the following: <ul style="list-style-type: none"> activities that cannot start until other activities are finished (e.g., proofreading a document) activities that must start on a certain date (e.g., a meeting) activities that must be finished by a certain date (e.g., to meet a funder deadline) performed during the Propose and Plan phases 	Schedule Project Charter
5.3 Communicate work/schedule	<ul style="list-style-type: none"> communicate and ensure understanding of the schedule and the work to be performed to key stakeholders, especially project team members performed during the Plan phase 	Schedule Project Charter
5.4 Assign work	<ul style="list-style-type: none"> give detailed instructions on the next set of activities that each team member needs to do, and ensure they understand the amount of effort and completion dates that are expected activities should be assigned in groups that will take no more than two weeks to complete, or less for smaller projects or highly important or complex activities) 	Schedule

	<ul style="list-style-type: none"> performed during the Plan, Create, Deliver and Close phases 	
5.5 Track time spent	<ul style="list-style-type: none"> have each team member provide updates on the amount of time spent on each activity for each activity, compare these actual amounts of effort to the amount that was estimated done on a regular basis, i.e., weekly performed during the Plan, Create, Deliver and Close phases 	<p>Schedule</p> <p>Time Tracking</p>
5.6 Make small adjustments	<ul style="list-style-type: none"> make minor course corrections as needed to the work, schedule, budget or products and services to keep the overall project on track performed during the Create, Deliver and Close phases 	<p>Work Breakdown Structure</p> <p>Schedule</p> <p>Budget</p> <p>Products or Services</p>
5.7 Make changes	<ul style="list-style-type: none"> make more significant changes to the project plan to address an issue which threatens the project being completed on time, on budget or to scope performed during the Create, Deliver and Close phases see Section 6.3 for more information on change management 	<p>Change Request</p>

8.5.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> • approves the Project Charter • approves change requests
Project Sponsor	<ul style="list-style-type: none"> • is ultimately responsible for the work management activities of the Project Manager • coordinates the Steering Committee and Advisory Committee as needed for work management and helps to manage any contract- or funding-related issues, if applicable • approves change requests
Project Manager	<ul style="list-style-type: none"> • performs all work management activities • also coordinates the project team and other individuals or agencies as needed for work management • responsible for creating and maintaining all work- and schedule-related project materials
Project Team	<ul style="list-style-type: none"> • works under the direction of the Project Manager to complete work- and schedule-related activities • supports the Project Manager by providing information needed to manage the work breakdown structure and schedule
Advisory Committee	<ul style="list-style-type: none"> • reviews and provides feedback on the Project Charter • reviews and provides feedback on change requests
Other Individuals or Agencies	<ul style="list-style-type: none"> • may support the Project Manager in work management activities

8.5.5 A Real World Example

Managing Work: Project Management in Practice

Lola meets with the contractors bi-weekly to understand how they are progressing on their activities. This bi-weekly meeting allows her to identify issues with the contractors' ability to deliver on time and within budget. This is particularly useful to coordinate the plumbers, the carpenters, and the electricians. They all work on separate parts of the house, but their work is intimately intertwined and impacts one another. Without the project team meetings, Lola would have a much harder time resolving issues and ensuring that delays or overages in one area don't affect the others.

8.6 Communication

8.6.1 What is the Purpose of Communication Management?

The purpose of communication management is:

- to determine the different methods of communication that will be used for a project,
- to communicate in an effective way to the project team, funders and other stakeholders, and
- to change an approach being used to communicate when required.

8.6.2 Overview of Communication Management

8.6.2.1 Planning

Projects always involve more than one person. Even if the team is just one person, there are always other stakeholders involved. Good communication is crucial.

Project managers use communication to:

- help the funder understand the vision for the project,
- help the project team understand the work that they should be doing,
- help funders and other key stakeholders understand where the project is at, what work still needs to be done, and any issues that need to be resolved, and
- to get the information needed from other stakeholders to effectively manage the project.

Several different forms of communication are used for project management. It can be formal (e.g., a change request) or informal (e.g., an email or discussion over the water cooler), written or verbal. For important messages, project managers often use more than way of communicating the message – for example, calling the Project Sponsor to discuss a change request, meeting with her or him to review the written request and sending an email follow-up after the meeting to confirm the decisions that were made.

Generally speaking, your communications should be brief, direct and clear – get to the point, and leave out anything that people don't really need to know. If you write a long email with long paragraphs and information that is only really relevant or interesting to you, you can almost guarantee that at least one of the people you send it to won't read it.

Also important is to take the specific communication needs of individuals into account when deciding how to deliver your message. For example, if you know your Project Sponsor gets hundreds of emails and doesn't always read them, consider phoning or meeting with him or her instead. And if a message is really important, follow up with the people involved and make sure that they received it and understood it. Remember that if someone doesn't understand the message you are trying to send, regardless of the reason, it will likely end up being your problem to fix if they later say "I didn't know that!"

8.6.2.2 Initiating

There is often an overload of information involved in project management. A key skill in project management is knowing what information needs to be shared and with whom, and knowing the most effective way to share that information. Before hitting "Send" or calling a meeting be sure that you really need to say what you were planning to say to the people you were planning to say it to.

An equally important skill is listening – a project manager needs information from other people in order to be successful. Once you've communicated your message, encourage people to respond. Invite them to offer ideas and feedback, listen closely to what they are saying (and not saying) about the project, and show that you value the information they're giving you.

8.6.2.3 Monitoring and Controlling

Remember that how you communicate is as important, if not more, than what you are trying to communicate. You will need to work with the people you are communicating with to ensure that the messages you are trying to send are being both heard and understood.

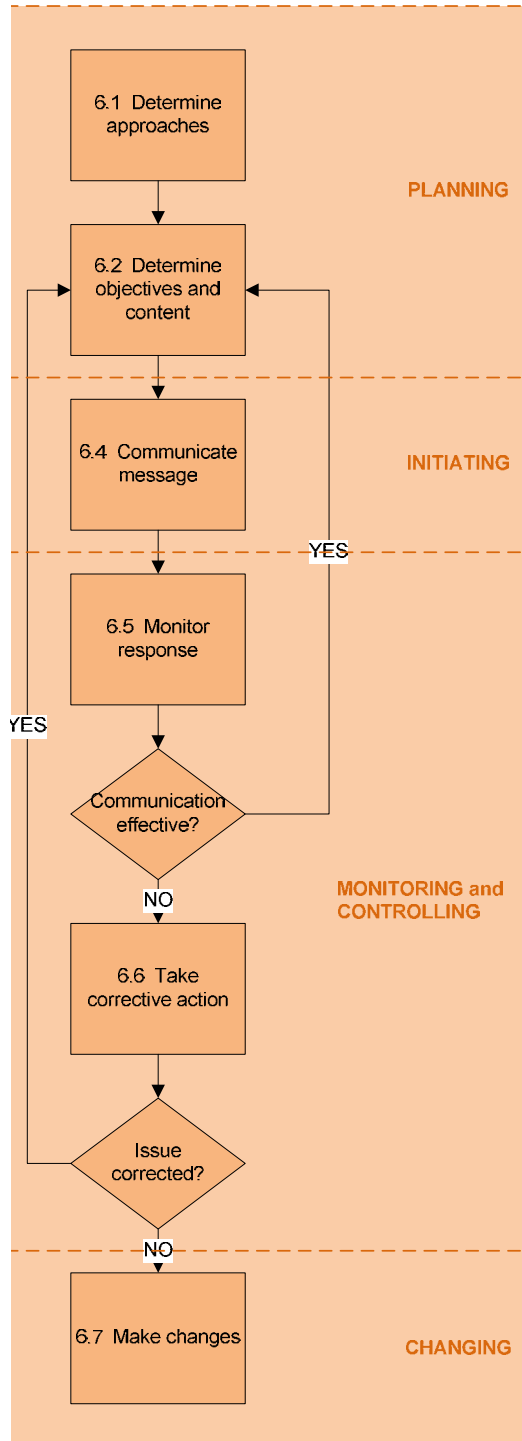
There have been many studies done and theories formed about what makes for good communication. But in project management, the following are generally considered as indications that you are communicating in an effective way:

- that the message is received and listened to or read,
- that the people receiving the message understand what you are trying to tell them,
- that the people respond to the message appropriately, and
- that you have open dialogue with the people you are communicating with.

Use the above to measure how well communication is working in your project. If you find that someone isn't understanding or responding to your messages, or aren't communicating themselves, work with the person to figure out a way of communicating that will work better for that person.

8.6.3 What Are the Steps?

8.6.3.1 Diagram



8.6.3.2 Description of Steps

Process	Steps	Tool / Template
6.1 Determine approaches	<ul style="list-style-type: none"> for each stakeholder, determine the approach(es) that will be used to communicate project information include written reports, meetings, email and phone calls as appropriate; more than one approach may be used for important messages performed during the Plan phase 	Communications Matrix
6.2 Determine objectives and content	<ul style="list-style-type: none"> each time you want to communicate with a stakeholder, first determine the objective of the communication then write the content that will meet that objective keep all communication as brief and clear as possible performed during the Plan, Create, Deliver and Close phases 	Team Status Report Executive Status Report Meeting Agenda
6.3 Communicate message	<ul style="list-style-type: none"> communicate and ensure understanding of the message to the intended stakeholder for meetings and phone calls, send a summary of what was discussed performed during the Plan, Create, Deliver and Close phases 	Team Status Report Executive Status Report Meeting Agenda Meeting Notes
6.4 Monitor response	<ul style="list-style-type: none"> ensure that the receivers of the message respond in a way that shows they've understood the message's objectives and content performed during the Plan, Create, Deliver and Close phases 	n/a
6.5 Make small adjustments	<ul style="list-style-type: none"> make minor course corrections as needed to the communication approaches being used or messages being sent to ensure the messages are being understood and responded to appropriately 	Team Status Report Executive Status Report

	<ul style="list-style-type: none"> performed during the Plan, Create, Deliver and Close phases 	<p>Meeting Agenda</p> <p>Meeting Notes</p>
6.6 Make changes	<ul style="list-style-type: none"> make more significant changes to the communications approach to address communication issues which threaten the project performed during the Create, Deliver and Close phases see Section 6.3 for more information on change management 	Change Request

8.6.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> receives Executive Status Reports and attends meetings approves change requests
Project Sponsor	<ul style="list-style-type: none"> is ultimately responsible for the communication management activities of the Project Manager receives Executive Status Reports, Project Status Reports and attends meetings coordinates the Steering Committee and Advisory Committee as needed for communication management and helps to manage any contract- or funding-related issues, if applicable approves change requests
Project Manager	<ul style="list-style-type: none"> performs all communication management activities also coordinates the project team and other individuals or agencies as needed for communication management responsible for creating and maintaining all project management-related communications for a project

Project Team	<ul style="list-style-type: none">• receives Project Status Reports and attends meetings• works under the direction of the Project Manager to prepare or send communications• supports the Project Manager by providing information needed to determine communication objectives and content
Advisory Committee	<ul style="list-style-type: none">• receives Executive Status Reports and attends meetings• reviews and provides feedback on change requests
Other Individuals or Agencies	<ul style="list-style-type: none">• may support the Project Manager by providing information for communication• may receive reports or attend meetings

8.6.5 A Real-World Example

Managing Communication: Project Management in Practice

She thought she had done a good job of communicating what each contractor needed to do – she showed them the architecture diagrams, talked through the details and explained it in detail in the contract.

And everyone seemed to understand what she expected of them. No one asked any questions, everyone seemed to nod their heads a lot, and when they showed up to work they did so without hesitation.

But Lola's confidence quickly left her. After the outline for the foundation had been placed and digging had begun, Lola decided on a whim to compare the outline to her architecture plan. To her surprise, she found that the hole that was being dug was too narrow by a good two feet!

She met with the contractors the next day, and after some careful explanation, they agreed that the outline was wrong. When she asked how it happened, they explained that they were a little unclear about the dimensions, but thought they had understood it correctly.

They told her that they were usually given a work order, which summarized everything they needed to know in one page. Without this, they had to refer back to the plan and contract repeatedly as they worked to see the details, and this led to the confusion.

Luckily, the error was easily corrected and Lola began using work orders to avoid further issues.

Importantly, Lola knows that she also needs to communicate with other stakeholders such as her family or with the bank that has funded the project. The communication with these groups would look very different than a series of work orders! She needs to understand what they need to know and how to best to communicate with them as well. For her family, her communication might be around the dinner table and involve discussions about when the house will be ready. For the bank, the communication might be about when she needs to pay the mortgage and involve more formal methods such as a letter or meeting at the bank.

8.7 Risk

8.7.1 What is the Purpose of Risk Management?

The purpose of risk management is:

- to determine the risks that may affect a project,
- to find ways to avoid these risks if possible, and to minimize their impact if it's not possible to avoid them, and
- to make changes when a risk couldn't be avoided and is significantly impacting the project.

8.7.2 Overview of Risk Management

8.7.2.1 Planning

Risk, like change, is an unavoidable part of project management. Every project has an inherent amount of risk associated with it, due to factors beyond any one person's control.

So it is a project manager's job to understand these risks, to know and watch for the warning signs and to be prepared to act to avoid or minimize the impact from a risk that has occurred.

If you were to list every risk that could affect a project, you would have a very long list and it would take you the entire project to plan for them! The key is to figure out which risks are a) most likely to occur and b) would have the greatest impact on the project.

After identifying the key risks, you can think of ways to avoid each risk (e.g., monitoring the budget on a regular basis to ensure that the costs don't exceed the budgeted amounts). You should also have a plan for what you will do if you can't avoid the risk (e.g., removing a low priority product or service from the scope of the project to keep the overall project on budget and on schedule).

Generally speaking, if there's anything about your project that you're worried about or have reason to believe may go wrong, you should include this as a risk for your project. The key to good risk management is to a) understand the potential risks, and b) to be prepared to address them. This approach will not only help you to manage risk in a constructive way, it will help others to see, understand and be prepared for the risks as well.

8.7.2.2 Initiating

No project manager needs to act alone. Once you've determined what the likely risks to your project are, you should communicate these far and wide and help people to understand the risk and the warning signs.

By doing so, you'll have a team of people watching for signs that a risk is going to occur, instead of just one person. And the people who may in fact cause a risk to occur (e.g., by working longer than estimated) will be more aware of the consequences to the project of doing so.

8.7.2.3 Monitoring and Controlling

Once you've determined ways to avoid risks, it is important that you act on these. Many risks can be avoided by you through good project management (e.g., actively tracking effort spent to avoid going over budget), and others may be avoided by working together with your team, Project Sponsor, Steering Committee or funder.

But no matter how much you try to keep risks from occurring, you should always know and be watching for the warning signs. Sometimes this will come from your own observations, and sometimes it will come from information provided by others. If you hear anything that sounds like it could be a problem for your project, treat it accordingly.

8.7.2.4 Changing

Sometimes risks are out of a project manager's control, and cannot be avoided. If you've been watching for the warning signs, you should be able to act proactively to minimize the damage if a risk does occur. But even if a risk takes you by surprise, you can still do a lot to limit the impact.

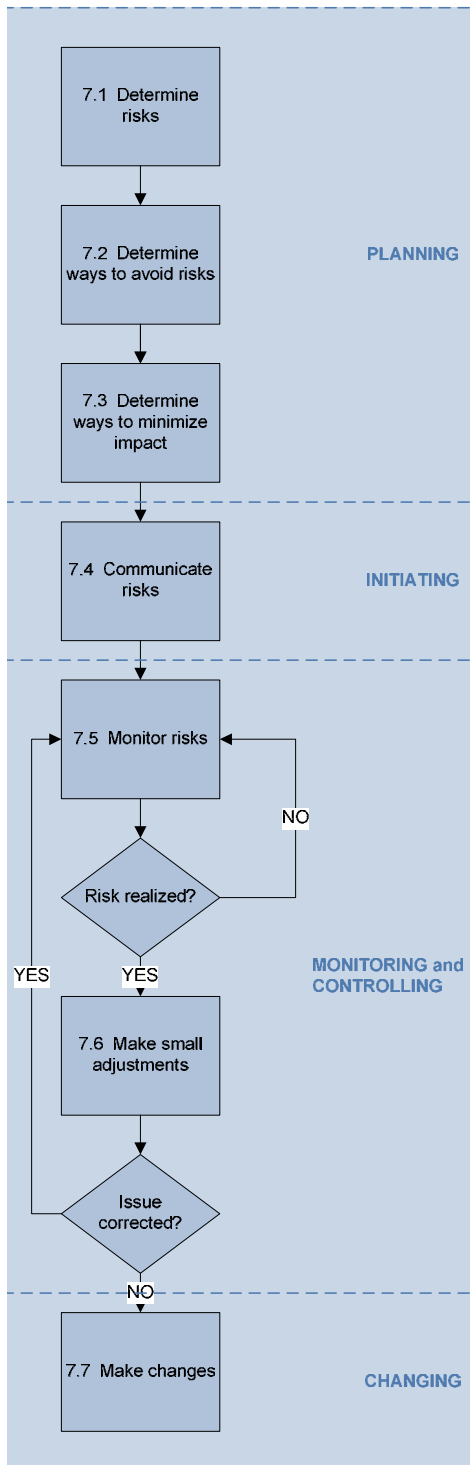
If a minor risk occurs, you may be able to find a way to deal with it yourself. But it's still a good idea to let people know that the risk occurred and get their agreement about what you plan to do about it before you make any changes. If nothing else, this will help people to feel like they are involved in the project and that they play a role in ensuring the project's success.

If a more significant risk occurs, the most important thing you can do is get everyone involved. You will want to have meetings not just with your project team, but with your Project Sponsor, the Steering and Advisory Committees (if applicable) and maybe even the funder. Let everyone know what is going on, and be prepared to explain why it happened, how much it will affect the project and what specific areas are affected. Then you should encourage everyone to work together to find solutions and to do any work that is needed to address the issue.

Minimizing the impact a significant risk can have may make the difference between doing a change request for a project's scope, budget and/or schedule and having a project fail completely. If you've built a strong team that is committed to the project, you'll be much more likely to find a solution that keeps everyone happy and still meets the goals of the project.

8.7.3 What Are the Steps?

8.7.3.1 Diagrams



8.7.3.2 Description of Steps

Process	Steps	Tool / Template
7.1 Determine risks	<ul style="list-style-type: none"> determine the issues, events or circumstances that could jeopardize the success of the project, warning signs that a risk is occurring and the expected impact that each risk would have focus on risks that seem like a likely possibility for your project, by focusing on specific things that concern you about being able to complete that project on time, on budget and on scope performed during the Plan phase 	Risk Log
7.2 Determine ways to avoid risk	<ul style="list-style-type: none"> for each risk, try to determine one or more ways in which it could be avoided altogether usually involves taking additional actions to those you would normally take (e.g., holding meetings more frequently to ensure understanding of a complicated project) performed during the Plan phase 	Risk Log
7.3 Determine ways to minimize impact	<ul style="list-style-type: none"> determine ways that you can minimize the damage done for risks that can't be avoided also usually involves taking additional steps performed during the Plan phase 	Risk Log
7.4 Communicate risks	<ul style="list-style-type: none"> communicate and ensure understanding of the risks and steps that will be taken to avoid or reduce the impact of them to key stakeholders, especially project team members important to create a sense of shared responsibility among all stakeholders for ensuring that the risks are avoided performed during the Plan phase 	Risk Log Executive Status Report
7.5 Monitor risks	<ul style="list-style-type: none"> watch for warning signs that a risk is about to or has already occurred 	Risk Log

	<ul style="list-style-type: none"> also involves ensuring that the steps that are meant to avoid or reduce the impact of risks are being properly taken by the project team and other stakeholders performed during the Plan, Create, Deliver and Close phases 	
6.5 Make small adjustments	<ul style="list-style-type: none"> make minor course corrections as needed to the risk management approach being used to ensure that risks continue to be avoided or that new risks are considered performed during the Plan, Create, Deliver and Close phases 	Risk Log Executive Status Reports
6.6 Make changes	<ul style="list-style-type: none"> make more significant changes to the project to address risks that could not be avoided performed during the Create, Deliver and Close phases see Section 6.3 for more information on change management 	Change Request

8.7.4 Who's Involved?

Person/Group	Role
Steering Committee	<ul style="list-style-type: none"> receives Executive Status Reports approves change requests
Project Sponsor	<ul style="list-style-type: none"> is ultimately responsible for the risk management activities of the Project Manager receives Executive Status Reports coordinates the Steering Committee and Advisory Committee as needed for risk management and helps to manage any contract- or funding-related issues, if applicable approves change requests

Project Manager	<ul style="list-style-type: none">• performs all risk management activities• also coordinates the project team and other individuals or agencies as needed for risk management• responsible for creating and maintaining all risk-related materials for a project
Project Team	<ul style="list-style-type: none">• receives risk log• works under the direction of the Project Manager to complete risk management-related activities• supports the Project Manager by providing information needed to manage risk
Advisory Committee	<ul style="list-style-type: none">• receives Executive Status Reports• may provide guidance on managing risks• reviews and provides feedback on change requests
Other Individuals or Agencies	<ul style="list-style-type: none">• may support the Project Manager in risk management activities

8.7.5 A Real-World Example

Managing Risk: Project Management in Practice

From the start, Lola knew that building a house was inherently risky. She would be doing work that she had never done before, using a great deal of money that wasn't hers and which needed to be paid back... with interest!

But she also knew that risk is a part of life, and that if she managed it well, she could keep the risk to a minimum. Once her loan was approved, she set to work on figuring out what risks she would face and how to avoid them. She sought advice from contractors, friends and the Internet on what she should watch out for when building a home.

Some of the risks seemed obvious (unscrupulous contractors, houses that take longer to build than expected), but the advice that was given to avoid these risks proved helpful. In fact, it was because of this research that Lola realized she should have a signed, written contract with each contractor she hired.

Lola thought that looking at the risks she would face would be a frightening experience, but she actually found it encouraging. It helped her to accept that the risks were real, but manageable.

Even though she didn't lift one board or hammer one nail, Lola did a lot of work on her house. By carefully managing the scope, budget, work and people involved, and giving extra attention to the way she communicated and the risks she would face, she was able to make her home building project a success. She was happy, her family was happy – even the woman at the bank who approved her loan was happy – and Lola felt quite proud of herself for a job well done.

9 What about Quality?

Many project management methodologies include a separate set of processes for the management of quality.

This methodology does not include a separate set of processes for managing quality. Instead, it is recommended that you think of quality as something that affects each step and process in a project – from creating a proposal to writing the evaluation report.

There are steps that can be taken to help ensure your project's products or services of good quality without following a formal process:

Used of standardized methodologies	<p>The most important factor for ensuring quality in a project is to use a formalized approach to the activities. Project management is one of them.</p> <p>By following a methodology to manage each step of your project you will spend less time focusing on how to manage the project and more time on delivering the project well</p>
Research	<p>Have your team take the time and do the research needed to understand both the need you are trying to meet and the users who will use the products or services they are creating</p>
Communication	<p>Be sure that each member of your team knows that quality is a high priority for your project</p> <p>Before beginning work on a new product or service, work with your team to find ways to ensure that quality standards will be met and that quality issues will be detected early</p>
Peer Reviews	<p>Have every important project document and deliverable reviewed by at least one other person before it is given to the Project Sponsor or Steering Committee for approval</p> <p>Be sure to include time and effort for these reviews and for revisions in your project plan</p>
Reviewing	<p>Include an assessment of the quality of your products or services when reviewing them during the Create stage</p>
Changes	<p>If you need to make changes to a project's scope, budget or schedule, consider and communicate the impact on quality that the changes could have</p>

To be successful, quality management must be both proactive (e.g., setting quality goals that your team works towards, using standardized methodologies) and reactive (e.g., doing quality reviews of each product or service and identifying and addressing quality issues).

To sum up, the more you focus on quality throughout each step of a project, the better the end results will be.

10 The Next Step

For some, the information contained in this methodology may seem a little overwhelming. But rest assured, it's not as complicated or difficult as it may seem!

The goal for this (and any) methodology is not for you to have it memorized after the first read. You should refer back to it as often as needed, using it to guide you as you work through each step of the process. You may also want to make copies of each diagram to use as a quick reference, and reread key sections before you begin each new phase of a project.

Included with this methodology are a set of tools and templates, which you will have seen referenced throughout. Each tool and template includes instructions on how to complete it, with examples that will further guide you. You'll find that by using these tools and templates a large part of the work is already done for you, and they will make it much easier for you to put this methodology into practice.

Like most skills, learning to manage a project effectively takes both dedication and practice. But by following a structured methodology for managing your projects, you have a better chance of avoiding the problems that plague a lot of projects and making your project a success!

11 Lifecycle-Based Tools and Templates

Tool/Template/Checklist	Description
Budget	Template for developing and keeping a budget
Change Request	Template used for outlining and getting approval of significant changes to the project plan
Close Checklist	Checklist used during Close phase to ensure all activities are completed
Communications Matrix	A chart outlining a simple communications plan
Create Checklist	Checklist used during Create phase to ensure all activities are completed
Deliver Checklist	Checklist used during Deliver phase to ensure all activities are completed
Evaluation Report	Templates used to create an evaluation report for funders at the end of a project
Executive Status Report	Template used to communicate formal project updates to Project Sponsor, Steering Committee and Advisory Committee
Issues List	Template used to track issues that occur during a project
Meeting Agenda	Template used to create meeting agendas
Meeting Notes	Template used for taking notes at project meetings
Project Charter	Template used for outlining and getting approval on the plan for completing a project
Plan Checklist	Checklist used during Plan phase to ensure all activities are completed
Proposal	Template used to submit a funding request for a project to funders
Propose Checklist	Checklist used during Propose phase to ensure all

Tool/Template/Checklist	Description
	activities are completed
Risk Log	Template used to outline significant risks to a project and the steps that will be taken to avoid them or reduce their impact
Roles and Responsibility Chart	Template used to identify the roles that will need to be filled for a project and the responsibilities of each of those roles
Schedule	Template used to assign dates to a Work Breakdown Structure
Project Overview Statement	Template to outline a project's objectives and scope
Team Status Report	Template used to communicate updates to Project Sponsor and project team