**LESSONS LEARNED**

1. **SCOPE**

This Quality Work Instruction (QWI) defines the Enterprise Project Management Office (EPMO) process to

effectively collect, analyze, manage and record Lessons Learned data. Lessons Learned shall be completed throughout the project life-cycle per [0300-0300-005-B PROJECT MANAGEMENT PROCESS](https://it.nc.gov/media/1002/open) and at a minimum during Project Closeout per [0300-0350-005-C PROJECT CLOSEOUT](https://it.nc.gov/media/1012/open).

1. **OWNER**
   1. The Enterprise Project Management Office (EPMO) Manager owns this QWI. No changes, additions or alterations may be made without the owner’s written approval.
2. **REFERENCE DOCUMENTS**

|  |  |
| --- | --- |
| **DOCUMENT IDENTIFICATION** | **DOCUMENT TITLE** |
| [EPMO RECORDS per CHAPTER 121 & 132](http://stateschedules.ncdcr.gov/Schedules/Office%20of%20the%20Governor/Office%20of%20Information%20Technology%20Services/Enterprise%20Technology%20Project%20Management%20Office/GovOff_EnterpriseTechProjMgn.pdf) | PROGRAM RECORDS RETENTION AND DISPOSTION SCHEDULE |
| PMBOK | A GUIDE TO THE PROJECT MANAGEMENT BODY OF KNOWLEDGE - 5TH ED |
| 0100-0800-010-B | FORMS AND RECORDS CONTROL |
| 0300-0300-005-B | [PROJECT MANAGEMENT PROCESS](https://it.nc.gov/media/1002/open) |
| 0600-0600-005-B | CORRECTIVE ACTION PROCESS |
| 0700-0700-005-B | PREVENTIVE ACTION PROCESS |
| 0300-0350-005-C | [PROJECT CLOSEOUT](https://it.nc.gov/media/1012/open) |

1. **ASSOCIATED FORMS**

|  |  |
| --- | --- |
| **FORMS IDENTIFICATION** | **FORM TITLE** |
| 0300-0390-005-D | [LESSONS LEARNED FORM](https://it.nc.gov/media/1131/open) |

1. **DEFINITIONS**

* **LESSONS LEARNED TEAM LEAD:**  ***Link to Glossary of Definitions and Terms***
* **CONTENT MODERATOR:**  ***Link to Glossary of Definitions and Terms***

1. **PROCEDURE**

**NOTE:** *Lessons Learned are completed as a SharePoint list in the Touchdown System, but these forms can be used by Project Managers as a template.*

* 1. The Project Manager (PM) shall determine when Lessons Learned reviews are required. The PM shall identify a Lessons Learned Team Lead for the project and encourage the capture and review of Lessons Learned throughout the project life-cycle. At a minimum, Lessons Learned shall be completed during Project Closeout per [0300-0350-005-C PROJECT CLOSEOUT](https://it.nc.gov/media/1012/open). **Note*:*** *A best practice Lessons Learned Methodology is available in Appendix A.*
  2. The Lessons Learned Team Lead is typically a person with knowledge of the project but not directly involved. This encourages process objectivity and development of insightful findings.
  3. The Lessons Learned Team Lead collaborates with the PM and Business Owner to publish an agenda and determine participants. **Note:** *A Sample Agenda is available in Appendix B.*
  4. The [0300-0390-005-D LESSONS LEARNED FORM](https://it.nc.gov/media/1131/open) shall be used by the Lessons Learned Team Lead to document the Lessons Learned. Agencies may add organizationally unique information as required.
  5. Complete the Project Information. (Section 1.0)
  6. Enter the Lessons Learned Data for the Lessons Learned. (Section 2.0)
  7. Submit the completed Lessons Learned Form to the Content Moderator for review and validation. (Section 3.0) Other Agency reviews may be added as necessary.
  8. **Lessons Learned Repository**

The EPMO shall provide an Enterprise repository to facilitate the collection, retention and query of Lessons Learned data. Agency Project Management Offices (Agency PMO’s), Agency PM’s, EPMO Project Management Advisors (PMA’s) and other personnel will place the [validated 0300-0390-005-D LESSONS LEARNED FORM](https://it.nc.gov/media/1131/open) into the EPMO Lessons Learned Repository. The repository will support flexible searches, such as:

Unstructured Searches:

* Support natural questions: “What are the issues the State faces with a mobile interface project?”

Structured Searches:

| **Reference:**  **PMBOK Knowledge Areas** |
| --- |
| Communication Management |
| Cost Management |
| HR Management |
| Integration Management |
| Procurement Management |
| Quality Management |
| Risk Management |
| Scope Management |
| Time Management |
| Stakeholder Management |

* + - * Search by PMBOK Knowledge Area. (I.e. Scope Management) *(EPMO Quality Assurance will categorize Lessons Learned based on the PMBOK Knowledge Areas listed at right.)*
      * Search by Agency name.
      * Search by Project name.
      * Search by Project phase. (I.e. Initiation; Planning & Design; Execution & Build; Implementation; Closeout.)
      * Search by keyword(s).
  1. Lessons Learned may indicate a need for Corrective Action or Preventive Action. In such cases, personnel will employ the 0600-0600-005-B CORRECTIVE ACTION PROCESS or 0700-0700-005-B PREVENTIVE ACTION PROCESS as warranted.

1. **RECORDS**
   1. Unless otherwise specified in this Procedure/QWI, Records shall be maintained in accordance with 0100-0800-010-B FORMS AND RECORDS CONTROL procedure.
2. **REASON FOR CHANGE**
   1. Initial issue.

**APPENDIX A: Lessons Learned Methodology**

The format below is a best practice summarized in [0300-0390-005-C LESSONS LEARNED](https://it.nc.gov/media/1126/open). This document provides guidance on how to capture Lessons Learned in a participatory manner, solicit team solutions and document action plans.

Lessons Learned should be explored in an open, participatory environment where ground rules and team norms have been established by team members. Each team member’s thoughts should be written on flip charts, preferably in non-edited format.

Consider breaking team up into different groups as this will generate more ideas and encourage participation. Facilitator should determine grouping team breakouts.

Each breakout group will have a flip chart for the questions: “What went right? What

went wrong? What could be improved?”

1. **Identify “What went right?”**

Take 15-30 minutes to document what worked well within the project. (Figure 1: Sample “What Went Right?”)

* Great team meetings - each week - at the table built relationship
* Precise focus defined tasks
* Stayed on track - fairly concise focus
* Good team work - mutual respect
* Good and various skill sets represented from business to technology

**Figure 1:** Sample "What Went Right?"

1. **Identify “What went wrong?”**

Take 15-30 minutes to document what did not go as planned. (Figure 2: Sample “What Went Wrong?”)

* Blame game
* Depend too much on “luck”
* Initial milestone dates too tight
* Lack of documentation
* Ports not open as needed and security blocks

**Figure 2:** Sample "What Went Wrong?"

1. **Identify “What could have been improved?”**

Take 15-30 minutes to document what could have been improved (areas for improvement). (Figure 3: Sample “What Could be Improved?”)

* Original focus may have been too big
* Business buy-in during the front-end
* Timelines, anticipation and accommodation of risks and unknowns
* Application issues - no one on board
* Streamline training process
* Improve product testing

**Figure 3:** Sample “What Could be Improved?”

1. **Identify Top 3 Priorities to Work on for Future Projects**

**Sample Top 3 Priorities**

1. Acceptance criteria
2. Current skill set
3. Resource management

Some common themes will most likely emerge from what went right, wrong and could have been improved.

* Each team can determine Top 3 priorities; each team to present Top 3 from their team. Project Team to come to consensus on final Top 3 ideas to improve.

1. **Generate Solutions and Ideas for Improvement**

The goal is to generate solutions on how to improve the Top 3 priorities. Simply identifying the Lessons Learned does not completely harness intellectual capital; probing for and capturing potential solutions provides greater value.

**Sample Solutions for Top 3 Priorities**

Acceptance criteria:

1. Test plan that includes provisions for exceptions.
2. Identify measurable criteria based on requirements.
3. Document criteria and method to confirm criteria is met.

Current skill set:

1. Prepare service support team via training.
2. Ensure appropriate level of documentation is available.
3. Identify resource support team roles.

Resource management:

1. Defined roles and responsibilities across the whole team.
2. Maintain personal calendar and make available to team.
3. Define resource allocations and priorities; communicate in writing when interruptions or change to availability occur - and assess impact to assigned deliverables.
4. Ensure activity list/schedule is updated based on changes to resource availability.

* Create an Improvement Idea flip chart for each of the Top 3 priorities, title the chart.
* Spread the sheets on paper around the room with several markers at each of the charts.
* Request everyone walk around to each flip chart and note an Improvement Idea in their own words.

1. **Generate and Map Top 3 Improvements on Impact** Quadrant

Itemize the solution ideas in a T-chart for each of the Top 3 Improvement Idea flip charts under the appropriate section.

* For ideas which are a Major Improvement and “Difficult to do” … *Create a plan.*
* For ideas which are a Major or Minor Improvement and “Easy to do” … *Just do it.*
* For ideas which are a Minor Improvement and “Difficult to do” … *Defer or Ignore.*

*Map each Improvement Idea on quadrant chart similar to the chart below.*

|  |  |  |  |
| --- | --- | --- | --- |
| Impact |  | **Difficult to do** | **Easy to do** |
| **Major Improvement** | ***(Plan)*** | ***(Just do it)*** |
| **Minor Improvement** | ***(Defer)*** | ***(Just do it)*** |

1. **Corrective or Preventive Action Items**

Document corrective or preventive actions taken in response to the Lessons Learned. The template below is suggested to assign responsibility, the EPMO Lessons Learned template only requests the names of the actions items.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Action Item(s) | Primary Responsible | Support Responsible | Due Date | Priority |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**APPENDIX B: Sample Agenda**

Memory Joggers:

* Project Management
* Technology
* Communication
* Business Process
* Resources
* Vendor Relationship
* Requirements
* Design and Build
* Implementation
* Testing
* Training

# Lessons Learned: *<<Insert Project Name>>*

## **Date**: *<<Insert Date>>*

## **Time**: *<<Insert Time>>*

**Location:** *<<Insert Location>>*

**Please bring:**  Ideas, Lessons Learned

**Recorder:**  *<<Insert Name of Recorder>>*

**PROJECT GOAL:** *<<Insert Project Goal>>*

|  |  |
| --- | --- |
| **Attendees** | **Role / Responsibilities** |
| *<<Name of Facilitator>>* | Facilitator   * Neutral; foster participation from all members. |
| **Project Team** | Contributors to Lessons Learned   * Set team norms, provide ideas, participate in discussions and help drive effective analysis & solutions. May serve as team scribe for flip chart discussions. |

**MEETING GOAL**: To make contributions to our organizational assets by discussing Lessons Learned in a productive, collaborative, open and participatory manner.

|  |  |  |
| --- | --- | --- |
| **Start - End** | **Description** | **Minutes** |
| *<<Insert Start/End Time>>* | **Introduction Team / Purpose** | *<<Insert Duration>>* |
|  | **Creation of Session Norms**  **Discuss Rules of Engagement** |  |
|  | **Team Contribution of Lessons Learned  What did we do right?**  **What went wrong?**  **What could have been improved?** |  |
|  | **Visioning - Identify 3 Priority Lessons Learned** |  |
|  | **Generate and Map Solutions on Impact Quadrant** |  |
|  | **Generate Corrective or Preventive Action Items** |  |