PAUSE AND LEARN
IMPLEMENTATION GUIDE

OFFICE OF THE CHIEF KNOWLEDGE OFFICER

NASA/GSFC

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INTRODUCTION - The importance of "pausing to learn"

A Pause and Learn (PaL) session is a method for reflecting and transferring individual lessons from a specific project event among fellow team members.

Based on the After-Action-Review experience of the U.S. Army, a PaL at GSFC is an informal event designed to specifically focus on:
1. What happened – events, people, places
2. Why did it happen – cause, environments, expectations
3. What did we learn from this – insights, behavior, actions we can take.

The idea behind the PaL process is to create a learning event at selected critical events in the life of a project. End of project reflections are good but are too infrequent for the organization to learn in a timely manner. In addition, much intermediate learning is lost between concept and launch. PaL sessions are intended to be integrated into the project life cycle at key points as a natural part of the process.

PURPOSE OF THIS GUIDE

This guide is intended for GSFC personnel interested in applying the Pause and Learn method within their offices and/or projects, whether on their own or with the assistance of the Office of the Chief Knowledge Officer.

KEY PRINCIPLES OF THE "PAUSE AND LEARN"

A PaL session at GSFC should be:
1. A non-attribution participant discussion
2. The voice of the team members offering views and ideas in a safe space
3. Close to the action in time, space and personnel (conducted soon after events)
4. A fundamental part of every project, built into the project process and schedule
5. Available for disciplines as well as project teams (engineering, safety, science)

OCKO vs. Non-OCKO Facilitated PaL

You may decide to conduct a PaL with your team on your own or to rely on the planning and facilitation support of the Office of the Chief Knowledge Officer. When using your own facilitator, consider the guidance below and adapt as needed.
When relying on the support of the Office of the Chief Knowledge Officer (OCKO), the following process applies:

BEFORE THE PAL - Planning

The Initial Conversation

The preparation phase involves scheduling, identifying and inviting participants, planning the logistics, communicating with PaL participants ahead of the session, and confirming the PaL session. The overall purpose of the preparation phase is to ensure that the PaL session goes smoothly, that it is well attended, and that expectations are met.

The point-of-contact will meet with the OCKO to clarify expectations:

- Is this a one-time PaL session or is it part of a series?
- If it is a one-time PaL, what is the specific event that has triggered it? Who has identified the need for a PaL? How did the idea of conducting a PaL come about?
- If it is part of a series, is there a set schedule? If not, who decides when it is time for a PaL session?
- What are the anticipated benefits? What is the rationale for doing PaLs?
- If a PaL is being scheduled, what is the rationale for doing a PaL now?
- Will there be a need for an OCKO facilitator or will the team identify a non-OCKO facilitator?
- If not facilitating, in what other ways can the OCKO support the PaL process?

Preparing for a PaL – The Details

Preparing for a PaL facilitated by the OCKO requires at least one meeting between the OCKO and the project or institutional office requesting the PaL. The purpose of the meeting shall be to discuss and come to an agreement on the following:

a. Purpose and Focus of the PaL session: This involves identifying key issues of interest that are likely to emerge out of the PaL discussions.

b. Setting expectations in terms of what a PaL session is meant to accomplish.

c. List individuals to be invited, specifying required vs. optional attendees.

> **Tips**: When sending the meeting request, all invitees are to be listed as "required".
> The distinction between "required" and "optional" is meant to clarify circumstances under which a meeting must be rescheduled when a "required" attendee is unable to attend.

d. Tentative timeframe for scheduling the event based on the availability of "required" attendees, to the extent that it can be determined at the time of this preliminary meeting.

e. Respective responsibilities in terms of implementation, including confirming who is to send the PaL meeting request.

f. Output of the meeting.

Scheduling a PaL

Unless otherwise decided during the preliminary meeting with the point-of-contact, the OCKO will be responsible for scheduling the PaL. The OCKO will use available meeting scheduling tools to identify the most convenient day and time to hold the PaL session and to send the meeting request.

The meeting request will be sent out with a clear explanation of the purpose of the meeting and mention of the point-of-contact's request for OCKO involvement.

Logistics

- <u>Reserve a meeting room for the PaL session</u>
  The room should be of sufficient size to comfortably accommodate the anticipated number of participants. Scope out the room in advance to identify any potential challenges in the room set up. To the extent possible, reserve a room conveniently located for the majority of the participants.

- <u>Ensure that adequate supplies are available</u>
  Confirm the availability of an adequate supply of easel pads and markers available for the session and/or a sufficiently large whiteboard and dry erase markers.

Tip: The facilitator may write down key points made by participants on a whiteboard or on an easel pad as a way of communicating that everybody is being heard (i.e., all ideas are worthy of consideration), as a way of confirming that the group agrees with what is being said and written down (or noting differing opinions), and as a way of keeping track of the

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- <u>Communicate with PaL invitees ahead of the PaL Session</u>
  In the Meeting Request message, the sender shall offer to provide additional information about the PaL process when requested by PaL invitees. Invitees should be encouraged to communicate with the point-of-contact as well in order to obtain clarification regarding the purpose of the meeting if necessary. The point-of-contact should be copied on all critical communications with PaL invitees to ensure appropriate information flows.

- <u>Confirm PaL session</u>
  A day and time should be confirmed when all the "required" attendees have accepted the meeting request or otherwise indicated that they are available and willing to attend the PaL. The Meeting Request should be updated to confirm the day, time and location of the meeting.

  A reminder email should be sent to all participants who have accepted the invitation 24 hours prior to the PaL session.

DURING THE PAL – Facilitation & Participation

Clarify roles and responsibilities at the beginning of the session. Spell out the ground rules for the conversation. Explain the role of the OCKO (if the OCKO is involved) both in the facilitation phase and in the follow up.

- **Generic PaL Questions**

The key generic questions for a PaL are as follows:
  - What did we intend to do?
  - What worked well, and why?
  - What didn't work well --why?
  - What did we learn from this?
  - What should we change?

These questions will be adapted based on the specific needs of the PaL. The OCKO facilitator will use the key issues pre-identified through communications with Point-of-contact(s) ahead of the PaL session to guide the discussions.

- **Note taking**

When the OCKO is facilitating a session, the OCKO will provide a note taker responsible for capturing the essence of the conversation. The facilitator should briefly explain the purpose of the note taking and whether notes will be transformed into a concept map.

AFTER THE PAL – Processing & Follow up

- **OCKO Conversation Maps**

When appropriate, the OCKO will process the raw meeting notes and create a concept map reflecting the key issues, lessons, insights shared during the PaL session.

- **Reviewing the Concept Map**

Once the preliminary concept map has been reviewed within the OCKO office The point-of-contact will have an opportunity to review the concept map to ensure accuracy and completeness.

The concept map can also be used to gather additional inputs from key individuals who were not able to attend the PaL session.

A final version of the concept map will be delivered to the point-of-contact. Confirm that ownership of the map(s) or other output from the meeting resides with the team and does not constitute an official report.

References & Additional Information

- OCKO, PaL Brochure.
  http://www.nasa.gov/centers/goddard/pdf/431367main_PaL%20Brochure.pdf

- Ed Rogers & John Milam, *Pausing for Learning: Applying the After Action Review Process at the NASA Goddard Space Flight Center*, IEEEAC paper #1023, Version 2.

- Videos Nuggets in the NASA Safety & Mission Assurance Library: a collection of short videos featuring Ed Rogers talking about various aspects of Knowledge Management Practices as implemented within NASA, including the Pause and Learn. http://nsc.nasa.gov/SMALibrary.aspx (NASA Only)
    - Taking Advantage of the Natural Learning Fault Lines with Pause and Learn
    - What is the PaL Process?
    - The Four Basic Principles of the PaL Process
    - When the PaL process is Useful within a Project-Program
    - How the PaL Process Benefits a Project-Program

- Process 2.0 (NASA ESMD)
  http://www.nasa.gov/externalflash/irkm-process20/index.html

- USAID, After-Action-Review Technical Guide, 2006.
  http://www.au.af.mil/au/awc/awcgate/usaid/after_action_guide.pdf

- A Leader's Guide to After-Action-Reviews, 1993.
  http://www.au.af.mil/au/awc/awcgate/army/tc_25-20/tc25-20.pdf

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OCKO website
http://www.nasa.gov/goddard/ocko

Case Study Collection
http://gsfcir.gsfc.nasa.gov/casestudies