



**GUIDE**

# **AFTER-ACTION**

## Review Guide

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# After Action Review Guide

## The National Comprehensive Center

The National Comprehensive Center (NCC) is one of 20 technical assistance centers supported under the U.S. Department of Education's Comprehensive Centers program from 2019 to 2024. The NCC focuses on helping the 19 Regional Comprehensive Centers and state, regional, and local education agencies throughout the country to meet the daunting challenge of improving student performance with equitable resources.

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## Introduction

Responding to complex problems and emergencies such as COVID-19 requires both rapid response and long-term planning. Part of the response and planning needs to be based on lessons learned from previous crisis experiences. Organizations should be routinely conducting strategic reviews of previous responses, projects, or events to analyze the implementation and effect of actions, document lessons learned, and apply those lessons in new conditions. Regional Comprehensive Centers can assist state education agencies (SEAs) or local education agencies (LEAs) in reviewing actions, identifying the lessons learned, and applying the lessons to continually improve student outcomes. An After-Action Review is a method for conducting such reviews.

## Background

An After-Action Review (AAR) is a method for extracting lessons from one action, event, or project, and applying the lessons learned to others. It enables a team to analyze for themselves what happened, why it happened, and how to use learnings to sustain strengths and improve weaknesses.

AARs were originally developed by the U.S. Army's National Training Center for use by the Opposing Force, a 2,500-person brigade charged with preparing soldiers for combat (Training Circular 25-20). AARs became well known when companies such as Shell Oil, Colgate-Palmolive, and Harley-Davidson used them to identify best practices and mistakes not to repeat.

An AAR is “a living, pervasive process that explicitly connects past experience with future action” (Darling, et al., 2005, p. 3). It offers a structured process to gain candid insights into an individual's or team's strengths and weaknesses from a variety of perspectives, feedback, and specific critical details that may have been missed in a typical evaluation report. AARs are especially important when a problem or situation lingers, and lessons learned can be incorporated into future planning.

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“By creating tight feedback cycles between thinking and action, AARs build an organization's ability to succeed in a variety of conditions. Former [participants now in the field] take with them not just a set of lessons but also a refresher course on how to draw new lessons from situations for which they did not train—situations they may not even have imagined. In a fast-changing environment, the capacity to learn lessons is more valuable than any individual lesson learned.” (Darling, et al., 2005, p. 9)

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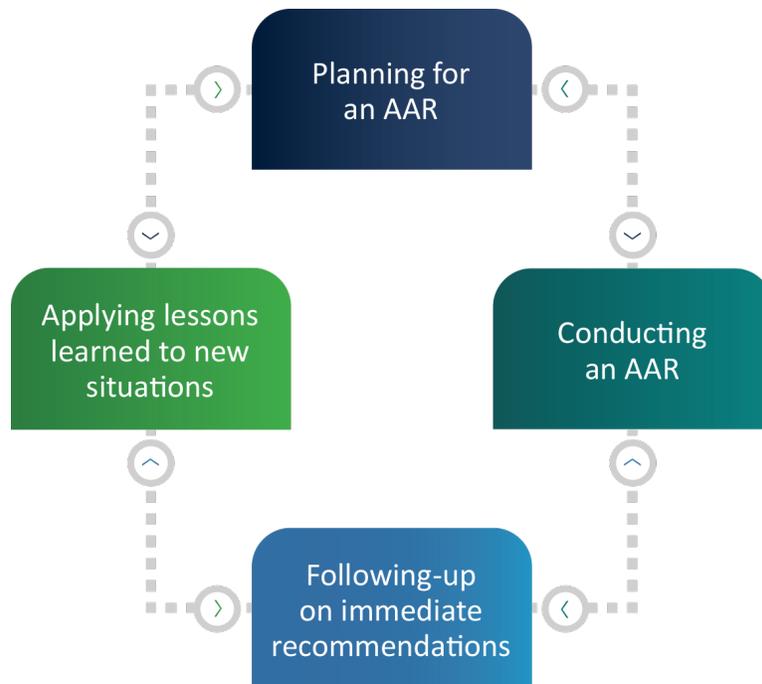


An AAR is a crucial but often neglected activity in organizations. Most organizations use postmortems of past failures, or a debrief session, in order to be more successful in the future. Often those efforts result in static reports that are all too often filed away and forgotten. Or, if an AAR is attempted, not enough time is given to the process, or the AAR is focused on critiquing performance, which only provides one point of view, focuses on error and blame, and often lacks participant discussion of the actions. A high-quality AAR, however, is an in-depth process during which the learnings are incorporated into the organization’s strategic direction, daily operations, and implementation process, leading to true improvement.

## Overview of the AAR

The purpose of an AAR is to determine what worked and what didn’t to help refine an organization’s ability to predict what will work and what won’t in the future. The AAR is part of a broader cycle of improvement during which explicit linking of lessons to future actions occurs. The goal is to improve performance at multiple levels of the organization, e.g., individual, team, division, so the organization is more cohesive and effective as a whole.

**Figure 1. AAR cycle**



AARs are conducted during or immediately after each event, such as a response to a crisis or disruption or a project. An AAR focuses on the intended objectives of the event or project as well as individual, team, and leader performance. It engages all participants in discussions using open-ended questions. The questions are related to specific standards established when the project or event was planned. The discussions lead to identification of strengths and weaknesses that are then linked to performance. The knowledge gained is then applied to a future project or event to validate the findings and improve performance.



## Common AAR Questions and Answers

### Who should use an AAR?

Any leader or team who wants to maximize learning from their actions and apply those learnings to improve performance and results.

### When should an AAR be used?

An AAR can be used immediately after an action, event, or at the end of a project. It is critical that the review occurs within 1 to 2 weeks of the event or project. It can also be used during key phases of a longer project or informally during project implementation.

### How much time is needed to complete an AAR?

Typically, a formal AAR at the organization or division level requires at least 4 hours, whereas an AAR for a team, office or unit would take about 2 hours. An informal review could be conducted in whatever time a team can allot. "A conversation as short as 15 minutes might identify barriers to progress and strategies to overcome them," (Salem-Schatz, et al., n.d.). While an AAR can be quick, an AAR should never be rushed! In other words, enough time needs to be given to the AAR process regardless of whether it is formal or informal.

### What resources are needed for an AAR?

Formal AARs call for a facilitator and possibly external observers, depending on the event or project. Informal AARs can be led by the unit leader or a team member who has the full support of the unit leader to guide the process. The facilitator captures the discussions and key points. In addition, each participant should have notetaking tools so they can take notes during discussions. For example, the facilitator can repeat back a key discussion point and the participant can formulate a reflection to add to the discussion.

### Who should participate in an AAR?

All leaders and team members who were responsible for and participated in the event or project, including consultants or contractors, should participate in the AAR. It is critical that they participate and take notes during the review. Ownership of the process by all is critical to its success.

### Where should an AAR take place?

Informal AARs take place wherever they are needed during implementation, which is usually where the actions are taking place. For example, an AAR could be conducted at a school where an intervention is being implemented as part of an evidence-based intervention project. Formal reviews should take place where it is conducive and comfortable for all participants to attend and engage in the discussions. For example, a formal AAR could take place back at the project office in a conference room or through a virtual meeting.



## Types of AARs

AARs can be formal or informal. Formal AARs usually help at the organization or division levels. During a formal AAR, an external facilitator or leader facilitates the review and focuses on a discussion of the event objectives. At the end, the leader reviews key points and issues identified as they relate to the key objectives.

Informal AARs mostly occur at the unit level and can be used when coaching an individual or team during project or event implementation. Feedback on individual or team roles related to the project objectives as well as individual or team performance related to overall project results is provided immediately.

The main difference between the formal and informal AARs is the amount of time, and resources needed, and when the AAR takes place Table 1 provides more detail on the differences.

**Table 1. Formal and Informal After-Action Reviews**

Formal After-Action Reviews	Informal After-Action Reviews
» Are conducted by a leader or facilitator and can include external observers	» Are conducted by internal staff
» Take more time	» Take less time
» Are scheduled beforehand	» Are scheduled when needed
» Are conducted where best supported	» Are conducted at the event or project site or back at the base of operations

Source: Adapted from U.S. Department of Army (1993). *A Leader’s Guide to After-Action Reviews*. [https://www.acq.osd.mil/dpap/ccap/cc/jcchb/Files/Topical/After\\_Action\\_Report/resources/tc25-20.pdf](https://www.acq.osd.mil/dpap/ccap/cc/jcchb/Files/Topical/After_Action_Report/resources/tc25-20.pdf)

## Reasons to Conduct AARs

Boss (2016) notes 6 key reasons to conduct an AAR.

- » An AAR allows leaders and team members to think strategically because their purpose is to question all previously held assumptions and beliefs that spark curiosity.
- » AARs build shared contextual awareness, breaking down long-standing silos by increasing clear communication within and across silos.
- » AARs help sustain competitive advantage and save time and costs related to ramping up new staff by providing a “go-to knowledge bank with inferred knowledge” that cannot be gleaned from an organizational chart.
- » AARs create conditions for innovation by providing employees with a collective source of information that allows a fresh look at old problems.
- » AARs enable strategic decision-making by helping build pattern recognition that heightens risk perception.



- » AARs minimize interpretations by providing clarity in learning, which leads to a focus on work productivity rather than how to carry out the work.

For Regional Centers, SEAs, or LEAs, AARs can be used to reflect on actions taken to address crises, such as a pandemic, or longer term projects, such as a series of professional development sessions on evidence-based practices or a pilot of a new program. An AAR can be part of a cycle of improvement whereby an AAR is routinely used to reflect on actions taken and how to use the learning to improve processes and procedures.

## Planning an AAR

Planning is critical to the success of an AAR (see the planning checklist in Appendix A). The facilitator meets with the organization, division, or unit leader (depending on the level of the AAR) before the AAR to determine the logistics of conducting the AAR including:

The date, time, and location for the AAR. The review should be conducted in person whenever possible, however, it could be accomplished through a virtual meeting.

- » The participants and how to ensure all team members are included and can be present. If a team member cannot be present, gather input through an interview, conference call, or video conference.
- » The meeting roles:
  - › Notetaker: A notetaker is designated to chart discussions and decisions. If the meeting is more than 1 hour it would be prudent to have more than one notetaker to rotate.
  - › Timekeeper: A timekeeper is assigned to keep the process flowing based on approximate time allotted for each question, however flexibility is needed based on the discussions. Strict timekeeping could limit important contributions. The AAR should determine the amount of time needed as opposed to the time allotted for the AAR. The facilitator or leader keeps things flowing and does not allow distracting digressions. Focus on the AAR is critical. The AAR is the objective, not an arbitrary schedule.
- » Confirmation of the event or project mission, purpose, and intended results (including outputs and outcomes). If a project plan was created, review the plan to gain a sense of the order of actions and expected outputs.
- » The ground rules for the review. These could be the established norms of the organization or ones the team agrees upon at the beginning of the review. Here is an example of possible ground rules:
  - › Actively participate
  - › Value all points of view
  - › Be open to new ideas
  - › Use “Yes...and,” rather than either/or thinking
  - › Build consensus



- › Take notes
- › Focus on issues that can be addressed, not on issues outside the organization’s sphere of influence
- › Be candid
- › Focus on improving performance, not placing blame
- › Acknowledge one’s own mistakes

## Conducting an AAR

An AAR begins with restating the task, purpose, intent, and anticipated results or end state. These should be posted and clearly visible to all participants since they are the key focus of the review—“Did we carry out the work as intended for the purpose and did we get the anticipated results?” This task is best accomplished by the leader of the organization/unit as it sets the tone and expectations of ownership and accountability of the leader.

Participants then discuss the following questions while the facilitator and notetaker capture key points of the discussions.

### 1. What was expected to happen?

- › What was the purpose and what were the objectives?
- › Who was the targeted audience?
- › What was the time frame?
- › Who was involved?
- › What were the intended outputs and outcomes?
- › What were the anticipated barriers? How were those to be addressed?

### 2. What actually happened?

- › When were actions initiated?
- › Why were certain actions taken?

### FACILITATOR TIPS

- › Give participants time to think about and write down their recollections.
- › It is important that participants focus on what transpired without judging what was good or bad.
- › Make sure each participant has a chance to speak. Ask participants to be specific and avoid generalizations.
- › Ask probing follow-up questions to assist a participant in getting to the specifics. For example, a follow-up question might be asked to encourage a participant to provide more specific details, e.g., Tell me what you mean?
- › Summarize and repeat back responses to verify with the person who made the statement that the notes or summation accurately reflects their intended response.
- › Periodically, summarize and repeat back the key discussion points to the entire group. This also assists the notetaking in recording responses that accurately reflect the person’s statement and the group’s discussion points.
- › Acknowledge feelings, but focus participants on sharing the facts. For example, e.g., It sounds like you felt frustrated, What specifically happened that led to the frustration?
- › Encourage each participant to share what happened from their own point of view, e.g., ow did you perceive the interaction?
- › Relate actions to subsequent results, e.g., What was the result of that action?



- › What intended actions were missed? Why?
- › How did each participant react to certain situations?
- 3. What went well and what didn't work? (What caused our results?)
  - › What were the successful steps taken toward achieving the objectives?
  - › What went really well? Why?
  - › What had the greatest effect on the team's success?
  - › What missteps occurred? Why?
- 4. What will we sustain or improve? What will we do to adapt or refine our executions for a better outcome?
  - › Given the information and knowledge we had at the time, what could have been done better?
  - › Given the information we have now, what can we do differently?
  - › What advice could be given to a team based on the experiences and discussions we have had?

The facilitator closes an AAR by summarizing the key points that emerged from the discussion, and identifying recommendations for future events or projects based on learnings. It is important to link observations to recommendations for future improvements. In addition, the facilitator engages participants in identifying concrete next steps for follow-up and assigning persons responsible for each step along with a timeline. Finally, the participants identify how AAR results will be shared with team members and others outside of the team (e.g., the lessons will be shared, but without individual comments/attacks/etc.).

#### FACILITATOR TIPS

- › Relate actions to subsequent results.
- › Recognize that most lessons that first surface are incomplete or wrong, representing what the unit thinks should work, not what really does work
- › Do not pass judgment. Let everyone be heard. Point out that during this section, positive and negative points will be shared.
- › Ask probing questions and why multiple times to get to root causes (e.g., the 5 whys technique in Appendix E).
- › Emphasize the positive and point out the difficulties in making really tough decisions in the moment, especially when the discussion starts to focus on errors.
- › Summarize and identify emerging themes.

#### FACILITATOR TIPS

- › Engage the team in exploring alternative courses of action that might have been more effective, e.g., How might this have been handled differently?
- › Make sure discussions of errors do not become blame focused, pointing fingers at others, e.g., What gap or barrier caused the error?
- › Compliment those who are accepting responsibility for errors on being accountable, e.g., We appreciate the ownership of the error and let's work together to learn from the experience.
- › Continually bring the focus back to the original intent, objectives, and results by asking how things could have been done differently to achieve better results, e.g., How did this action support the overall objectives?



## Using the Results of the AAR

“At most civilian organizations we studied, teams view the AAR chiefly as a tool for capturing lessons and disseminating them to other teams. Companies that treat AARs this way sometimes even translate the acronym as after-action report instead of after-action review, suggesting that the objective is to create a document intended for other audiences” (Darling, et al., 2005). In contrast, the U.S. Army’s Operation Force believes a unit hasn’t learned the lesson until there is a change in behavior.

The above statements point out the importance of using the AAR results to improve performance. Not all AARs involve correcting what went wrong. Some involve applying what went right under different conditions or circumstances. An AAR provides an opportunity to experiment and continually improve by sustaining those actions that work and applying variations to get even better results. Evidence gathered through AARs can add to a body of evidence that builds best practices to continue or expand. The facilitator supports leadership in planning and implementing the lessons learned and conducting AARs to determine if the variations work. The AARs then become part of the overall continuous improvement process of the organization, its divisions and units, and its people.

The facilitator works with the leader or leadership team to create a report that provides a clear summary of concrete and actionable recommendations for improvement and an action plan to apply lessons learned to an upcoming event or project. Lessons learned may indicate that execution failed due to lack of communication, an overlooked barrier in the planning process, or poor performance on the part of an individual or team. While it is desirable to keep things positive, these failures must be acknowledged, owned, and addressed by focusing on the role that the action(s) played in the failure of the mission and ways to prevent a repeat of the error.

COVID-19 provides an opportunity to reflect on actions taken, the effectiveness of the actions, and lessons learned from the rapid responses in changing contexts. An AAR provides a method for reflection which can be used by state, district, and school leaders to improve education service delivery.



## References

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## Appendix A: AAR Planning Checklist

### After-Action Planning Checklist

1. Determine a date, time, and location for the AAR. The review should be conducted in person whenever possible.
2. Identify participants and ensure all team members are included and can be present.
3. Determine meeting roles:
  - › Notetaker to chart discussions and decisions. If the meeting is more than 1 hour it would be prudent to have more than one notetaker to rotate.
  - › Timekeeper: Time should be assigned to questions during the review to keep the review flowing and allow time for wrap-up.
4. Review the event or project mission, and the purpose and intended results. If a project plan was created, review the plan to gain a sense of the order of actions and expected outputs.
5. Establish ground rules for the review. These could be the established norms of the organization if they are used.
6. Determine required supplies and equipment whether the meeting is face-to-face or virtual (e.g., Flip charts, markers, tape, recorder, computer, projector, virtual tools such as Padlet)



## Appendix B: AAR Ground Rules

### After-Action Review Ground Rules

- » Actively participate
- » Value all points of view
- » Be open to new ideas
- » Use “Yes...and,” rather than either/or thinking
- » Build consensus
- » Take notes
- » Focus on issues that can be addressed, not on issues outside the organization’s sphere of influence
- » Be candid
- » Focus on improving performance, not placing blame
- » Acknowledge one’s own mistakes



## Appendix C: AAR Key Questions

### After-Action Review Key Questions

- 1. What was expected to happen?**
  - a. What was the purpose and what were the objectives?
  - b. Who was the targeted audience?
  - c. What was the time frame?
  - d. Who was involved?
  - e. What were the intended outputs and outcomes?
  - f. What were the anticipated barriers? How were those to be addressed?
- 2. What actually happened?**
  - a. When were actions initiated?
  - b. Why were certain actions taken?
  - c. What intended actions were missed? Why?
  - d. How did each participant react to certain situations?
- 3. What went well and what didn't work? (What caused our results?)**
  - a. What were the successful steps taken toward achieving the objectives?
  - b. What went really well? Why?
  - c. What had the greatest effect on the team's success?
  - d. What missteps occurred? Why?
- 4. What will we sustain or improve? What will we do to adapt or refine our executions for a better outcome?**
  - a. Given the information and knowledge we had at the time, what could have been done better?
  - b. Given the information we have now, what can we do differently?
- 5. What advice could be given to a team based on the experiences and discussions we have had?**



## Appendix D: AAR Template

### After-Action Review Template

Event, Project or

Action: \_\_\_\_\_

Event, Project or Action \_\_\_\_\_

Timeline: \_\_\_\_\_

Participants	Role	Present for AAR (Yes or No)

Date of AAR: \_\_\_\_\_ Was Review Completed? During the Event/Project/Action \_\_\_\_\_ After the Event/Project/ Action \_\_\_\_\_

What Was Expected to Happen?	Patterns/Trends
<i>What was the purpose and what were the objectives?</i>	
<i>Who was the targeted audience?</i>	
<i>What was the time frame?</i>	
<i>Who was involved?</i>	
<i>What were the intended outputs and outcomes?</i>	
<i>What were the anticipated barriers? How were those to be addressed?</i>	

<b>What Actually Happened?</b>				<b>Patterns/Trends</b>	
<i>When were actions initiated?</i>					
<i>Why were certain actions taken?</i>					
<i>What intended actions were missed? Why?</i>					
<i>How did each participant react to certain situations?</i>					
<b>What Went Well and What Didn't Work?</b>					
<b>What Went Well and What Didn't Work?</b>				<b>Patterns/Trends</b>	
<i>What were the successful steps taken toward achieving the objectives?</i>					
<i>What went really well? Why?</i>					
<i>What had the greatest effect on the team's success?</i>					
<i>What missteps occurred? Why?</i>					
<b>What Will We Sustain or Improve? What Will We Do to Adapt or Refine Our Executions for a Better Outcome?</b>					
<b>What Will We Sustain or Improve? What Will We Do to Adapt or Refine Our Executions for a Better Outcome?</b>				<b>Patterns/Trends</b>	
<i>Given the information and knowledge we had at the time, what could have been done better?</i>					
<i>Given the information we have now, what can we do differently?</i>					
<i>What advice could be given a team based on the experiences and discussions we have had?</i>					
<b>Action Plan to Apply Lessons Learned</b>					
<b>Action</b>	<b>Output</b>	<b>Outcome</b>	<b>Person(s) responsible</b>	<b>Resources</b>	

# Appendix E: 5 Whys Template

## 5 WHYS Worksheet\*

Define the Problem: (Insert an issue or need.)

Why is it happening? (Identify each as a concern)

1.	Why is that? ↓
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2.	Why is that? ↓
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3.	Why is that? ↓
----	-------------------

4.	Why is that? ↓
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**Caution:** If your last answer is something you cannot control go back up to previous answer.

5.	Why is that? ↓
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Source: \*(Adapted from a free template by The IPL LLC <https://www.theiplgroup.com/>)

