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Reports: Primer and Best Practices

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Overview

This Primer and Best Practices document is a resource for individuals and groups who are tasked with writing reports for work in academic, nonprofit, and government spaces. While the people in these spaces are usually accomplished writers in their chosen field, report writing is a separate skill. Report writing comes with different objectives, constraints, considerations, and stakes. This difference can add anxiety to work that is already consuming. The purpose of this document is to relieve that anxiety while providing the tools for report writers to tell the story of their work in the best possible way.

This document is divided into two sections. The first is a primer on the elements common to reports in the academic, nonprofit, and public sectors. The primer is a basic tool to guide the creation of new reports and to analyze existing reports. The second section provides a set of hallmarks for quality reporting and the best practices for achieving those hallmarks.

The **primer section** explores the basic elements that make up the framework of any report. This includes the difference between mandatory and self-reporting; data and narrative reporting; efficiency and effectiveness reporting; and standard reporting and evaluation. These comparative elements form the can be used to analyze and define reports in terms of intent, audience, and format.

MANDATORY	**vs.**	SELF-REPORTING
DATA	**vs.**	NARRATIVE
EFFICIENCY	**vs.**	EFFECTIVENESS
STANDARD REPORTING	**vs.**	EVALUATION

The **best practices section** provides the tools to fine tune a report based on achieving three hallmarks of quality reporting: Utility, Clarity, and Focus. These three hallmarks are values that guide report writers in the creation of best practices in reporting.

It is not the purpose of this document to provide a writing or style guide. **Appendix A** includes writing tips as pertinent to report writing. This section is limited as individual institutions often have established, sometimes mandatory, writing and style guides for reports. Similarly, sponsor and funder organizations have formats for submission that defy any single writing style. Report writers who do not have a mandatory guide established for them should find their own preferred resources.

The Primer and Best Practices sections use a vocabulary of terms that have many different, parallel meanings in other fields and other types of writing. To help avoid confusion, **Appendix B** is a glossary of terms used in this document, providing definitions and examples of how specific terms are used in reporting.

Section 1:
Primer on Report Writing

What is a report? Most sources will broadly define a report with some variation of a report being "an account or statement of work conducted as part of a program, project, or initiative." In short, a report is a story. It would be filed in the nonfiction section of the library, but a story, nonetheless. Reports can take many forms. A report can be a multiple page written narrative, a complex data upload, or a simple attendance list, just a fictional story could be a novel, epic poem, or a four-panel cartoon strip.

This primer focuses on the elements of reporting as storytelling. By understanding the elements of the story being told, the reader of the primer should be empowered to better understand reports they are analyzing and create reports that are successful.

A popular example of reporting is genealogy. This is evident to fans of the PBS show "Finding Your Roots," which uses both narrative reports (historical documents such as birth certificates, newspaper articles, contracts, the census, et. al.) and scientific data (DNA testing) to create a larger, tailored report (A scrapbook with a family tree) for the celebrity guests. It is an excellent example of how the elements of reporting listed below are in fact interconnected and can generate positive and nuanced outcomes when used in combination. (PBS, ND)

The purpose of Section 1 is to provide a framework for the common types of reports (or stories) by examining four divisions of purpose and content:

MANDATORY REPORT	VS.	SELF-REPORTING
Required as part of a contract, agreement, or grant. Tells the story in the manner the sponsor wants it told for their purposes.		Non-required reporting created in response to a perceived need. Tells the story in a manner tailored to the report creator and audience's needs.

DATA REPORTING	VS.	NARRATIVE REPORTING
The story of the work told with lists, numbers, and math.		The story of the work told through text and graphics.

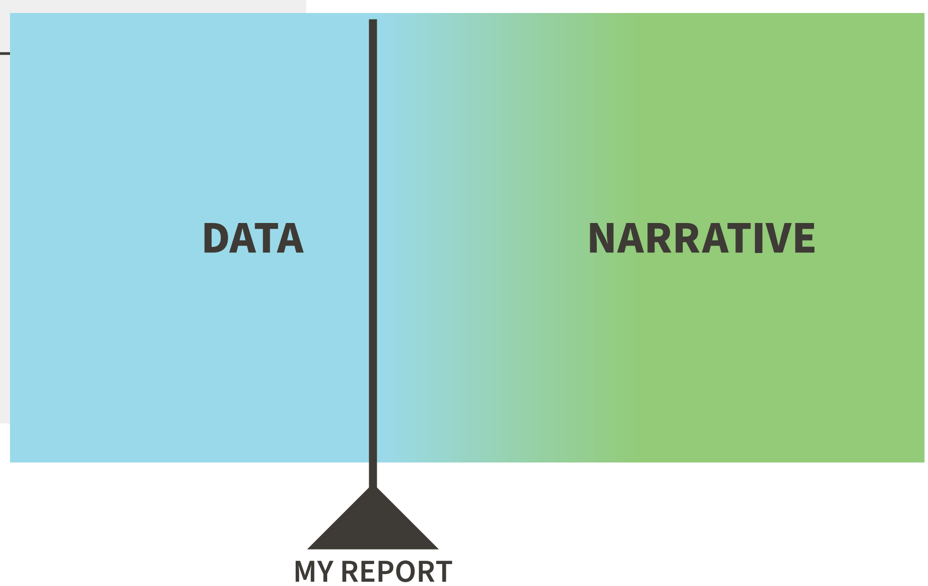
EFFICIENCY REPORTING	VS.	EFFECTIVENESS REPORT
The story told in terms of inputs and outputs. Often relies on data reporting and tends to keep its timeline confined to the period that the work is conducted within.		The story told in terms of outcomes and impacts. Often relies on narrative reporting and the timeline can extend to both before and after the period that the work is conducted within.

STANDARD REPORT	VS.	EVALUATION REPORT
A report that is a statement of work completed, processes conducted, and results. A standard report may contain recommendations, but rarely calls to action.		A report done with the goal of improving processes, outputs and/or outcomes through analysis. An evaluation report will often have one or more calls to action and is the start of a process/cycle.

THESE ELEMENTS OFTEN EXIST ON A SPECTRUM:

It should be noted that these elements have been presented as dichotomies for expediency's sake. In practice, these elements often exist on a spectrum for individual reports. This is most obvious when elements overlap. For example, data reporting often requires narrative context. When this overlap occurs, the spectrum is created.

Spectrums are inherently complex. This complexity can create confusion when creating or analyzing a report. It can be useful to take the time to create a mental image of where the report lies on each element's spectrum.



Mandatory versus Self-Reporting

MANDATORY REPORTING:

A mandatory report is required as part of an agreement with a partner or sponsoring organization. Mandatory reports are often about accountability, declaring what was accomplished with specific resources (funds, time, equipment, etc.) towards stated goals and objectives. In the case of research-oriented goals, mandatory reports can also be about increasing community benefit by sharing the information in the report. A mandatory report is an exercise in constrained story telling. The audience is predetermined: It will be the partner and anyone they choose to disseminate the report to. The format and content are stricter. The partner will prescribe the content and format of the report.

EXAMPLES OF MANDATORY REPORTS

- **Tax Returns:** Most U.S. residents are required to file an annual tax return. A tax return is a report where the taxpayer states their income, expenses, and other tax related transactions. (IRS Staff, ND)
- **Ingredient Lists:** While you may not think of it as a such, many of the products you purchase at the grocery store come with a mandatory report. Food manufacturers are required by the Food and Drug Administration (FDA) to list all of the ingredients in their product on the label and in order by weight. (FDA Staff, 2023)
- **Progress Reports for Grants:** Whether they are governmental or non-profit in origin, the sponsors of grants generally require periodic updates on how their funds are being put to use. Some require multiple reports, such as the National Science Foundation (NSF), which requires an annual progress report and a Final Outcomes Report (Cite)

vs.

SELF-REPORTING:

Self-Reporting efforts are reports created out of a recognized need as opposed to a mandate from a partner or sponsor. The “recognized need” can be varied, including but not limited to anticipation of future need, the desire to capture nuances omitted by an existing mandatory report, or creation of a road map to repeat the work after the period of the report. Likewise, the audience for self-reporting can vary significantly. The audience of a self-reporting effort might target include sponsors, potential sponsors, peers, and even skeptics or critics. These variables make the format and content unconstrained as opposed to the constrained nature of mandatory reports.

The wide-open nature of self-reporting makes it a valuable tool. It is adaptable to both the audience and report creator’s needs. Self-reporting should be used in conjunction with mandatory reports to ensure that important information does not fall through the cracks. When properly implemented, self-reporting creates sustainability in a project or program through the clear and effective dissemination of information.

Self-reporting can be a little more difficult to initiate. It requires thought, time and effort that may not be accounted for in a project. Those same resources in the case of mandatory reporting are typically easy to allocate because they are requirements of the sponsor. The benefits often outweigh the effort it takes to conduct self-reporting efforts. Self-Reporting provides focus, clarity, and utility to a body of work that would otherwise be lacking.

EXAMPLES OF SELF-REPORTING

- **Nonprofit Organization Annual Reports:** Many nonprofits of a certain size publish an annual report on their work. These reports are not required by the federal government but serve a purpose for organization. For instance, some use an annual report as a springboard for fundraising, others use an annual report to communicate with their stakeholders who benefit from their work, and still others may use an annual report to provide a deeper of accounting of their finances than their tax return might indicate.
- **Meeting Minutes:** Meeting minutes are a record (or report) of the attendance, discussions, decisions, and/or actions taken by a group or team at a specific meeting. Meeting Minutes serve the purpose providing accountability and transparency.
- **File Indexes:** A file index is a report that lists, sorts, and provides location for texts, documents, and other material that are in a filing system. Many organizations, especially those that are large. Complex, or have long histories, create file indexes to reduce the time and effort needed to use their own files.

Data Reporting versus Narrative Reporting

DATA REPORTING:

Data reporting is story telling through lists, numbers, and math. While at first this may seem counter-intuitive, remember that numbers can be reflective of progress and action. President Joseph Biden, quoting his father, once led a session of budget remarks with a statement that illustrates this: “Do not tell me what you value. Show me your budget, and I’ll tell you what you value.” (Biden, 2022) At the core of the Biden quote is a recognition that data report tells a narrative in two ways: What data is included (or not included) and how the data is presented. Data reporting is sometimes used interchangeable with the term qualitative reporting, or reporting on information that is easily countable. In terms of storytelling, it is important to take time to consider what data is collected and how it is presented. In story telling terms, this is the “establishing shot” that provides the audience with the context needed to properly read the report.

Advantages of data reporting include that it is concise. Data reporting can be used to establish trends, correlations, and provide results for/against hypotheses in experiments. Data reporting is more easily scaled/combined/compared to similar reporting efforts than narrative reporting efforts.

EXAMPLES OF DATA REPORTING

- **Balance Sheet:** A balance sheet is a report that states an individual’s or organization’s assets and liabilities in terms of monetary value. Generally speaking, in a balance sheet total liabilities are subtracted from total assets to determine net worth.
- **Attendance Sheet:** An attendance sheet is a count of participants at an event or program. It can be as simple as a hashmark tracking system or as complex as a list of program participants with additional information specific to each entry that can be sued to filter, sort or otherwise slice up the data. (For example, an attendance list that also tracks demographic information of participants.)
- **Quantitative Survey Results:** Often surveys used in research and reporting are framed in such a way as to have the final responses tallied. The questions in such surveys have specified results for the respondents to choose from. (Yes or no being the most common example, though any closed set of responses can be tallied).

vs.

NARRATIVE REPORTING:

Narrative reporting is telling the story of the work with language and graphics. While the word “narrative” may imply lengthy prose, narrative reporting can be as short as a single sentence or pie chart. Narrative reporting can be used for qualitative reporting, or reporting on work that is measured in terms other than quantity. In terms of storytelling, what becomes important with narrative reporting is identifying the audience and the way that they consume information. Tailor the content of the narrative to their learning styles, needs, expectations.

Narrative reporting has the advantage of allowing nuanced descriptions of work and environment as opposed to the constrained nature of data reporting.

EXAMPLES OF NARRATIVE REPORTING

- **A News Report:** Journalism is one of the most common types of narrative reporting. After all, journalists are frequently called reporters! While news reports can have quantitative information such as statistics, a news report provides additional narrative for context. There is often a qualitative aspect to news reporting, measuring social, political, or other non-quantifiable impacts.
- **A Movie Review:** A movie review is a report which evaluates the quality of the film in question. As the arts are subjective, a movie review is qualitative based on the preferences, bias, and expectations of the reviewer.
- **Qualitative Survey Results:** Surveys which feature open ended questions or set choices that are relative but not quantifiable (e.g., a Likert scale that from a restaurant that asks a diner if their meal was “very unsatisfying, a little unsatisfying, neither satisfying or unsatisfying, a little satisfying, or very satisfying.”)

Important Note: *Data and Narrative reports are not mutually exclusive. Very often reports contain elements of both. A data report may have open fields that require a narrative response. A narrative report will usually have embedded data reporting in sentence, paragraph, or graphic formats.*

Efficiency Reporting versus Effectiveness Reporting

EFFICIENCY REPORTING

Efficiency reporting is about comparing inputs (or resources) to outputs (products, events, texts) in an effort to justify the work done. Inputs are usually thought of in terms of money/funds, but can include resources such as time, equipment/technology, and intangible assets. Outputs are the measurable assets created from the inputs, such as products, texts, events, etc. A key value in efficiency reporting is stewardship. Efficiency reporting answers the basic question "What did you do?" and the more complex question "Have you used your given inputs to create the highest possible output." As such, efficiency reporting often has a strong element of data reporting. Efficiency reporting can be summative, looking at a whole body of work from beginning to end or formative, using information to determine if a body of work is feasible or will be productive. The latter would be "crunching the numbers."

Efficiency reporting tends to rely heavily on data reporting, though that data can be embedded or expanded on in a narrative report.

In terms of storytelling, efficiency reporting can be considered the roster of characters and the basic plotline. The "characters" are the inputs and outputs. How the inputs and outputs relate to each other are the "Plot."

EXAMPLES OF EFFICIENCY REPORTING

- **Return on investment (ROI):** In marketing, an analysis of Return on Investment measures the amount of income or number of sales generated by specific ads or marketing campaigns. The inputs are the number and cost of the advertisements, and the outputs are the number and dollar amount of the sales that can be tied back to the ad.
- **Budget vs. Actual Report:** A budget in and of itself is a formative efficiency report with estimated monetary data as inputs and predicted profits or loss as outputs. A budget vs. actual report is a summative efficiency report that takes the actual inputs (expenses and revenue) and compares the actual output (balance) to the amounts predicted in the budgeted amounts.
- **Fuel Economy Report:** A report on the number of miles per gallon specific automobiles are able to achieve is an efficiency report. It calculates an output (number of miles travelled) based on input (number of gallons of gasoline).

vs.

EFFECTIVENESS REPORTING

Effectiveness reporting is about the outcomes for the intended subjects of a program. Where an efficiency report answers the question "what did you do?" effectiveness reporting answers the question "to what end was the work done?" Effectiveness reporting examines the entire timeline of a project or program, establishing the pre-existing state of the subjects, the subjects progress through the project, and recording/estimating the ongoing benefits of the project to the subjects.

Effectiveness reporting relies heavily on both data and narrative reporting. Effectiveness reporting is most powerful when it includes the voice of those meant to benefit from the work. Determining outcomes for a group of subjects often requires anecdotal information obtained through surveys and interviews completed before, during, and after the project's completion.

In terms of storytelling, effectiveness reporting can be thought of as "the moral of the story."

EXAMPLES OF EFFECTIVENESS REPORTING

- **Restaurant Reviews:** A restaurant review is a report on the experience of a meal or series of dishes. The focus of restaurant reviews tend to be measurements of subjective and non-measurable aspects of the meal. (Quality of service. Whether or not the taste was pleasing. Originality, technical prowess, or cultural authenticity of the preparation, etc.)
- **Focus Group Report:** Focus Groups are conducted to gain insight into the opinions, perspectives, and experiences of stakeholders within a body of work. In terms of effectiveness, a focus group may be engaged to discuss the results of a completed body of work in terms of positive outcomes gained by the stakeholders in the conversation.
- **Important Note:** Just like reports can be both data and narrative driven, a report can offer information on both efficiency and effectiveness.

Important Note: *Just like reports can be both data and narrative driven, a report can offer information on both efficiency and effectiveness.*

Standard versus Evaluation Reporting

STANDARD REPORTING

A standard report is a presentation of facts as understood by creator(s) of the report. The purpose of a standard report is to inform the audience about work conducted, in terms of efficiency and/or effectiveness. Standard reports tend to be summative, providing information on a body of work conducted over a specific period of time. The audience is often external from the report writer and the work being documented. Standard reporting is a more or less linear process. Standard reports can provide analysis and recommendations to the audience but are not part of a cycle of change.

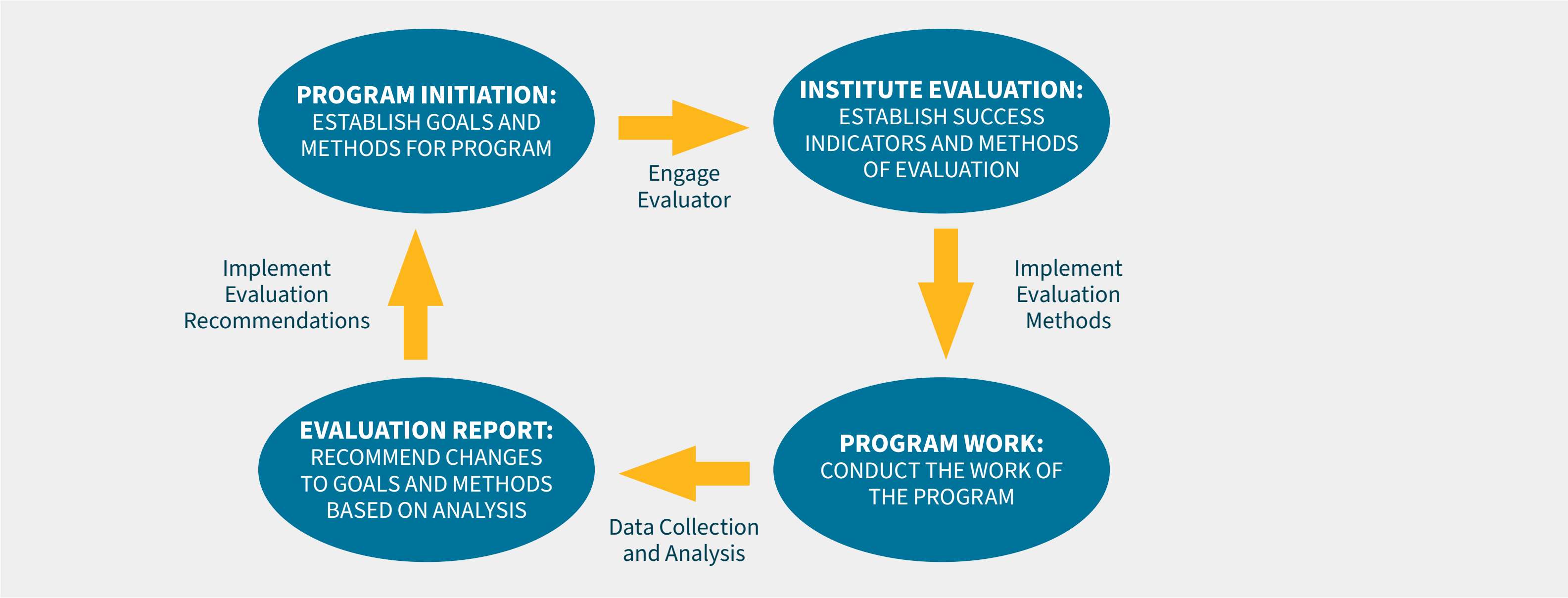
STANDARD REPORTING PROCESS

vs.

EVALUATION REPORTING

An evaluation report provides analysis of the work conducted by an individual or group with the intent of increasing positive outputs and/or outcomes. Evaluation reports suggest changes in methods, processes, goals, and/or objectives based on analysis of program processes and predetermined success indicators. Frequently, indicators of success are co-created between the project team and the evaluators to identify the short and long term focuses of the project. Evaluations tend to be formative in nature, examining what changes can be made to create those positive changes. This creates the primary difference between evaluation and standard reporting: Evaluation is part of a cycle. Evaluation reports are often mandatory reporting efforts and can involve a third party to the people doing the work of a project and the entity sponsoring the project. This is not to say that evaluation cannot be a self-reporting effort. Self-evaluation efforts often lead to better outputs, outcomes, and more efficient use of inputs.

EVALUATION REPORTING PROCESS



EXAMPLE 1: SIMPLE

According to the Kansas City Chief's website, on November 11th, 1990, linebacker Derrick Thomas sacked Seattle Seahawks quarterback Dave Krieg seven times. Seven sacks in a single game is a record that stands to this day. (Kansas City Chiefs Staff, ND).

Granted, this report is very brief, but that brevity makes it useful for analyzing reporting elements.

Is this post Mandatory or Self-Reporting?

While the Kansas City Chief management may have issued a directive to make a vlog post about Derrick Thomas's record, this is an example of self-reporting. No sponsor or overseeing organization (Advertisers, the NFL, etc.) is mandating that the Chiefs report on Thomas's. The Chiefs, however see a benefit to their brand and community building. The Chiefs also perhaps see a responsibility to celebrate their past player's accomplishments.

Is this post Data or Narrative Reporting?

This post has elements of both data and narrative reporting. There is the basic data point of Thomas's seven sacks and the brief sentence and accompanying video provide narrative context to that notable output.

Is this post Efficiency or Effectiveness Reporting?

While Thomas was certainly an effective player in the November 11th game, describing his accomplishment is strictly a measure of efficiency. In 60 minutes of game time, Derrick Thomas achieved seven sacks. Effectiveness reporting would add the extra element of a positive outcome, such as "Derrick Thomas's seven sacks led the Kansas City Chiefs to a win over the Seattle Seahawks."

Note this was not the case. Seattle actually won that game 17 to 16. This discrepancy in efficiency versus effectiveness why some sports statisticians have attempted to switch to stats that account for outcomes, such as Major League Baseball's WAR (Wins Above Replacement).

Is this post Standard or Evaluation Reporting?

Strictly standard. These are the facts as they happened without any recommendations for a change in process or goals. That is not to say that NFL teams do not engage in evaluation. In fact, film review of past games should be considered a type of evaluation reporting.

EXAMPLE 2: (COMPLEX)

The National Science Foundation (NSF) requires two different types of reports for its grants: **Annual Progress Reports (APRs)** and a **Project Outcomes Report**. (National Science Foundation Staff, ND) The APRs are prepared each year and provide an overview of the year's activities as related to the project and broader impacts which may not be intrinsic to the research. (Project instructions) The Project Outcomes Report is a short summary of the project written for a public audience. (Project instructions.)

The first step in analyzing the reporting requirements for NSF is disaggregating the required reports. It is tempting to clump the APRs and Outcomes Report together as "NSF reporting," but they are actually separate reports with separate instructions for completion. The instructions for completing the APR come in several disparate locations on the research.gov site, but the template provided gives a great overview of the elements that will go into a complete report. (Cite) The specific requirements for the outcome report are also available in multiple places. A short overview is available to the public on the NSF's proposal and award policies guide website (Cite), though more specific instructions are available to grantees through their password protected grants page at research.gov. (Cite)

The template for the **APR** is fairly significant in terms of the amount of information it requests. There are five major sections (Accomplishments, Products, Participants, Impacts, and Changes/Problems) each with multiple questions and prompts. Many of those questions have the option of listing "nothing to report" so the length and content of the report can vary significantly from grant to grant and from year to year for specific grants. The questions are mostly open ended, requiring text responses. The focus of the questions are generally about quantifying what happened during the reporting period. Some of the questions ask about future plans or impact of the work. There is also the opportunity to add up to three appendices or attachments to support answers to the questions, with the strong recommendation that one attachment be a report from the project's external evaluator.

The instructions for the **Project Outcomes Report** are framed as a single prompt. The instructions advise to write the report in plain English and to include how the project's outcomes either advances knowledge and/or provides community benefit.

Now that the two reports have been separated, it is possible to analyze them each in terms of the elements of report writing:

APR	PROJECT OUTCOME REPORT
Mandatory	Mandatory
Mostly Narrative	Narrative
Both Efficiency and Effectiveness	Effectiveness
Both Standard Reporting and Evaluation	Standard Reporting

Is this post Mandatory or Self-Reporting?

Both reports are required as part of NSF founding and have prescribed formats/content, so both are firmly Mandatory.

Is this post Data or Narrative Reporting?

The APR's frequent use of open-ended text questions makes the nature of the report largely narrative, however, some of questions are data-centric (Number of activities, number of participants, et.al.) and can be expressed with counts or tables of data. The Project outcomes report asks specifically for a narrative about outcomes.

Is this post Efficiency or Effectiveness Reporting?

The NSF APR has many questions that are reflective of both efficiency and effectiveness. Many of the prompts and questions revolve around efficiency: the outputs such as publications, events attended, experiments, and so on. The APR also asks about impacts of the work, so there is effectiveness reporting as well. (Impacts being more or less synonymous with outcomes as described in the elements of reporting.) The Outcomes report, as the name may indicate, is centered on outcomes and is effectiveness reporting.

Is this post Standard or Evaluation Reporting?

The NSF APR is mostly a standard report, but since each report asks about problems, changes, and adjustments with the goal of improvement from year to year, there is also evaluative content. The Outcomes Report does not ask for a plan to improve upon outputs or outcomes, so is a Standard Report.

Hallmarks of Quality Reporting

FOCUS
CLARITY
UTILITY

While reports may vary in terms of how the basic elements of reporting discussed in the primer are applied, there are some hallmarks of quality that apply to any report. The best practices described in this section will help a writer achieve these hallmarks of focus, clarity, and utility.

FOCUS

A quality report will focus on a limited set of objectives based on the audience for the report.

- Analyze or state Report Requirements
- Be Intentional When Choosing or Creating tools
- Delegate Responsibilities

CLARITY

A quality report is coherent, concise, and tells a specific story.

- Answer the basic questions “who, what, where, when, how, and why?
- Make Comparisons to Deepen Context
- Be transparent and accountable
- Keep your Audience in Mind

UTILITY

A quality report will be useful to its reader/audience.

- Create Helpful Artifacts
- Create a Central Location collected Information
- Assign a Data Steward

FOCUS

Report writing can be time consuming, and if that completion time is poorly estimated, stressful. To combat this potential stress, take the following early steps when looking ahead to a report deadline.

Analyze the Reporting Requirements Before Work Begins:

It is necessary to perform the work in a manner suitable to record results for later reporting. This is particularly true in the case of mandatory reporting, where in many ways the required information shapes the work as much as any other goal or objective. In the case of self-reporting, it is more the reverse designing the report in response to the expected work. Either way, analyzing the reporting requirements before actual work begins allows the report creator to build their own schedule, set deadlines, and shape communications with all the principal stakeholders in the project.

The process of analyzing report requirements is to break down the report into a list of tasks that need to be completed to finish the report by its deadline. Ideally, each task on the list should include an approximate amount of time needed for completion. With this information it is possible to turn the list of tasks into a timeline for completing the report.

Example:

Erin and their team receive a grant from the federal government to conduct their work. Before beginning this work, the team reads the grant agreement, making special note of the reporting requirements section. Specifically, the report requires an annual report that includes a count of participants including demographic information, a list of equipment purchased with the grant, and a narrative update on the progress of the work towards its intended goals. The narrative portion will have to include written information on multiple events that are part of the project and has the option of including photos/graphics.

With the help of the team, Erin puts together the following list of needed items and task to complete the report:

1. An attendance template that captures demographic information to be used as the work progresses. Creating the attendance template will take half a day. Each attendance list should take 10 minutes to complete, but the work of formatting and double checking the final compiled list may take up to 2 days to complete.
2. An Equipment List for the project. This was already created as part of the application for the grant and only needs to be updated if any changes are being made to the list during the ordering process. This list will take a day to prepare and format for the report.
3. A common filing space for written information on project progress as well as photos and graphics. Creating the file sharing site will take a day. The team members will need to spend half a day creating the narratives for each event. Compiling and editing this information could take up to a week.

Erin now can work the time needed to complete reporting into the work plan. They know that approximately two days will be needed at the beginning of work to set up the attendance List, equipment list, and file sharing site. Individual team members will need to schedule a half day after each event to create their narrative and share their files. Erin will need to budget at least a week and two days before the reporting deadline to compile information.

Be Intentional When Choosing or Creating tools for collecting information:

Many tasks will require tools for collecting information. For small scale programs and projects, this can be as simple as choosing the preferred word processing and spreadsheet applications. In larger organizations with complex data management systems, it is important to identify where information lives and how to access it. It is also important to compare the strengths and limitations of tools for fulfilling report requirements.

An important part of being intentional is ensuring that information is saved and shared in a consistent and easy to use way. Often this involves creating a naming convention for files. Naming conventions are most effective when they are relatively simple and provide information that is easily sortable and searchable. Abbreviations used in naming conventions should be consistent. (i.e., if multiple documents from the United States Postal Office are expected, make sure that project team members are using the same initials. Tags like USPS, PS, Post or Post Office are each fine, but need to be same for every file.) Numerals usage and date formats should also be consistent if used.

Whenever possible, establish what format documents and files are to be saved in. If all files need to be PDFs, for instance.

It can be useful to create a document stating all of the naming and filing conventions at the beginning of a project. Team members can reference this document when creating new material.

Example (Continued):

Erin chooses to use the MS Office platform to track the information required for reporting. It is most commonly used platform amongst the team members and supports both tracking counts of attendees and equipment with MS Excel.

Erin takes the time to set up a single form for attendance that the team can enter data into as events take place. The form matches the template for the attendance list created and to be used. The form also matches the format of questions regarding attendance that the sponsor will be requesting as part of the report.

Similarly, Erin uses the information provided by the sponsor to craft the first narrative document using MS Word. Erin shares out this initial document using MS SharePoint and requests that the team uses the same format and naming conventions for their reports going forward. The similar format will make the narratives easier to compile for reporting and the shared naming convention will make the SharePoint easier to navigate and search for the entire team.

Similarly, Erin uploads a series of pictures that go along with her first narrative. She also shares these including the preferred naming convention and file type. (As MS Office does not have its own separate image type, Erin chooses JPEG (.jpg) which is the default for most of the cameras used by the team.

FOCUS

Delegate Responsibilities:

Assuming that the report is being created in a collaborative (team) environment, it is important to let each team member know their responsibilities. It is equally important to give each team member an overview of all tasks to be completed to finish the report. This is particularly true in the case of tasks that are dependent on other tasks or events for their completion. (e.g., Jimmy needs to complete “Task A” before Shauna can start “Task C” or Jimmy and Shauna both need to wait to start their tasks until the semester has ended.)

Add delegated responsibilities to the task list created as part of report analysis, include contact information needed for most reliable communication between team members.

Example (Continued):

Erin realizes that workload for the report is beyond the scope of what any individual team member can contribute on top of conducting the actual work on the program. After meeting with the project team, they assign Micky with tracking attendance at events, Chandra with collecting and sharing the photos and graphics, and Eduard with writing the first draft of the narratives. Erin charges themself with compiling the information for the report when due. Erin includes the information on delegated tasks to their items and task list and shares this document with the project team.

CLARITY

Answer the basic questions "who, what, where, when, how, and why?

The closest "story" analog to a report is a news story. A good report will answer all the same questions as a good news story. That includes the five Ws: who, what, where, when, how, and why.

- "Who" includes all stakeholders in the report. The creator(s) of the report, the individuals conducting the work reported, he subjects/beneficiaries of the project, sponsors, and partners, et. al.
- "What" includes both the inputs and the outputs of the project/program/work. What was quantifiably used and created by the work.
- "Where" includes the location of the work conducted as well as the area impacted by the work.
- "When" includes the timeline of the project, beginning, middle, and end. If discussing outcomes, it is important to discuss before and after the work is completed.
- "How" includes the methods used to achieve outcomes and outputs.
- "Why" includes positive outcomes from the work. It may be the most important of the questions, as it justifies the work.

Example (Continued):

Eduard writes a paragraph to serve as the narrative portion of the report for the first event:

Dr. Drake, Bobbi Spenser, and Ms. Jones conducted the first live demonstration of our new technology for an audience of over 100 pre-med students at Port Charles State College (PCSC) on Friday, March 29th. The demonstration required Dr. Drake plan the event with PCSC departmental staff including the medical school administrators for scheduling and maintenance crew to be sure the chosen venue could handle our technology's power requirements. At the end of the demonstration, the students were surveyed about their opinions of the technology, with 63% indicating that they believed they would use the technology later in their career and 77% indicating that the technology would likely enhance the health of patients in their practice.

- The first sentence establishes "Who" by listing two groups of stakeholders: the team members and stating that over 100 pre-Med Students participated.
- The first sentence also establishes "What" by stating that it was a live demonstration of the technology.
- The first sentence also establishes "Where" by stating that the demonstration took place at PCSC.
- Finally, the first sentence establishes "When" by stating the date of the demonstration.
- The second sentence addresses "How" by stating that Dr. Drake needed to work with PCSC to launch the demonstration. The inputs are Dr. Drake's time, the PCSC staff time and expertise, and the space to actually conduct the demonstration. The Output is the demonstration itself.
- The second sentence also adds to "Who" by naming the departments Dr. Drake needed to work with.
- The third sentence established "Why" by stating the intents and opinions of the students after the demonstration.

Make Comparisons to Deepen Context:

It is possible to answer all the basic questions and still have a report that feels shallow or thin. Work does not take place in a vacuum. Make sure your report reflects the deeper context of the work/subject. Expand the use of these questions to establish what makes the work compelling. For example, compare methods of achieving results with past methods when answering "how." Or compare your results to past results of similar work in a "when" response.

Example (Continued):

Eduard reviews his narrative paragraph and makes the following changes and additions:

Dr. Drake, Bobbi Spenser, and Ms. Jones conducted the first live demonstration of our new technology for an audience of over 100 pre-med students at Port Charles State College (PCSC) on Friday, March 29th. The same student body was present for a demonstration of MedCo's similar technology in January of this year. The demonstration required Dr. Drake plan the event with PCSC departmental staff including the medical school administrators for scheduling and maintenance crew to be sure the chosen venue could handle our technology's power requirements. At the end of the demonstration, the students were surveyed about their opinions of the technology, with 63% indicating that they believed they would use the technology later in their career and 77% indicating that the technology would likely enhance the health of patients in their practice. This compares favorably to MedCo's published survey results of 53% intending to use the technology and 60% indicating that the technology will enhance patient health.

- By introducing MedCo's competing technology, Eduard has deepened context by establishing a basis for comparison of the team's own work. The results of 63%/73% may otherwise have seemed low, but they are high in comparison to Medco results.

Be Transparent and Accountable:

While the focus of these best practices has been "story telling" it is important to stress that a report is an information resource and credibility is important. This means that a report writer must be able to provide sources for any statements made, justify any methods used in the work, and be willing to acknowledge and correct any mistakes or misstatements.

Example (Continued):

After sharing his narrative with the team, Eduard realizes that he has not cited his sources and adjusts his narrative appropriately. Eduard notifies team members of the change.

Dr. Drake, Bobbi Spenser, and Ms. Jones conducted the first live demonstration of our new technology for an audience of over 100 pre-med students at Port Charles State College (PCSC) on Friday, March 29th. The same student body was present for a demonstration of MedCo's similar technology in January of this year. The demonstration required Dr. Drake plan the event with PCSC departmental staff including the medical school administrators for scheduling and maintenance crew to be sure the chosen venue could handle our technology's power requirements. At the end of the demonstration, the students were surveyed about their opinions of the technology, with 63% indicating that they believed they would use the technology later in their career and 77% indicating that the technology would likely enhance the health of patients in their practice. Tallied results of the full survey may be found in the Project team's SharePoint. This compares favorably to MedCo's survey results of 53% intending to use the technology and 60% indicating that the technology will enhance patient health, as published in JMG. (Kane, 2024)

- Eduard is being accountable by recognizing his own mistake, updating the document, and notifying his team of the mistake.
- Eduard has provided links to write ups or calendar listings of the events he cites. (Noted with the blue underlined text)
- Eduard has stated where the tallied results of the team's survey can be found.
- Eduard has instituted a reference notation system to his paragraph to cite the "JMG" article or report.

Keep Your Audience in Mind:

Assume the Audience Is “a little foggy on the whole thing. When engaging in self-reporting and creating artifacts, it is easy to fall into shorthand methods and presumptions of familiarity. Signs of these pitfalls include use of abbreviations/acronyms, sentence fragments instead of complete sentences, and statistics without references. It is best to assume that anyone reading a report is coming at it cold and has only a little basic knowledge of the subject of the report. Remember that the creator of a report is also an audience member. Do not rely on personal or institutional memory. To avoid confusing the reader, take steps to eliminate the shorthand.

Tips for clearing the fog:

- Define any acronyms or abbreviations the first time they are used in a document.
- Write in complete sentences.
- Avoid run-on sentences
- Avoid Pronoun use.

Example (Continued):

Eduard makes one final pass at his narrative and makes the following changes:

Dr. Noah Drake, Ms. Bobbi Spenser, and Ms. Fredericka Jones conducted the first live demonstration of the team’s new technology for an audience of over 100 pre-med students. The demonstration took place at Port Charles State College (PCSC) on Friday, March 29th. The same student body was present for a demonstration of MedCo’s similar technology in January of this year. The demonstration required Dr. Drake plan the event with PCSC departmental staff including the medical school administrators for scheduling and maintenance crew to be sure the chosen venue could handle the team’s technology’s power requirements. At the end of the demonstration, the students were surveyed about their opinions of the technology, with 63% indicating that they believed they would use the technology later in their career and 77% indicating that the technology would likely enhance the health of patients in their practice. Tallied results of the full survey may be found in the Project team’s SharePoint. This compares favorably to MedCo’s survey results of 53% intending to use the technology and 60% indicating that the technology will enhance patient health, as published in Journal of Medical Gadgets (JMG). (Kane, 2024)

- In the first sentence Eduard changes the naming convention.
- Eduard has broken the first sentence into two sentences to reduce the run-on aspect.
- Eduard has eliminated use of the pronoun “our.”
- Eduard has spelled out “Journal of Medical Gadgets” instead of using just “JMG.”

UTILITY

Create Helpful Artifacts:

The importance of creating artifacts can be illustrated by what is conventionally thought of as an artifact, and is also in fact, a report. The Rosetta Stone. In 1799, Napoleon's troops found the Rosetta Stone while digging the foundation for a fort. The stone was etched with a decree by royal cult of king Ptolemy, in three different languages. As one of the ancient languages (Greek) had already been translated, Scholars were able to translate remaining two (Egyptian Hieroglyphics and Demotic, the less formal language of the ancient Egyptian people.) (British Museum Staff, 2017)

Artifacts are acts of micro-self-reporting. If a report is a story, it is important to remember that a story is made up of different pieces: Characters, plots and subplots, settings, themes, introductions, conclusions, etc. It is useful to build small reports or "artifacts" that break down these elements into digestible units for easy use and analysis. In a fictional story this could include a roster of characters with descriptions, a map of settings, a statement of themes and motivations, a synopsis of the plot, etc. For a report this could include a glossary of terms, descriptive write-ups of events or programs, organizational charts, etc. Artifacts create a shared language for metrics and grant specific terminology.

Example (Continued)

Erin's project team has already created some artifacts for their grant:

- The initial list of items and tasks needed to complete the report.
- The attendance template.
- The Attendance list.
- Any narrative descriptions created by team members.
- Photos collected for the report.

There are other potential artifacts that can be created or saved for Erin's project. For instance, the application for the grant, grant award notification from the government, and signed grant agreement all might have significant or important information for the project team.

Create A Central Location For Collected Information:

Frequent communication between team members is a basic need for report writing. To aid in effective communication, create a central location for all the information needed to complete the report. A central location will include all documents and information resources needed to complete the report. It should be accessible to all team members for both adding a retrieving information. This location can be a literal physical location, such as a file cabinet, but more often is a digital location. This may be an application such as Google Drive or SharePoint or a less sophisticated solution like a shared folder on a network drive.

In addition to increasing ease of communication, a central location for information provides insurance that work can continue if sudden changes in personnel occur. (e.g., Rafi is responsible for tasks centered on event organization and scheduling for the project. Rafi wins the lottery and splits. The rest of the team should be able to go to the central location and view Rafi's schedules, invoices, etc. to pick up where they left off.)

Example (Continued)

Erin has already created a central location for the project: MS SharePoint. Erin takes the time to place each of the existing artifacts in clearly labeled folders within the SharePoint, make folders for anticipated artifacts based on the task list, and makes sure that team members have the appropriate permissions settings to access, add, or edit documents as appropriate.

Assign a Data Steward:

The more complex a project is in terms of number of people contributing and amount of information being collected, the more likely it is that attention to naming conventions and format will diminish. Also, project needs and constraints may change over time, requiring changes to the story outline of your report. To avoid the issues this causes, assign a “data steward” whose responsibility is to periodically go through the central information location, changing file names to meet naming conventions, making sure documents are in appropriate folders, and adding/subtracting files and folders appropriate.

Example (Continued)

After a couple of months working on the project, Erin begins to notice that it is becoming hard to track down individual artifacts in the SharePoint. While most of the project team has been using the established naming conventions, others have not. Their also typos in some file names, which makes them harder to search for. Erin takes an hour to change any incorrect or misspelled file names. Realizing this will need to be an ongoing process, Erin delegates the responsibility of conducting a monthly check and update on file names to Jean, effectively making Jean the data steward.

Appendix A: *General Writing Tips*

This document is not meant to be a general writing style guide, but it is important to note that often the creators of reports are not experienced writers. It is recommended that anyone working on a report either use the preferred guidelines of their organization or find a style guide that works for them. Below are some recommendations to keep in mind while creating reports.

Remember the basics.	***For narrative reporting:*** • Use proper spelling, capitalization, and punctuation. • Avoid sentence fragments and use paragraphs. • Maintain the same tense. (Past, present, future) • Maintain the same narrative point of view. (First, second, or third Person) • Have an introduction, body, and conclusion. ***For data reporting:*** • Use consistent formats for numbers and dates. • Watch out for text elements with common and frequent variations (e.g., names like John, Johnathan, Johnny or even Jack.)
Keep it Simple.	***For narrative reporting:*** • Avoid run on sentences. • For long lists use bulleted or numbered lists instead of text separated by commas. • When possible, use third person: • Avoid possessive determiners such as “our” or “my.” • Avoid personal pronouns such as “I” and “we.” • Use active, not passive voice. ***Tip:*** *Speak long sentences aloud. If it is not easy to say, then it is not easy to read.* ***For data reporting:*** • Label columns and rows in a spreadsheets and databases clearly. • Avoid formatting that interferes with sorting and filtering.
Review and Revise.	Create multiple drafts. This creates more than a chance to proofread for grammar and spelling errors. With each pass, try to make the report more accurate, concise, and compelling. When possible and as needed, invite critique on drafts from the important stakeholders in the report. Make sure that all the important voices are being heard and answered.
Be Accountable.	Accountability is important in both narrative and data reporting. Graphics and language should be focused without the type of embellishments that breed skepticism. (i.e., do not cherry pick data, omit key facts and factors, present graphs, or charts with vague or misleading axis labels.)

Appendix B: *Glossary*

While the vocabulary used in this document is by no means exotic, many of the words and terms have definitions specific to the process of reporting. This glossary is provided as disambiguation tool for terms that likely have alternative meanings and uses in other writing and communication projects.

Accountability: The value of showing responsibility to stakeholders in a body of work. Accountability includes efficient and effective stewardship of resources used in a body of work. Accountable reports will cite source material.

Artifact: A short self-reporting effort that is designed to document part of a larger process.

Assessment: A report on a body of work, condition, or situation intended for use in an evaluation. Assessments are often considered either summative or formative.

Audience: The intended consumers of a report. A group of concerned stakeholders in the work being reported on. A single report can have multiple audiences.

Best Practice: A process, procedure, or policy that has been identified as preferred. Best practices are often those that are recognized as the most efficient or effective.

Clarity: The value of being coherent, concise, and specific in reporting. Clarity is a hallmark of quality reporting that defines best practices which revolve around accuracy, comparison, transparency, accountability, and accessibility to the audience.

Data Reporting: Data reporting is the creation of reports using numbers, lists and math. Data reporting is useful in efficiency reporting as it can easily be used to account for inputs and outputs. Data is a reporting element that exists on a spectrum with narrative reporting.

Efficiency: The measurement of a body of work in terms of outputs as compared to inputs. An efficient process maximizes outputs gained in comparison to inputs used. Efficiency reporting often leans heavily on data reporting. Efficiency is an element of reporting that exists on a spectrum with Effective reporting.

Effectiveness: A measurement of the positive outcomes that result from a body of work. Effectiveness reporting answers the question “to what end has the work been conducted.” An effective process, or procedure builds progress to a mission, goal, or objective. Effectiveness reporting often leans heavily on narrative reporting. Effectiveness is an element of reporting that exists on a spectrum with efficiency reporting.

Element: An element is a basic and inherent aspect of the process of reporting. Elements are grouped into pairs that exist on a spectrum. Elements of reporting can be used to both write and analyze reports.

Evaluation: The process of reviewing a body or work or process with the goal of improving either or both efficiency and effectiveness. Evaluation involves making suggested changes based on assessments. Evaluation is a process as opposed to a static document. Evaluation is an element of reporting that exists on a spectrum with standard reporting.

Focus: Focus is the ability properly emphasize the elements of a report that are important to the stakeholders. Strong focus serves both the audience and person or team creating the report. A report writing process that is focused will make it easier for the audience to digest a report and for the project team to delegate responsibilities for writing the report. Focus can sometimes be achieved through self-imposed constraints, such as limiting the scope of a report. Focus is a hallmark of quality reporting.

Five Ws: The shorthand for basic questions to be answered in a report: Who, What, Where, When, and Why:
Who: The stakeholders in the work being reported on, including a definition of their stakes.
What: A description of the body of work and how the work was conducted.
Where: The physical space that the work reported on took place and/or the space effected.
When: The period of time that the work effects: Past, present, and future.
Why: The reason(s) the work was conducted. The mission and expected outputs and outcomes.

Formative Assessment: A formative assessment is used to determine if a body of work is feasible, appropriate, or acceptable. Formative evaluation uses both efficiency and effectiveness reporting. Formative assessments are used in evaluation.

Funder: a stakeholder who has provided financial resources to the body of work reported on. Often the source of mandatory reporting.

Goals: The desired outputs and outcomes from the body of work being reported on. Individual goals are often aligned with a mission, value, or vision statement.

Hallmarks: A hallmark is a distinctive feature or element used to define or qualify a component in a body of work. (input, output, outcome, or best practice.)

Input: An input is a resource used in a project. This is often thought of as funding, but includes resources such as time, space, staff, or skill sets. Inputs are compared to outputs to determine efficiency.

Mandatory Reporting: Mandatory reporting is the creation of reports that are required as part of an agreement with a partner, funder/sponsor, or other organization invested in the body of work. Mandatory reporting tends to be constrained by the mission, values, and resources of the 90-dpartner requiring the report. Mandatory Reporting is an element that exists on a spectrum with self-reporting.

Metrics: A method of measurement specific to inputs and outputs of a report. The specific units of measurement used to determine if a body of work's objectives have been achieved.

Narrative Reporting: Narrative reporting is the creation of reports using text and graphics. Narrative reporting is useful for providing depth and nuance on that data alone can't provide. Narrative reporting is often useful for describing outcomes and effectiveness. Narrative reporting lies on a spectrum with data reporting.

Objectives: Objectives are a type of goal specific to desired outputs. Objectives are quantifiable and have defined metrics to determine if they have been achieved.

Output: An output is a quantifiable resource created through the body of work being reported on. Outputs are compared to inputs in a body of work to determine efficiency.

Outcome: The result, benefit, or consequence of a body of work. Outcomes often are expressed in terms of impact on a stakeholder group and are not always easily quantifiable. Outcomes are used to determine the effectiveness of a body of work.

GLOSSARY

Participant: A participant is a stakeholder who makes use of or benefits from the body of work being reported on.

Project Team: The group of stakeholders responsible for conducting and/or supporting the work being reported on.

Qualitative Data: Qualitative data is information that is not easily counted or expressed through math. Qualitative data is observational and used to point towards achieved outcomes and mission goals.

Quantitative Data: Quantitative data is information that is easily counted or expressed mathematically. Quantitative data can be used to measure inputs and outputs for efficiency reporting.

Report: The story of a body of work. An account or statement of work conducted as part of a program, project, or initiative.

Self-Reporting: Reports created by a project team in response to a perceived need. Self-reporting is unconstrained and can take whatever form the project team deems best to express the story of their body of work. Self-Reporting lies on a spectrum with mandatory reporting.

Spectrum: A tool used to classify reports whose elements lie between two opposite poles. An alternative to viewing reporting elements in binary terms.

Sponsor: A partner stakeholder who provides resources/inputs to a project. These can be inputs other than financial or monetary resources.

Stakeholders: Stakeholders are individuals connected to the body of work being reported on. Stakeholders are defined by the nature of their connection to the work. (i.e., their personal stakes.)

Standard Reporting: A standard report is a statement about a body of work completed, the processes used in the body of work, and the results of the work. Standard reports can cover the lifespan of a body of work from beginning to end. Standard reports may come in a cadence (quarterly, annually, etc.), but are not in and of themselves an ongoing process. Standard reporting lies on a spectrum with Evaluation.

Style Guide/Writing Guide: An established or preferred set of writing guidelines for use in creating a report. Style guides/writing guides can be dictated by the organization sponsoring the work.

Summative Assessment: Is the process of measuring and comparing the data of a completed body to that of existing standard or benchmark.

Transparency: Transparency is the value of being clear. A transparent project team is open and accessible to questions on a report, particularly those that come from stakeholders.

Utility: A hallmark of quality reporting, utility is defined as a report that is usable by its intended to audience. A utile report will acknowledge and address the “stakes” of its stakeholders.

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