



# SUMMATIVE EVALUATION REPORT (PAVILION)

Pavilion: DINFOS Online Learning Platform

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# Introduction

Summative evaluations are used to determine the effectiveness and impact of instructional materials after they have been implemented. The information collected from this type of evaluation is “designed to serve decisions—usually major decisions” about the potential future of instructional materials (Tornberg, Session 6). These evaluations typically occur after the development of the course materials to measure how much the users have learned, determine if they have achieved the learning objectives, and to determine how well users can apply their acquired knowledge and skills to new scenarios. Summative evaluations employ many different methods of data gathering to determine if the instructional course materials have achieved their intended purpose and goals and to also identify areas where improvements can be made.

Summative evaluations are different from formative evaluations, which are employed throughout the instructional process to provide revisionary feedback to the designers of the instructional materials regarding suggested improvements in the effectiveness, appeal, and improved ability of users to achieve the learning objectives. While formative evaluations are used to make important adjustments and to provide ongoing feedback, summative evaluations are used to evaluate the effectiveness and impact of the instructional materials.

Overall, summative evaluations play an important role in evaluating instructional materials by providing valuable feedback about their effectiveness and impact in achieving learning objectives and informing decisions about future improvements and/or implementation of this course of instruction.

## Background

PAVILION is an online learning platform produced for and used by communication experts and students working for the Department of Defense (DoD). These materials are a contracted product for the Defense Information School (DINFOS), an instructional arm of the DoD’s Defense Media Activity mission. DINFOS trains U.S. military, DoD civilians, international military, and interagency students in a variety of subject areas including public affairs, print journalism, photography, video production, broadcast journalism, broadcast equipment maintenance, and various forms of graphic design and digital media.

PAVILION was designed and implemented as a learning tool to support DINFOS’s mission to train and sustain Public Affairs and Visual Information professionals in the fleet and field (i.e., in all DoD organizations and its allies). This online resource is designed for and used by current and matriculated students at the Defense Information School. It is intended for those individuals occupied with supporting the public affairs, visual information and/or broadcast training roles established throughout the DoD. This online resource is available to help keep those individuals informed of the most up-to-date communications information as well as the techniques and skills required to be successful in their chosen occupational field supporting strategic DoD communications.

## Context

These instructional materials are designed to be flexible and accessible at any time (24/7) and in any physical space available and/or preference by the user. These materials are designed to be a convenient and self-paced source of instruction, with repeated access and practical applications. To access these materials, a user only needs a computer or a laptop with internet access. At its inception, these instructional materials were meant to be accessed and used by individuals newly assigned to fulfill the role of communications specialist at any DoD unit or military organization.

## Learning Objectives

The learning objectives associated with the PAVILION course materials are that PAVILION users will:

- Be able to perform the job of a communications specialist regardless of their formal communications training.
- Be able to perform the various communication duties of their assigned DoD organization.
- Be able to access the most up-to-date communication standards and protocols in support of the DoD communications mission of their unit or organization.

## Purpose And Goals

The purpose of this evaluation is to assess whether PAVILION course materials are effective in training and preparing communication specialists to fulfill their communications roles as well as promoting the best communication-related outcomes for each DoD organization. Information resulting from this evaluation can be presented to key DoD and DINFOS stakeholders and can serve as a reference in determining the continued support and/or further development of these instructional resources.

Besides the overall purpose of evaluating the effectiveness and impact of PAVILION instructional materials, additional purposes of this evaluation include:

1. Collecting additional course materials improvement recommendations.
2. Collecting information concerning the attitudes of users (the perceived value and efficacy placed on the PAVILION course materials by the users).
3. Collecting information regarding how well PAVILION achieves its stated goals and objectives (the overall effectiveness of these course materials).
4. Collecting information concerning the overall impact PAVILION has had in supporting the communications mission of the DoD/DINFOS (the overall impact of these course materials).

## Audience

The primary audience for this summative evaluation would be key supporters and developers of PAVILION in the Department of Defense (DoD), the Defense Media Activity (DMA), and the Defense Information School (DINFOS). “By also involving the stakeholders at the end of the study, the utility and probable attention given to the evaluation findings are sure to be increased” (NSF Handbooks, 2010).

A secondary audience for this report would include the DoD fleet and field leadership who oversee their organization’s communications mission along with the administrators and developers of the PAVILION course materials. Another potential audience for this report would be the individuals who access and make use of the course materials to do their job as communication specialists.

## Learners/Users

The intended users of these instructional materials would be anyone affiliated with the DoD whose job is to manage the communication efforts of their assigned DoD organization through the strategic use of public affairs announcements/statements, print journalism, photography, video production, broadcast journalism, broadcast equipment maintenance, graphic design, digital media, and social media. It is expected that a user of PAVILION course materials should be able to perform their communication duties to the best of their ability to support their organization’s communication strategy and mission.

Potential PAVILION users include Reservists and Guardsmen who are assigned directly to their Reserve units, are embedded with their unit’s Public Affairs office, and must wait for funding and course availability before they can be enrolled and attend DINFOS in person. Many Reservists and Guardsmen do not attend until about three years into their careers, and therefore must perform their communication duties in a Public Affairs Office before engaging in any formal training.

Another group of potential users includes Public Affairs Officers. These individuals often graduate and immediately go to their first assignment for about one year before they can secure a seat in the Public Affairs Officer Training Course at DINFOS. These officers are often assigned to understaffed DoD units and must be able to hit the ground running and serve as fully trained Public Affairs Officers before receiving formal Public Affairs training.

A final group of potential users includes active-duty military personnel assigned to small, understaffed military units who, in addition to their primary job, are informally assigned the role of communications specialist. These individuals are expected to learn the necessary information and skills on the job (i.e., how to issue public affairs statements, how to produce unit-related content, how to monitor and maintain an effective social media presence, how to respond to potential unit-related crises, etc.) to fulfill their role as communications specialist for their unit.

## Stakeholders

The key stakeholders and decision makers of PAVILION include the Defense Media Activity (DMA), a parent organization of DINFOS which oversees operational and budgetary oversight of all DOD communication-related assets. Additional key stakeholders include the Commandant and the Provost of DINFOS because these individuals are strongly invested in PAVILION's success as a course of communications-related instruction. A final key stakeholder includes Digitalwave, the creation and design team of these course materials.

## Summative Evaluation Use

The results of this summative report are to be shared with all key stakeholders to determine the overall impact of PAVILION as an effective course of instruction. The information provided in this report will help these stakeholders make the best decisions about the potential continuation and/or further development of these instructional materials.

This type of evaluation is undertaken *after* the program of instruction has been implemented. A summative evaluation is used for decision making purposes to verify and validate the intended outcomes of the program of instruction, to assess learner outcomes resulting from engaging with the instructional materials, and to determine the overall effectiveness, usefulness, or worth of the program of instruction by the users.

## Evaluation Questions

The purpose of selecting our specific evaluation questions is to help prioritize our data gathering efforts and to help further focus our overall evaluation efforts. The goal of our evaluation questions is to be able to ask the right kinds of questions that will allow us to evaluate the merit, value, and worth of PAVILION as a program of instruction for DoD communication specialists. The development of our evaluation questions was inspired by two different evaluation models - Rossi's Five Domain Evaluation Model and Kirkpatrick's Four Levels of Evaluation Method.

According to Rossi's Five Domain Evaluation Model, clear and concise evaluation questions (derived from a strong collaboration between the evaluator and key stakeholders) "constitutes the core from which the rest of the evaluation evolves" (Johnson & Dick, 2012). In Rossi's model, there is a strong recommendation to engage in an *impact assessment* to determine if a program of instruction achieves its intended goal; therefore, one of the main goals of our evaluation is to assess the overall impact of PAVILION course materials as they were intended in their purpose, design, and execution.

Based on Kirkpatrick's Four Levels of Evaluation Method, there is an emphasis to assess learner reactions/attitudes towards the instructional materials, determine if learners experience an increase in knowledge and/or skills as a result of engaging with instructional materials, determine if learners are able to transfer their instructional-based learning to their on-the-job performances, and assess if the learners are beneficial contributors to their DoD organization because of their engagement with these instructional materials. Another goal of our evaluation is to not only assess and determine the above-mentioned aspects of the PAVILION course materials

but to also evaluate how effective users are in supporting the communications mission of the DoD/DINFOS as a result of their engagement with these instructional materials.

## Evaluation Matrix Design

One clear recommendation from several of the available evaluation models as well as the evaluation course instruction is to create an evaluation matrix for our summative evaluation. An evaluation matrix is considered a “good way to succinctly present how your evaluation methods align with your [strategic evaluation] questions ... [the] matrix not only provides an overview of the evaluation methods. It also allows you to ensure that each question is addressed by one or more data collection strategies” (Reeves & Hedberg, 2003). The advantage of using a matrix is that recipients of the evaluation can review the alignment among the evaluation questions and the proposed methods of data collection that were agreed upon by the evaluators to address these questions.

## Guiding Questions

The guiding questions we have prioritized for this evaluation are as follows:

1. What are the users’ reactions to the learning experience? What is their level of engagement?
2. How effective is PAVILION in increasing the knowledge/skills of users?
3. How effective are PAVILION instructional materials in promoting users’ ability to apply their knowledge/skills to their on-the-job performance?
4. What is the overall impact of PAVILION on the DoD’s communication mission?

**Table 1: Evaluation Matrix**

<b>Q1: What are the users’ reactions to the learning experience? What is their level of engagement?</b>			
<i>Sub Questions</i>	<i>Data Collection Strategies</i>	<i>Data Source</i>	<i>Data Collection Procedure</i>
A. To what extent is the user motivated to engage with the instructional materials?	Survey	Learner/User	Consisting of rated and open-ended questions intended to rate user’s interest and motivation to engage with the course materials. Users complete a survey upon the evaluator’s request after engaging with PAVILION materials.
B. To what extent does the user believe the instructional materials are valuable in assisting them with their communication tasks.	Survey	Learner/User	Consisting of rated and open-ended questions intended to rate user’s perceived value of the course materials in promoting their ability to do their communications specialist job. Users complete a survey upon the evaluator’s request after engaging with PAVILION materials.
<b>Q2. How effective is PAVILION in increasing the knowledge/skills of users?</b>			
<i>Sub Questions</i>	<i>Data Collection Strategies</i>	<i>Data Source</i>	<i>Data Collection Procedure</i>



A. To what extent has the user increased their communication knowledge as a result of engaging with the instructional materials?	Survey	Learner/User	Consisting of rated and open-ended questions intended to rate user's self-rated acquisition of communications-related and public affairs knowledge as a result of engaging with the course materials. Users complete a survey upon the evaluator's request after engaging with PAVILION materials.
	Document Analysis	End products created by PAVILION users	Verification via a written content rubric to evaluate that the end product aligns with DoD communications mission. Undertake document analysis of PAVILION users after they have been on the job for at least a year and before they have achieved an E-5 NCO rank.
B. To what extent has the user increased their communication skills as a result of engaging with the instructional materials?	Survey	Learner/User	Consisting of rated and open-ended questions intended to rate user's self-rated acquisition of communications-related and public affairs skills as a result of engaging with the course materials. Users complete a survey upon the evaluator's request after engaging with PAVILION materials.
	Document Analysis	End products created by PAVILION users	Verification via a written content rubric to evaluate that the end product aligns with DoD communications mission. Undertake document analysis of PAVILION users after they have been on the job for at least a year and before they have achieved an E-5 NCO rank.
C. To what extent has the user's attitude as communicators improved as a result of engaging with the instructional materials?	Survey	Learner/User	Consisting of rated and open-ended questions intended to rate user's perceived value of the course materials as well as their change in attitude as a result of engaging with the course materials. Users complete a survey upon the evaluator's request after engaging with PAVILION materials.
	Interview Protocol	Supervisor	Consisting of interview questions intended to rate users' attitudes resulting from their PAVILION use. Engage in an interview with the user's supervisor after the user has been on the job for at least a year and before they have achieved an E-5 NCO rank.
<b>Q3. How effective are PAVILION instructional materials in promoting users' ability to apply their knowledge/skills to their on-the-job performance?</b>			
<i>Sub Question</i>	<i>Data Collection Strategies</i>	<i>Data Source</i>	<i>Data Collection Procedure</i>
A. To what extent are the instructional materials useful and effective in promoting user's ability to create quality communication products? A.1. No more than 1-2 content, copy-editing, style, mechanics, and clarity issues per page. A.2. Facts and research are credible and connect to the focus of the story. A.3. All names are spelled correctly	Document Analysis	End products created by PAVILION users	Verification via a written content rubric that the end product indicates a marked improvement (after engaging with the instructional materials) aligns with DoD communication mission. Undertake document analysis of a user after they have been on the job for at least a year and before they have achieved an E-5 NCO rank.



Q4. What is the overall impact of PAVILION on the DoD's communication mission?			
<i>Sub Question</i>	<i>Data Collection Strategies</i>	<i>Data Source</i>	<i>Data Collection Procedure</i>
A. To what extent does communication content support DOD core principles? A.1. Meet well-defined, appropriate objectives A.2. Remain respectful, responsive, and genuine, and represent high standards of professional and ethical behavior A.3. Inspire and engage with audiences. A.4. Promote the DoD as good stewards of the public trust A.5. Never be construed as offensive, inappropriate, or unbecoming A.6. Not be used to promote or endorse non-Federal entities or personal interests (i.e., financial, or otherwise).	Document Analysis	Performance Review reports	Produced by supervisors regarding subordinates. Undertake document analysis of a user after they have been on the job for at least a year and before they have achieved an E-5 NCO rank.
	Interview Protocol	Supervisor/ Unit Commander	Consisting of interview questions intended to rate user performance and end product resulting from their PAVILION use. Engage in an interview with the user's supervisor and/or unit commander after the user has been on the job for at least a year and before they have achieved an E-5 NCO rank.

## Data Collection

A key element of a sound evaluation plan is careful specification of the questions to be addressed by the evaluation design and data collection methods (Reeves & Hedberg, 2003). To be able to provide reliable and valid data for our summative evaluation, we formulated clear and more detailed questions. It is important to make sure that the data we collect represent the intended audience we are trying to analyze to be valid. It is also important that there is consistency and stability in our instruments to provide reliable data.

## Methods And Strategies

Data collection methods are essential to the process of summative evaluation as is the selection of appropriate and feasible data collection methods needed to collect the data to evaluate the worth, value, and merit of this project. The following list includes the methods identified for this summative evaluation.

### Method 1: Learner/User Survey

#### PURPOSE

Survey results will be used to gauge the level of learning and to provide feedback to PAVILION developers, content developers, and to DINFOS about user assessment of the site. If the evaluation team follows a group of students through training, the team can give them a pre-training survey and a post-training survey to gauge the change in their level of comfort with Public Affairs policies and principles.

**RATIONALE**

The evaluation team will use a survey to gather data about student learning and experience in the PAVILION system. A survey will allow us to gather quantitative data on a large scale. The team will either send the survey to the entire Public Affairs field, or request participation only from those who have completed a training package in PAVILION. Additionally, the team can target the survey to the supervisors of communications specialists who have used PAVILION to analyze its impact on Public Affairs operations within a unit or DoD organization. The surveys can be used to assess knowledge, skills, attitudes, and we can make the survey anonymous to encourage participation.

**DATA SOURCES**

Potential survey sources include users who have used PAVILION, completed a curated set of classes, and their supervisors.

**PROCEDURE**

The evaluation team will develop an electronic survey and work with the DoD Public Affairs team to administer it throughout each service's Public Affairs staff. Survey respondents will have the option to remain anonymous or to provide their name and contact information for further evaluation and a potential interview. Once the evaluation team receives responses, the evaluators will analyze and look for trends or actionable data and create a report for DINFOS and DMA leadership.

## Method 2: Document Analysis

**PURPOSE**

By analyzing documents produced by PAVILION users, supervisors will be able to determine the level of knowledge and skills their communications staff has gained because of their engagement with the course materials. Additionally, supervisors can pinpoint areas in need of improvement and provide additional training or support to help communication specialists continue to develop their skills. As a result, the DoD and PAVILION developers will be able to gauge the level of effectiveness of the instructional materials. Document analysis will also inform both supervisors and PAVILION users about the effectiveness of these instructional materials in promoting the users' ability to apply their knowledge or skills to their on-the-job performance.

**RATIONALE**

Communication specialists are expected to produce quality documents that are credible, align with the Department of Defense communication mission, and are mechanically correct. PAVILION instructional materials provide training for its users. The team will use rubrics to evaluate the end products produced by PAVILION users.

**DATA SOURCES**

Potential document sources include any end products produced by specified communications specialists who have engaged with PAVILION instructional materials.

**PROCEDURE**

The evaluation team will gather end products of PAVILION users and have their supervisors use a rubric to evaluate the important elements of individual writing tasks to assess the overall

quality of each written product produced. These communications specialists will receive feedback on their work in addition to any necessary training.

## Method 3: Interviews

### PURPOSE

The interview questions are intended for the user's supervisor and/or unit commander to rate the attitudes and performance of PAVILION users, as well as to rate the communication outputs and end products produced as a result of the user's PAVILION engagement. After building rapport, the interviewer will ask the user's supervisor and/or unit commander relevant questions that closely relate to the evaluation's purpose during these interviews.

### RATIONALE

The evaluation team will use an interview protocol to gather information from users regarding any potential changes in their attitude or level of confidence as communicators that may have resulted from their engagement with the instructional materials. Information will also be gathered to determine how the communication content of PAVILION supports DoD core communication principles. By using the evaluation matrix, the alignment of interview questions with evaluation questions will help to display whether any gaps that may exist in what is being asked during the interviews.

### DATA SOURCES

The interview data will be gathered from the user's supervisor and/or unit commander, who can assess the user who has been on the job for at least a year and before they have achieved an E-5 NCO rank.

### PROCEDURE

The evaluation team will ask the same predetermined questions in a structured type of interview to all supervisors and/ or unit commanders in the same order to provide data with high reliability and validity. It is essential to follow the interview protocol with open-ended questions to get the best information and allow the participants the opportunity to offer any additional information that might be relevant to the evaluation purpose. By creating probes or prompts for each question will help keep the evaluation team on track. This approach will result in the materialization of unexpected data from these participants, therefore, writing expansive questions will allow the participants to take the questions in several directions.

## Benefits & Limitations

According to the NSF Handbook for Project Evaluations (2010), there are certain advantages and disadvantages associated with each method of data collection that was selected to achieve the goals established in our summative evaluation.

When implementing question and response *surveys* as part of our evaluation plan, the *advantages* are:

- Surveys are good for gathering very descriptive data.

- Surveys can cover a wide range of surveyed topics.
- Surveys are relatively inexpensive to develop and use.
- Surveyed data can be analyzed using a variety of existing analytical software.
- Surveys are an inexpensive method of gathering quantitative data from a large audience.

The *disadvantages* of using *surveys* as a data collection method are:

- Surveys often provide biased information due to the self-reporting nature of surveys.
- Data from surveys may provide a general picture of the instructional materials but often lack a certain depth of useful information.
- Surveys may not provide adequate information regarding the overall context of the course materials.
- Some questions may be ignored or unanswered, causing researchers to lose out on that source of data.
- Surveys don't convey emotion or unspoken language that can only be obtained through direct observation.

When implementing an analysis of *public domain documents* produced by DoD members as part of our evaluation plan, the *advantages* are:

- Document analysis is relatively inexpensive to undertake.
- Documents are often easily accessible and available.
- Document analysis allows for a better understanding of course materials users.
- Existing records can be useful for making comparisons (e.g., PAVILION course material users and non-course materials users based on their communication outputs and end products).
- Analyzing documents produced and submitted by DoD staff is unobtrusive.

The *disadvantages* of *document analysis* as a data collection method include:

- Documents may be incomplete.
- There is no way of knowing how much time a communication specialist spent completing the PAVILION instruction prior to producing end products.
- It may be challenging to locate suitable documents.
- Analyzing documents can be time consuming.
- Documents may be inaccurate or of questionable authenticity.

When implementing an individualized and in-depth interview as part of our evaluation plan, the *advantages* are:

- Interviews usually produce lots of detailed, insightful, and useful information.
- Interviews promote “face-to-face” contact with a participant and the interviewer is able to observe many aspects of the interviewee’s responses.
- Interviews allow the interviewer to explore course-related topics in depth and can clear up any misconceptions or misunderstandings about the course materials.
- Interviews are a flexible method of data collection.
- Interviewers can establish rapport with participants to make them feel more comfortable, which can generate more insightful responses.

The *disadvantages* of using *interviews* as a data collection method are:

- Interviews are expensive and time consuming.
- Interviews require qualified and highly trained interviewers to execute an effective interview.
- Information gained from interviews may be distorted/invalid because of recall error, selective perceptions, and a desire to please the interviewer.
- Flexibility of planned interviews can result in inconsistencies across all the interviews scheduled for the evaluation.
- Volume of interview information collected can be quite large and may be difficult to transcribe and reduce data

## Other Tools and Techniques

### Additional Technique 1: Field Study

#### DESCRIPTION

Field studies involve collecting data within the actual environment in which the evaluated participants are employed. This evaluation technique usually involves conducting interviews, distributing surveys/questionnaires, and/or making direct observation of the field study participants.

For the purposes of this evaluation, we would take a quasi-experimental approach to our data collection strategy. In coordination with select DoD units, we would establish an experimental group consisting of PAVILION users and a control group consisting of DINFOS graduates. All selected individuals would be employed as DoD communication specialists during the same time period, engage in the same types of communication tasks, and produce similar end products as result of their job requirements.

#### PURPOSE

The purpose of this data collection method is to compare the quality of communication end products produced by PAVILION users versus DINFOS graduates as well as assess the degree of competency to which they do their job. These comparisons will help to determine the value and worth of the instructional materials being evaluated.

#### RATIONALE

The rationale of this method of data collection is to evaluate how effective the PAVILION instructional materials have been for its users and to determine whether they have been able to transfer their acquired knowledge and skills to their job performance. Data, collected in the aforementioned methods, will determine if the experimental group (those individuals who have received PAVILION instruction) did as well, if not better, than the control group (those who had not received PAVILION instruction). This method is used to determine how effective the online instructional materials are in comparison to “the effectiveness of ‘traditional instruction,’ which [is] usually delivered by a teacher in a classroom [setting]” (Johnson & Dick, 2012). While field studies are known to be quite expensive and time-intensive, the amount and richness of data collected in a well-designed and executed field study is considered invaluable.

## Additional Technique 2: Automated Data Collection

### DESCRIPTION

Automated data collection, also referred to as an “audit trail” is done when a user’s progress through an interactive, online learning system is tracked. This data includes keystrokes, mouse clicks, screen touches, time spent on specific exercises, downtime, the path taken, in addition to scores on available assessments.

### PURPOSE

The information gleaned from automated data collection and the work produced by users can help supervisors and PAVILION developers assess the effectiveness and impact of this collection of online instructional materials. Data related to a user’s path through the online learning materials, the amount of time a user spends on tasks, and their responses to built-in questions can easily be gathered and later analyzed.

### RATIONALE

Computers are capable of tirelessly gathering large volumes of data. PAVILION instructional materials consist of an extensive set of online tutorials available to DoD employees and users are not directed to follow a specific learning progression when engaging with the materials. Using automated data collection would provide helpful information when assessing the effectiveness and impact of the course materials. There are no assessments currently available in PAVILION instructional materials, so tracking time spent on tutorials, the path users follow, in addition to the frequency with which each tutorial is accessed could be useful data to analyze.

## Instrumentation

The purpose of this evaluation is to assess whether PAVILION course materials are effective in training and preparing learners/users in their role as communications specialists. To meet this objective, the creation of valid, reliable, and feasible evaluation instruments is essential to the collection of useful data to evaluate the effectiveness and impact of PAVILION course materials. The guiding questions of this evaluation form the basis of these two instruments.

### Instrument 1: PAVILION Learner/User Survey

This survey is based on a DINFOS end-of-course survey administered on the last day of training to all students who graduate. At DINFOS, the survey is used to improve future courses. We modified the survey to accommodate the guiding questions for our summative evaluation (*questions 1-3 in the Evaluation Matrix*). See the survey in Appendix B: PAVILION Learner/User Survey.

### RATIONALE

Basing our data collection instrument on a DINFOS survey ensures that we will gather data that DINFOS and PAVILION leadership are wanting to know about PAVILION users. We are

confident that this would be a valid and reliable tool for gathering pertinent information and help improve PAVILION in line with DINFOS and DoD communication-related priorities.

## Instrument 2: Written Content Rubric

The written content rubric is based on a grading rubric used at the DINFOS content management course to evaluate and provide feedback on written content. Students use this as a checklist when writing assignments, and instructors use this to assess assignments. Since this rubric was used in a class designed for more experienced writers, we modified it to ensure it captured all foundational components of writing. See the rubric in Appendix C: Written Communication Rubric.

### RATIONALE

This data collection instrument was developed to support questions 2-4 of our evaluation matrix as well as many aspects of the document analysis method of our data collection. Evaluators will be able to use this instrument to evaluate the quality of written products and to ensure a consistent standard across the DoD has been met by those who have had the opportunity to attend DINFOS in-person training program and those who only receive training via PAVILION.

## Reflection

Instructional design includes identifying the learning needs of a population of learners and the development of instructional materials. When creating these materials, instructional designers and developers consider how students learn, and they incorporate methods and strategies that will help learners reach their instructional goals. Evaluation is a critical component of Instructional Systems Design. “Evaluation is the process of determining the merit, worth, and value of things and evaluations are the products of that process” (Johnson & Dick, 2012). Evaluations are conducted to determine whether instructional programs are effective in meeting their intended objectives. Additionally, evaluations of instructional materials help ascertain whether learners can successfully apply the knowledge and skills they learned to real world tasks. To evaluate instructional programs, evaluation instruments must be developed. It is important that these instruments are valid and reliable. For an instrument to be deemed reliable, the same results should be obtained over the course of multiple trials. A valid evaluation instrument is one that measures what it was designed to measure.

Formative evaluation is intended to take place during the developmental stage of the instructional design process, allowing for revisions to be made. Based on many of our readings, formative evaluation is often overlooked, but is an incredibly valuable tool for an honest assessment of the effectiveness and clarity of a program of instruction. Formative evaluation is a bit more complex as it is done with a small group of users to “test run” various aspects of instructional materials. It’s like having someone look over your shoulder during the development phase to help you catch things that you miss. One of the most powerful reasons to conduct a formative evaluation is to determine that the message is clear. This type of evaluation helps to identify areas that might need improvement and pinpoint strengths, as opposed to waiting until after the publication of the instructional materials. When conducting both the expert and user reviews during our formative evaluation, things that seemed unclear immediately jumped out at



us as we observed a user and an expert struggle to navigate aspects of PAVILION course materials. Additionally, it helped us rewrite and clarify our evaluation questions to ensure they were simple, succinct, and focused.

Summative evaluation is done at the end of a program and its role is to determine whether a particular program was effective in meeting the intended objectives and whether it should be continued. This type of evaluation involves the creation of tools and instruments, such as surveys, interview protocols, observation logs, pre- and post-tests, and many other types of information and feedback gathering methods. Once the data is reviewed, decisions regarding the merit or worth of the program are made. Clearly there is value in ongoing evaluation of the instructional materials for the purpose of revising to make improvements, especially if the recommendations are of value and benefit to the learner. But because a summative evaluation usually occurs at the end of instruction and after it has been released, this type of evaluation is limited in its ability to provide useful feedback to the instructional designer during the initial implementation of the course. However, the information from a summative evaluation can be used to guide efforts and activities in any subsequent course development.

Upon reflection, formative and summative evaluations have distinct purposes. Formative evaluation is meant to steer the design on the correct path so that a user has a satisfactory experience with the instructional materials. Engaging in an evaluation is a natural part of any iterative, user-centered design process. Summative evaluation is meant to assess the overall usability and is instrumental in tracking the instructional course over time and in comparing it with other programs of instruction. As we developed our evaluation plans, we were better able to understand our target audiences' needs, how to meet these needs, how to design useful evaluation objectives that were achievable and measurable, and we were able to learn a lot more from these evaluation processes. The most critical aspect of a good evaluation is in formulating the objectives because the objectives are what provide the roadmap to our final evaluation destination. Both types of evaluations require a high level of communication and collaboration among all members of the evaluation team. This process is not a solitary enterprise.

We learned that an evaluation should be crafted to address the specific goals and objectives of a program, project, or course of instruction. It is likely that others have created similar evaluation designs and instruments, so looking at what others have done can help us design or conduct a better evaluation. Our goal was to create a potentially reliable evaluation, one that could be replicated. The higher the quality of the evaluation design, its data collection methods, and its data analysis, the more accurate its conclusions and the more confident we as evaluators can be in its findings. We also think that instructional designers make good summative evaluators because they would have a much better understanding of the instructional design process, the characteristics of well-designed instruction, and the criteria for evaluating instruction. These skills provide expertise for designing and conducting the expert judgment as well as the analysis phases of the summative evaluation. Since evaluators are rarely the designers or developers of the instruction, external evaluators are preferred as they have no personal investment in the instruction and are likely to be more objective about the strengths and weaknesses of the program, project, or instructional materials.

# List of Appendices

**Appendix A:** Cited Sources

**Appendix B:** PAVILION Learner/User Survey

**Appendix C:** Written Communication Rubric

## Appendix A: Cited Sources

Burke Johnson, R., & Dick, W. (n.d.). Evaluating and Managing Instructional Programs and Projects.

Frechtling, J., Stevens, F., Lawrenz, F., Sharpe, L., & Stevens, F. (2010). The 2010 User-Friendly Handbook for Project Evaluation. National Science Foundation, Directorate for Education and Human Resources.

Reeves, C.R. & Hedberg, J.G., (2003). Interactive Learning Systems Evaluation. Educational Technology Publications. Englewood Cliffs, New Jersey.

Tornberg, R. E. (2023, spring). class notes, PowerPoint Sessions 6 & 7.

## Appendix B: PAVILION Learner/User Survey

To what extent can you:	I cannot perform this task	I can perform this task with significant supervision	I can perform this task with minimal supervision	I can perform this task without supervision	I can perform this task and explain it to others
Explain Department of Defense Public Affairs (KNOWLEDGE)					
Identify your specific military branch's public affairs concepts, processes, and products (KNOWLEDGE)					
Explain various aspects of command information (KNOWLEDGE)					
Explain guidelines for release of information (KNOWLEDGE)					
Identify communication laws that impact public affairs (KNOWLEDGE)					
Explain the role ethics plays in public affairs (KNOWLEDGE)					
Explain community engagement (KNOWLEDGE)					
Apply English skills (grammar, word usage, punctuation, etc.) (SKILLS)					
Explain how news is defined and evaluated (KNOWLEDGE)					
Write a news story (Leads, Bridges, Localizing) (SKILLS)					
Write a headline (SKILLS)					
Explain security issues and applications (KNOWLEDGE)					
Write captions (SKILLS)					
Write an accident/incident release (SKILLS)					
<i>If you selected "I cannot perform this task" or "I can perform this task with significant supervision" for any of the above ratings, please elaborate and provide comments:</i>					

Course Material Ratings	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The instructional content provided in PAVILION is accurate and complete.					
The instructional content is informative and interesting.					
The instructional content is easy to engage with and understand.					
I find the course materials useful for me to learn from.					
I find that the course materials benefit me as a communications specialist for my DoD organization.					
I find myself wanting to learn more based on the content and information provided in PAVILION.					
Overall, I was satisfied with PAVILION					
<i>If you selected "Strongly Disagree" or "Strongly Agree", for any of the above course ratings, please elaborate and provide comments:</i>					
<i>Per week, on average, how much time did you spend engaging with the course materials?</i>					
<i>What is the greatest benefit you received from your engagement with the PAVILION course materials?</i>					
<i>What improvement(s) do you recommend for PAVILION?</i>					

## Appendix C: Written Communications Rubric

Category	Inadequate 1	Needs Improvement 2	Meets Expectations 3	Exceeds Expectations 4
<b>Requirements</b>	<ul style="list-style-type: none"> <li>• Tone is rude, accusatory or inappropriate throughout.</li> <li>• Author is an incorrect SME.</li> <li>• Article goes against the command position.</li> <li>• Facts and research are not present.</li> </ul>	<ul style="list-style-type: none"> <li>• -Three to four sentences have an inappropriate tone.</li> <li>• -Facts and research not from credible sources or used deceptively.</li> </ul>	<ul style="list-style-type: none"> <li>• One or two sentences have an inappropriate tone.</li> <li>• Facts and research credible, but don't connect to the focus of story</li> </ul>	<ul style="list-style-type: none"> <li>• -Tone is appropriate.</li> <li>• -Author is correct SME, i.e., commentary is by junior service member, or editorial is by command staff.</li> <li>• -Article supports command position.</li> <li>• -Facts and research are credible and connect to the focus of the story.</li> </ul>
<b>Lead</b>	<ul style="list-style-type: none"> <li>• Lead does not paint a clear picture of the story's focus and does not transition well to the focus.</li> <li>• Uses no illustrative writing techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Lead paints a weak picture of the story's focus or does not clearly transition to the focus.</li> <li>• Uses few illustrative writing techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Lead paints a strong picture of the story's focus, but transition to focus is weak.</li> <li>• Uses some illustrative writing techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Lead paints a vivid picture that clearly relates and transitions well to the focus.</li> <li>• Uses compelling illustrative writing techniques.</li> </ul>
<b>Focus</b>	<ul style="list-style-type: none"> <li>• Focus is not clear and not maintained throughout the story.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus is too broad or too narrow and not maintained throughout the story.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus is vague and loosely maintained throughout the story.</li> </ul>	<ul style="list-style-type: none"> <li>• Focus is completely clear and maintained throughout the story.</li> </ul>
<b>Body/Structure</b>	<ul style="list-style-type: none"> <li>• No descriptive writing techniques are used.</li> <li>• Story has no organization or flow.</li> <li>• No transitions.</li> </ul>	<ul style="list-style-type: none"> <li>• Attempted descriptive writing techniques.</li> <li>• Story is minimally organized or does not flow.</li> <li>• Transitions are ineffective.</li> </ul>	<ul style="list-style-type: none"> <li>• Purposeful use of descriptive writing techniques.</li> <li>• Story is partially organized with deliberate flow.</li> <li>• Some transitions are awkward.</li> </ul>	<ul style="list-style-type: none"> <li>• Strong descriptive writing techniques are used.</li> <li>• Story is meticulously organized with deliberate flow.</li> <li>• Transitions are smooth and effective.</li> </ul>
<b>Conclusion</b>	<ul style="list-style-type: none"> <li>• Conclusion drifts from the story's focus and does not effectively close the story.</li> <li>• No effort made to use illustrative writing techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Conclusion is related to the story's focus but is canned or doesn't effectively close the story or clearly relate to focus.</li> <li>• Little effort made to use illustrative writing techniques.</li> </ul>	<ul style="list-style-type: none"> <li>• Conclusion effectively closes the story but could be more clearly related to focus.</li> <li>• Illustrative writing techniques attempted, though not always effective.</li> <li>• Conclusion could leave a stronger impact.</li> </ul>	<ul style="list-style-type: none"> <li>• Conclusion strongly relates to focus. Effectively &amp; naturally closes the story without being canned. Complements focus with strong use of writing techniques.</li> <li>• Leaves impact on the reader.</li> </ul>
<b>Copy-editing</b>	<ul style="list-style-type: none"> <li>• Entire story is disorganized.</li> <li>• More than 9 content, copy-editing, style, mechanics, and clarity issues per page.</li> </ul>	<ul style="list-style-type: none"> <li>• There are 6-8 content, copy-editing, style, mechanics, and clarity issues per page.</li> </ul>	<ul style="list-style-type: none"> <li>• There are 3-5 content, copy-editing, style, mechanics, and clarity issues per page.</li> </ul>	<ul style="list-style-type: none"> <li>• No more than 1-2 content, copy-editing, style, mechanics, and clarity issues per page.</li> </ul>