チリ国
内務公共安全省国家緊急対策室（ONEMI）

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災害リスク削減のための ONEMI 組織強化プロジェクト

事業完了報告書 要約版

付属資料 (3/3)

（付属資料 5-4～付属資料 6）

2022 年 2 月

独立行政法人
国際協力機構（JICA）

株式会社 オリエンタルコンサルタンツグローバル
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付属資料

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能力開発コースのモニタリング・
評価に係るマニュアル

Guide for the evaluation of ONEMI courses and programs for the National Civil Protection System

Elaboration based on the “Practical guide to manage training in public services” of the Civil Service (2014)

The information and findings presented in this document contribute to the achievement of Output 3 of the project, which indicates that “the mechanism for the development of human resources and their training on disaster risk reduction is established in the Civil Protection Academy and the Community Prevention Department of ONEMI "

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Introduction

This document has been developed based on the “Practical Guide to Manage Training in Public Services” developed by the Civil Service in 2014, and within the framework of the ONEMI-JICA Project “Institutional Strengthening of ONEMI for Capacity Development in Disaster Risk Reduction” that was developed during the period 2018-2021 with the support of the Japanese Agency for International Cooperation (JICA).

During the process of contextualization and adaptation of the guide developed by the Civil Service, along with having the formal authorization to conduct said adaptation to the needs of ONEMI, there was also the collaboration and technical assistance of professionals from the Civil Service, who allowed: to review some of the evaluation instruments used by ONEMI in its courses and training programs; to identify ONEMI training courses and programs susceptible to be evaluated at the transfer level; to develop transfer evaluation instruments for selected courses; and to meet in a timely manner the requirements arising in the framework of this initiative.

The adaptation of the "Practical Guide to Manage Training in Public Services" (Civil Service, 2014), was conducted focusing on the evaluation processes of training activities, with the aim of having the necessary tools for continuous improvement of the quality and impact of the training activities offered by ONEMI both to its officials, as well as, to other members of the National Civil Protection System.

The adaptation and ownership of this "Guide for the evaluation of ONEMI courses and programs for the National Civil Protection System", seeks to strengthen the capacities of ONEMI to demonstrate the extent to which the knowledge and skills acquired in the training courses are used by participants in their jobs and roles that they perform within the framework of the National Civil Protection System, as well as, to detect elements that can be improved in the field of Civil Protection and to make the necessary modifications in the training activities offered by ONEMI.

This is how ONEMI, with this guide, seeks to complement the evaluation activities that it currently carries out in its courses and training programs, with additional evaluations that seek to measure the impact that training activities have on the performance of the members of the National Civil Protection System who participate in the training sessions organized and offered by ONEMI.

The methodological proposal presented in this document is not the only way to manage and evaluate training, but it is recommended by the Civil Service since the concepts and practical tools included allow effective use by ONEMI.

It is expected that this guide will be used both by the Civil Protection Academy and other ONEMI departments (Central and Regional Offices) that conduct training activities for both ONEMI staff and other actors of the National Civil Protection System.

Finally, we wish to thank and acknowledge the support of the Civil Service, part of the Ministry of Finance, and highlight its mission of "Strengthening the public function and contributing to the modernization of the state, through the implementation of policies for the management and development of people and senior managers, to promote better public employment and a state at the service of citizens ", and to install the capacities that this challenge entails, the adequate investment in education and training programs for public officials that acquires particular relevance.

Training Management Model

The training management model that is promoted by the Civil Service considers four main stages, which are presented in Figure 1, including the following stages: detection of training needs; training planning, training execution; and training evaluation.

Figure 1. Training management model promoted by the Civil Service

Each of the stages presented in the previous figure is briefly detailed below, to later focus the content of this guide on stage 4, related to training evaluation.

For readers who wish to delve into the different stages, it is recommended to review "Practical Guide to Manage Training in Public Services" developed by the Civil Service in 2014.

1. Detection of training needs (DTN)

It seeks to determine clearly, either with ONEMI staff or with other members of the Civil Protection System, “the problem, need or challenge” that is interfering with the performance of the ONEMI official or another actor of the Civil Protection System to achieve the desired behaviors and performances.

Also, at this stage, the ONEMI unit that is promoting the training activity should determine and agree on the training expectations: and agree with relevant actors of ONEMI or the National Civil Protection System, what will be the performance objectives or behaviors that the participant, once the training is finished, should put into practice in their job and / or in the role that they should perform within the framework of the Civil Protection System (NCPS).

Thus, it is sought to determine more clearly, with the different target audiences defined by the Civil Protection Academy, other ONEMI units and the ONEMI staff itself, "the problem, need or challenge" that is interfering in the performance of the member of the NCPS, and that affects in aggregate terms the performance either institutional (ONEMI) or of the NCPS as a whole.

For this, it is important to collect as much evidence as possible (results of management indicators, direct observation of performance, institutional strategic plans, national policy for disaster risk reduction, among others) that demonstrate this reality and reach a consensus within ONEMI, National DRR Platform and other members of the NCPS if “the problem” can be corrected with a training activity.

Also, at this stage, the expectations about the training should be determined and agreed within ONEMI and / or with the potential participants of the training activity: How do you think the training can help solve the problem? Have other solutions been considered? Which ones? What do you expect from the training (in terms of performance and results)? and Is the participants' commitment to the training solution encouraged, agreeing on their level of participation during the process?

Then, considering the available information, the next step is to agree on the performance objectives that the participants must put into practice once the training in their job or role assigned within the framework of the NCPS is completed. Therefore, these performance objectives should be observable by a third party.

To define the performance objectives, it is necessary to have clarity of the desired behavior (what the participants should do), the conditions in which the behavior must be executed (circumstance or framework in which they occur) and the criterion (quality or performance standard that is considered successful) .In this way, all the above information must be clearly written in the performance objectives of a training course, which will later facilitate the evaluations that are conducted.

2. Training Planning

It corresponds to the process during which the instructional specifications (learning objectives, methodology, contents, activities, duration, materials, modality, etc.) of the training activity are generated, through which it will allow the participants to learn and give meaning to the content they receive.

For this, the performance objectives, defined in the detection of training needs (DTN), must be transformed into learning objectives, which should answer the following question: What knowledge, skills and attitudes are needed to achieve the desired results?

The learning objectives are measured in the place where the training is conducted (learning evaluation) and they should be the ones that guide the definition of the contents of a certain training activity, and for which it is due to:

- ✓ Identify the factors that affect adult learning.
- ✓ Define contents, methodologies and duration of the activity, which implies:
  - a) Determine the contents of the activity, which will depend on the knowledge, attitudes and skills that will be developed and that were previously determined, and aligned with the learning objectives: What topics / subjects should be included in the course to satisfy the needs and achieve the learning objectives?
  - b) Consider the capabilities that instructors must have to meet these needs and demands;
  - c) Define the modality of execution of the activity, for example, face-to-face, e-learning or b-learning, outside or inside work, hours, course size, among others;
  - d) Determine the type of activity (course, workshop, seminar, discussion, internship, etc.);
  - e) Define teaching-learning methodologies and tools, such as case studies, exercises, simulations, videos, among others.

In addition, elements that facilitate a greater probability of transfer from the training activity to the job or the role of the participant in the National Civil Protection System should be considered, which means considering in the design of the training activity, the following:

- ▪ That the participants visualize in the training activity solutions to real problems related to their job performance.

- When required or recommended, conduct a diagnosis of the basic knowledge that potential participants have, in order to integrate them in the best possible way to the learning process.
- Show during the training sessions, the various ways of applying the new knowledge, for example, making use of case studies or good practices.
- That the participants have the opportunity to show during the training, the application of the new knowledge in a practical way, for example through simulations.

During the Planning stage, the learning evaluation mechanisms (declarative knowledge tests) to be used should be defined, based on the learning objectives defined for the course. In addition, to define if the training activity will be evaluated in the levels of satisfaction and transfer.

Finally, at this stage the logistical conditions related to the modality of the course that has been planned must also be anticipated.

3. Training Execution

In this stage, the aim is to ensure the quality of the implementation of the training activity, for which it is necessary to have a follow-up and monitoring strategy, as well as, a methodology that allows management decisions and adjustments of the training activity, on factors that influence the quality of learning, such as: modality (face-to-face, virtual, etc.), quality of instructors, quality of the training activities design, duration of activities, frequency, materials used, quality of tutorials (if any), role of managers, among other variables.

It is relevant at this stage of the process that the instructional design and the implementation strategy have been validated by the ONEMI leadership of the unit that organizes the training or with the support of the CPA, to begin execution according to plan.

4. Training Evaluation

It corresponds to the process of knowing the results achieved by the training activity, taking into account each of the previous stages. The challenge for this stage is to seek information, through the results of the measurements that are carried out, so that those involved in a certain training can make decisions based on evidence, which allow the continuous improvement of the training activities developed by ONEMI.

As proposed by the Civil Service in the document "Practical Guide to Manage Training in Public Services", the evaluation model proposed to be used by ONEMI corresponds to the methodology developed by Donald Kirkpatrick[1], in which four areas or levels of evaluation are established, where each level determines the type of information and data that must be collected, as shown in Table 1.

Table 1. Evaluation levels developed by Donald Kirkpatrick

Level	Measurement
1. Reaction (Satisfaction)	It measures participants' satisfaction with a training activity.
2. Learning	It measures changes in knowledge, skills and attitudes
3. Transfer (Applicability)	It measures behavioral changes in the workplace.
4. Results	It measures changes in organizational variables at the level of production and results, to determine the impact of training activities.

In this context, how do we evaluate the impact that a certain training has on the achievement of the institutional objectives of ONEMI and / or the NCPS? How do we measure the contribution of an ONEMI

[1] Donald Kirkpatrick and James Kirkpatrick, "Evaluation of training actions. The four levels". Training and Development Collection. Management Editions 2000. Third Edition revised and updated, Barcelona, 2007.

training activity to the work of the NCPS? Why is it important to measure and have results from this measurement?
Some answers to these questions indicate that we evaluate to:

- ✓ Diagnose the level of achievement of the training objectives that were defined for the course.
- ✓ Determine knowledge, behaviors and perceptions of those involved in a structured and comparable way.
- ✓ Compare the benefits of the activity in relation to the costs of carrying it out.
- ✓ Identify positive and negative aspects of a training, to determine what should be modified. This includes aspects such as presentation methodologies, content, place, schedule, instructors, etc.
- ✓ Test the clarity and validity of the techniques used in the activity (presentation of instructors and participants, case studies, practical exercises, etc.).
- ✓ Identify the participants who stood out and those who obtained low results in the activity, looking for the reasons that made learning possible or impeded.
- ✓ Determine the need for reinforcement to those who need it.
- ✓ Generate an information base that allows making decisions.

Although in Table 1, the four levels of evaluation proposed by Kirkpatrick are presented, the fact that most of the participants in ONEMI's training activities are people outside the institution, which makes it difficult to measure results, the evaluations that ONEMI will promote in its training activities will only consider the first three levels (reaction, learning and transfer).

In the transfer evaluation (applicability), the degree to which the knowledge, skills and attitudes learned in the training have been transferred to a better performance in the job or role in the NCPS is measured. It is at this level of evaluation that the methodology that will be addressed later will focus, to show the contribution of training in improving the performance of ONEMI staff, as well as, the NCPS members.

Training activity evaluations

The evaluations that will be considered for a specific training or training course should be taken into account in each of the stages considered in the training management model that was presented previously.

The evaluation of the training considers all the actions that must be developed during and once the training activity is finished to conduct the evaluation of the same at the levels of "reaction" (satisfaction), "learning" and "transfer".

In addition, prior evaluations (or diagnostic evaluations) should be considered within this stage, which are considered in some training activities, which are usually conducted with the objective either to select participants, to level knowledge at the beginning of the training activity or to have a baseline that allows comparing the advances in the knowledge acquired, with the learning evaluation that is usually carried out at the end of the training activity.

As mentioned, the training evaluation model adopted by ONEMI and presented in this practical guide is by Donald Kirkpatrick, which is presented below.

Training activities evaluation model: Donald Kirkpatrick[2]

In 1959, this author classified four (4) areas or levels of evaluation. Each level of evaluation determines the type of information and data to be collected.

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[2] Donald Kirkpatrick and James Kirkpatrick, "Evaluation of training actions. The four levels". Training and Development Collection. Management Editions 2000. Third Edition revised and updated, Barcelona, 2007.

The evaluation levels considered in the Kirkpatrick model are those indicated in the following table, which seek to answer the questions indicated for each of the levels and with the measurement approach indicated:

Table 2. Evaluation Levels D. Kirkpatrick

Level	Questions	Measurement
1. Reaction	To what degree do participants in a training activity react favorably to the training?	It measures the satisfaction of participants in a training activity.
2. Learning	To what extent do the participants acquire the expected knowledge, skills and attitudes based on participation in the training activity?	It measures changes in the knowledge, skills, and attitudes of the participants in a training activity.
3. Transfer (Applicability)	To what extent did the participants change their behavior, applying what they learned during the training on the job?	It measures changes in behavior, of the participants of a training activity, in the workplace.
4. Results	Did the change in behavior positively affect the organization?	It measures changes in organizational variables at the level of production and results, to determine the impact of training activities.

Each of the evaluation levels presented in Table 2 are briefly described below.

Reaction evaluation (satisfaction): To produce learning, it is important that the participants of a training activity react favorably in terms of interest, attention and motivation. Therefore, this level measures how satisfied the participants are with aspects such as the methodology, instructors, contents, materials, infrastructure used for training, and other aspects that may vary depending on the type of training used (face-to-face, synchronous virtual, asynchronous virtual, mixed, etc.).

The evidence shows that one of the satisfaction measures that has the greatest correlation with learning is the relevance and perceived usefulness of the training activity by the participants, for the performance in their jobs and roles in the NCPS.

The results of the evaluation at this level allow decisions to redesign and adapt particular elements of a training activity and as a relevant input for the evaluation, among others, of the performance of an instructor, content, course modality, etc.

Learning Assessment: Evaluate learning, means according to Kirkpatrick, to determine one or more of the following aspects:

- What knowledge has been acquired or reinforced?
- What skills have been developed or improved?
- What attitudes have been changed or adopted?

In the learning evaluation, the degree to which knowledge, the use of instruments, techniques, models, principles, skills, etc., have been acquired by the participant during the training activity is measured.

The learning of knowledge is relatively easy to measure by means of evaluation instruments that are related to the contents delivered during the training, which can be used before (diagnostic evaluation), during (mid-term evaluations) and usually always at the end of a training.

This type of learning assessment occurs frequently in all formal educational processes and we are culturally accustomed to them.

Transfer Evaluation (applicability): It is the evaluation of behavioral change, and it measures the degree to which knowledge, skills and attitudes learned in the training activity have been transferred to a better performance in the job and the fulfillment of the roles and functions assigned to a person within the framework of the National Civil Protection System.

What happens when participants finish a training and return to their jobs or to their role within the National Civil Protection System? Do they actually use and apply what they have learned? It is difficult to know, due, among other things, to the fact that (i) participants cannot change behavior until they have a chance to do so; (ii) it is not easy to determine when the change will occur; and (iii) it is possible that the results of the expected change are not favorable for the participant and thus return to the initial situation.

The complexity of evaluating this level of conduct or transfer should not discourage carrying them out, since not doing it, denies the possibility of identifying the "real value" of the training process and, therefore, it leads to ignorance of the results achieved and denies the possibility of improving the training activity to achieve the desired behavioral changes by whoever designs and develops a specific training activity.

Evaluation of results (impact): With this type of evaluation, the aim is to monitor ONEMI's own strategic management variables, as well as, the ones from the the National Civil Protection System, to determine to what degree they have improved (if any), as a result of the training.

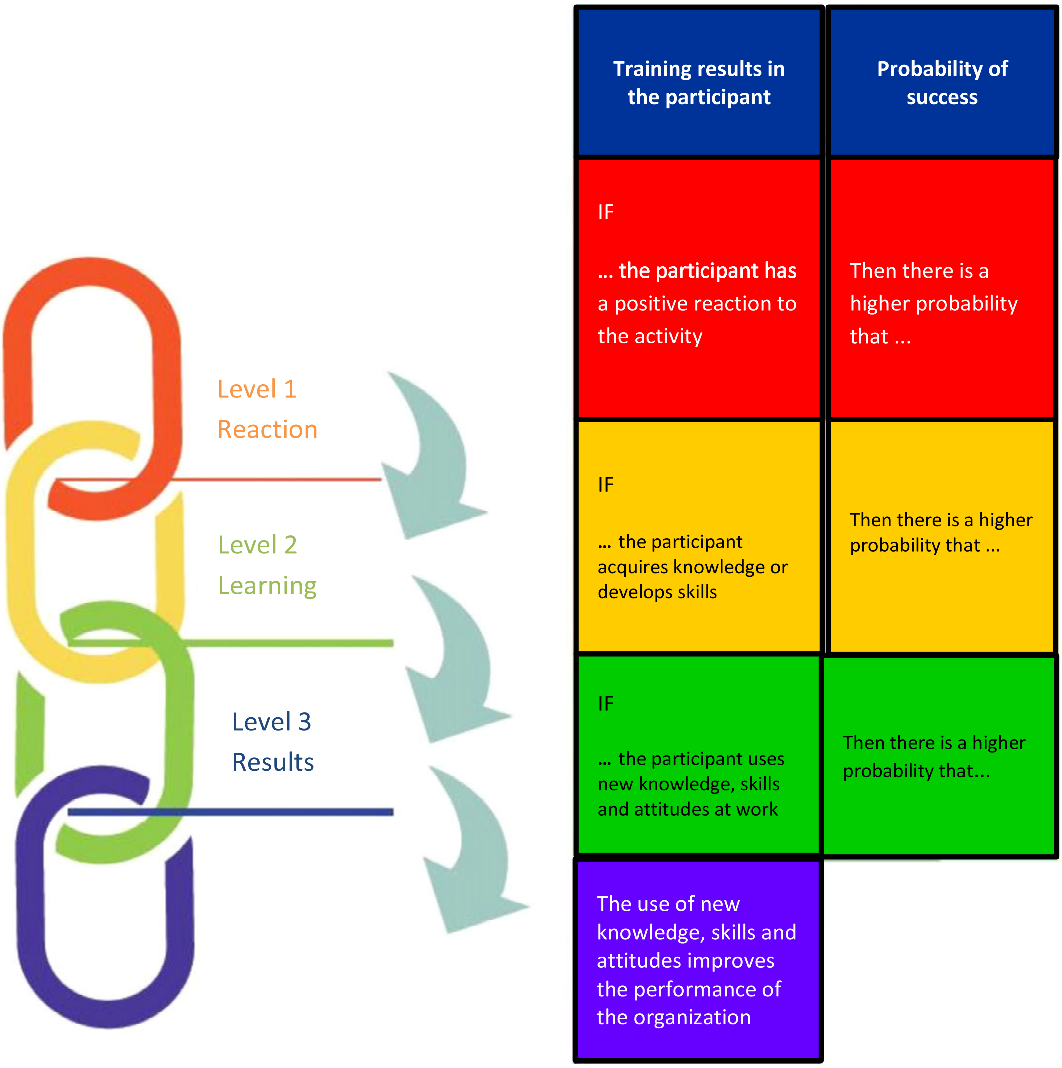
One of the most important questions at this level, and perhaps the most difficult to answer, is: How much did “productivity” increase as a result of the training activities carried out? or What tangible “benefits” are observed as a result of the human, technical and financial resources that have been invested in training (or for a particular training course)?

The training activities offered by ONEMI include both institutional staff and other members of the National Civil Protection System (Municipalities, Ministries, technical-scientific institutions, NGOs, the media, volunteers, etc.); the latter makes it difficult to observe the results (impact) of training in institutions other than ONEMI, therefore this level should be considered for those training courses designed exclusively for ONEMI staff.

From the evaluation model presented above, it is evident that as levels advance, the action of evaluating becomes more complex, which is why, in the vast majority of training activities, evaluation is only carried out up to the second level proposed by Kirkpatrick (reaction and learning), since to evaluate at the third and fourth level (transfer and results), first of all it is necessary to define the objective of carrying them out, analyze the convenience of doing so, using and defining criteria and tools that allow identifying when and how to evaluate at these superior levels.

It is important to consider that the evaluation model has a concatenation between its levels, so that each evaluation level impacts, positively or negatively, on the next, as it can be seen in Figure 2.

Figure 2. Evaluation value chain



This is how, if a person has a positive reaction (satisfaction) in front of a training activity **(Level 1, Reaction / Satisfaction)**, then there is a greater chance that he/she will acquire the knowledge or develop the skills that the training provides **(Level 2, Learning)**.

In addition, if the person acquires the knowledge or develops the skills that the training provides **(Level 2, Learning)**, then there will be a greater probability that they will apply the new knowledge, skills and attitudes at work or in compliance with their roles and functions in the National Civil Protection System **(Level 3, Transfer)**.

Finally, if the person uses the new knowledge, skills and attitudes in their job **(Level 3, Transfer)**, then there will be a greater probability of improvement in the expected performance of your organization within the framework of the National Civil Protection System **(Level 4, Results)**.

The tools used at the different levels of evaluation generate different types and amounts of information, for which the evaluation tools and methodologies must be developed considering that the information that is generated is used effectively and by default, avoiding collecting irrelevant information that will not be used in the analyzes that are required.

This is how the Civil Service, as well as practice, suggests carrying out the different levels of evaluation in proportion to the level of complexity of the evaluations that are of interest to conduct for a given course or cohort.

Therefore, in a specific program, training course or cohort, criteria such as the following could be applied:

- Reaction evaluation of 100% of the participants, although a representative sample can be taken for the analysis of the information.
- Learning Assessment to 80% of the participants.
- Transfer Evaluation to 20% of the participants.
- Evaluation of Results (impact) to 10% of the participants.

Chart 1. Measuring results of a training program / course [3]

Quality of the information obtained for the management of the evaluated course	Evaluation level	Measurement complexity	Suggested application universe
Less	Level 1 Reaction	Less	100%
	Level 2 Learning		80% - 100%
	Level 3 Transfer		20%
Higher	Level 4 Results (impact)	Higher	10%

The measurement of results, first of all, must respond to a genuine interest on the part of who organizes the training actions, to measure the results of their training programs or courses to have the necessary elements and information that allows the continuous improvement of the same, revisiting the previous processes that go from the detection of training needs, the planning of the training (including the instructional design), the execution of the training, as well as, reviewing and updating the training evaluation processes and tools themselves. However, the training evaluation actions must be adapted to the resources (human, time and financial) available and assigned for this purpose.

In general, in the training courses conducted by ONEMI both for its staff and for other members of the National Civil Protection System, it is recommended to use the following criteria:

- Reaction Evaluation: 100% of the participants in all training courses.
- Learning Evaluation: 100% of the participants in all training courses.
- Transfer Evaluation: at least 20% of the participants of a cohort of courses of interest to be analyzed.

The evaluation of results (impact) will only be considered for some of the specific training courses for ONEMI staff, where it is suggested to consider at least 10% of the participants of a cohort of courses of interest to be analyzed.

Evaluating the training, for each of the evaluation levels, is a process that leads to a judgment regarding one or more attributes of the training (satisfaction, learning, effectiveness, relevance, transfer, impact), based on information obtained, processed and analyzed (through tests, interviews, observation, etc.) and contrasted

[3] Luis Guillermo Cerna. Principles and foundations of Training, Evolution Editions. 2006.

with a clearly established reference, which are the performance and learning objectives established in the instructional design for each course.

Although the results obtained for the evaluation of each level presented in Chart 1, allow to make specific judgments and to take actions for the continuous improvement of the analyzed training course, the realization of measurements for all levels allow their concatenation and to analyze in a comprehensive way the different attributes of a training and thus have more elements that ensure that the participants achieve the performance and learning objectives of a certain course.

Considering that each of the evaluation levels presented in this model, evaluates various aspects of the training, they are measured with different instruments or tools, which must be designed specifically for each course, with the aim of collecting information that allows making decisions according to what is sought to be measured at each level.

Chart 2. Characteristics of the Evaluation levels of the Donald Kirkpatrick Model

Evaluation level	What does it measure?	How is it measured?	Relevance
1 - Reaction	- To what extent are the participants **satisfied** with the training? - What do the participants think of the **performance** of the instructors? - Did the **contents** of the training seem relevant? - What do the participants think of the **modality** (face-to-face, virtual, mixed, etc.) of the training? - What do the participants think of the **materials**, **methodology**, use of time, etc.? - Was the **place** / **platform** used for the training adequate?	Satisfaction survey at the end of the training	Evaluate if the participants… - Feel that the training is **relevant** to their job. - Are **motivated** to learn. - Feel that learning is **facilitated.** - Were **satisfied** with the training. This level of evaluation also allows obtaining positive and / or negative **comments** from the participants.
2 - Learning	- To what extent did the participants acquire new knowledge and skills? - To what extent did the participants change their attitudes?	- Written tests (multiple choice, true and false, short answer, etc.) - Performing tasks (workshops, simulations, drills, role play, etc.)	- Evaluate if the participants achieved the learning objectives. - Identify what knowledge and skills they acquired or did not acquire. - Use results as input to improve training.
3 – Transfer (applicability)	- To what extent did the participants change their behavior and improve their performance in the job and / or in their role in the National Civil Protection System as a result of the training? - Was there transfer of learning (level 2) in the job and / or in his/her role in the National Civil Protection System?	- Observing the participants in their jobs, or the products of their work. - Indirectly, by interviewing the participants, their supervisors, their subordinates or others who can observe the expected performance after the training.	- It allows to identify if the knowledge and skills acquired in the training have been transferred to the job and / or in their role in the National Civil Protection System. - It allows to identify possible factors that are influencing the transfer of learning.
4 – Results (impact)	How did the training influence the results of ONEMI and / or the National Civil Protection System?	Through the results of ONEMI and / or the National Civil Protection System, such as: Indicators of the National Policy for Disaster Risk Reduction, National indicators of the	It allows to link the training with the goals and / or strategy results of ONEMI and / or the National Civil Protection System

Evaluation level	What does it measure?	How is it measured?	Relevance
		Sendai framework, Goals established in the Management Improvement Program and / or Collective Performance Agreement.[4]	

Reaction evaluation

Reaction evaluations can be applied both to instructors and to the people who participated in a certain training program, training course or cohort, in order to know their level of satisfaction in a certain training activity.

These types of reaction evaluations are detailed below.

Reaction evaluation of instructors

The consideration of this measurement seeks to obtain from instructors who have participated in the development of a specific course or cohort, their assessment of various aspects related to the training activity in which they have participated.

In this type of evaluation, it also allows the person who teaches the course to express their general appreciation of the evolution of the activity, as well as, other relevant aspects they wish to evaluate.

Annex 2 presents the reaction evaluation survey of instructors who participated in the virtual courses developed by the CPA during the year 2021. Among the aspects included in this evaluation, the following stand out: pre-training coordination between the CPA and the instructor; adaptations to the contents of the course under the virtual modality; design and useful methodology for the evaluation of learning and the technological platform used for online training.

Reaction evaluation of participants

It is necessary to design and apply an instrument or tool to evaluate level 1 of "reaction" to 100% of participants in a specific course, in order to measure their satisfaction with the training activity.

Considerations for the design of the reaction evaluation

The tool that is designed or used should address significant aspects of its execution, such as level of training and preparation of instructors, quality of materials and activities, conditions of infrastructure and / or platform used for training and others that may be of special interest to the person organizing or developing the training activity.

Therefore, the minimum that a reaction evaluation should measure, should focus on the following dimensions:

i. Training experience.
ii. Competence of instructors.
iii. Activity program.
iv. The relevance of the activity.
v. Overall evaluation.

[4] Translation Note: Management Improvement Program [Programa de Mejoramiento de Gestión (**PMG**)]. Collective Performance Agreement [Convenio de Desempeño Colectivo (**CDC**)].

ONEMI's Civil Protection Academy has developed various tools for evaluating the reaction (satisfaction) of the training courses they develop in person and online, which have similar structures and content, and which differences are due either to the format of the training activity (face-to-face, virtual, etc.) or to specific information that needs to be collected in this type of evaluation.

In Chart 3 and Chart 4, as well as, in annex 2, some of the tools for the evaluation of reaction (satisfaction) developed and used by the Civil Protection Academy in some of the courses taught are presented.

Chart 3. Tool for the reaction evaluation (satisfaction) developed and used by the Civil Protection Academy (1 of 2).

Satisfaction survey of the Level II Risk Scenarios course

Institution	Evaluation Date	City of Activity

In order to continually improve training activities, we ask you to answer this brief survey, to consider your contributions in future training actions. We appreciate your cooperation.

Below you will find a set of statements of the activity regarding the evaluation, the exposed contents, evaluation of the trainers and evaluation of the facilities. We ask that you rate each of these areas using a scale from 1 to 7 (consider decimals, if required). **Ex.: 5.8 (good).**

Very bad	Bad	Insufficient	Sufficient	Good	Very Good	Excellent
1.0	2.0	3.0	4.0	5.0	6.0	7.0

1. Content Evaluation:

N°	Areas to evaluate	Nota
1	The course contents are adjusted to what is indicated in the performance objectives and according to the program.	
2	The level of the contents has been of quality and these have been exposed in a clear and understandable way.	
3	The contents covered in the course are applicable in their current tasks, allowing improvements.	

2. Facility Evaluation:

N°	Areas to evaluate	Nota
1	The facilities met the required comfort aspects: light, heating, adequate furniture, etc.	
2	The technological support was adequate for the purposes required in this training	
3	The quality of care during intermission was adequate and effectively allowed to regain the ability to concentrate in the course.	
4	The location of the venue allowed timely access to carry out the activity.	

Chart 4. Tools for the reaction evaluation (satisfaction) developed and used by the Civil Protection Academy (2 of 2).

3. Instructor Evaluation:

N°	Areas to evaluate	Instructor qualification 1	Instructor qualification 2	Instructor qualification 3
1	The instructor demonstrates mastery of the topics presented.			
2	The instructor clearly answers the queries made.			
3	The instructor encourages participation during the session.			

4. Considerations to better understand some answers:

- Indicate which elements would help us understand some of your answers:

- Indicate other aspects that you consider relevant regarding the instructors:

- Factors that would help improve future training:

Thank you!

This reaction (satisfaction) survey developed by the Civil Protection Academy (CPA) for the Risk Scenarios-Level II course, is also used by the CPA for other courses that they conduct or they just make adjustments to specific aspects that they wish to evaluate.

On the other hand, the Civil Protection Academy, together with the institutions that have developed training courses in E-learning format, have developed reaction (satisfaction) evaluation tools such as those presented in Chart 5

Chart 5. "Reaction Survey" (satisfaction) of the E-Learning platform Disaster Risk Management Course

Reaction Survey

1 .- The campus design is visually attractive.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

2 .- The website is easy to use, simplifying the browsing experience.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

3 .- My doubts and / or queries about the use of the website are dealt with in a timely manner by the inquiry service.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

4 .- The contents and activities are fulfilled according to the objectives set at the beginning of the training.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

5 .- The level of difficulty of the contents covered is adequate.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

6 .- You consider that what you have learned in the training is useful for your job.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

7 .- The activities conducted are able to maintain my attention during training.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

8 .- The activities allow me to better understand the reviewed content.

○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

9 .- Instructions to conduct the activities seem clear and precise.

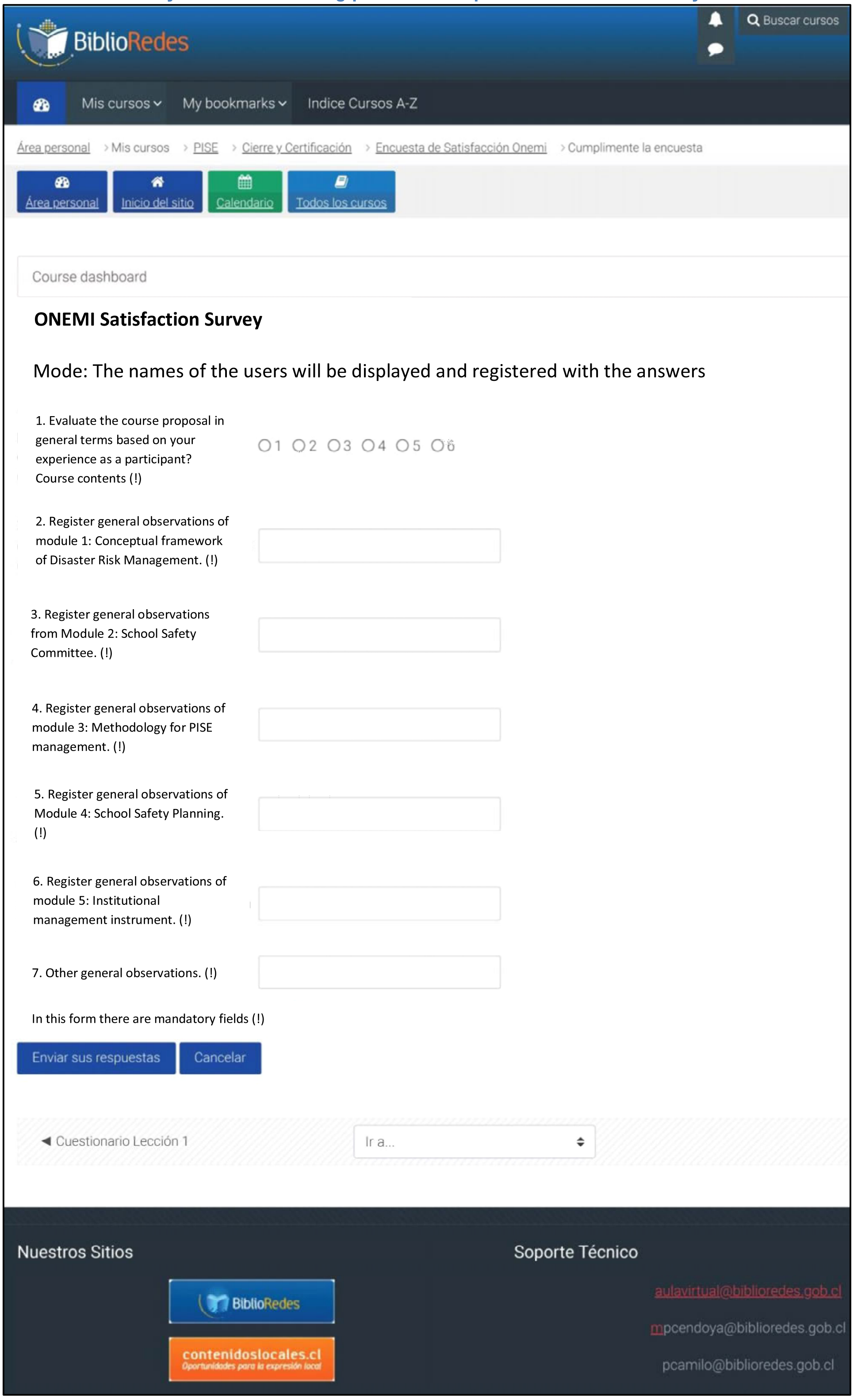
○ 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7

10 .- In general terms, mark with an X the level of satisfaction with the training.

_ Very satisfied _ Quite satisfied _ Satisfied _ Not very satisfied _ Not at all satisfied

Enviar Cerrar

Chart 6. "Satisfaction survey" of the E-Learning platform Comprehensive School Safety Plan[5] Course



[5] Translation note: Comprehensive School Safety Plan [Plan Integral de Seguridad Escolar (**PISE**)]

Although some of the reaction evaluation tools presented above do not incorporate them, it is emphasized the need if the reaction evaluations are carried out in a concatenated way with transfer evaluations (Level 3), consider the following questions that are predictive for the results of the subsequent transfer evaluation.

- Is what you learned in the training applicable to your job? Why?
- Would you recommend this activity to a colleague from your institution? Why?

On the other hand, although on various occasions these reaction evaluations are conducted anonymously or it is left to the consideration of whoever answers whether or not to include their name in the satisfaction evaluation, in the event that the reaction evaluation is carried out concatenated with transfer evaluations (Level 3) it will be necessary to register the name, to analyze how the results of the satisfaction evaluation can influence some of the results of the transfer evaluation.

Considerations for applying the reaction evaluation

To apply the reaction evaluation tools, and to reduce the probability of errors in the measurement, it must be planned to carry it out in a timely manner and committing the participants to answer it.

To promote that this type of evaluation is completed, it must be explicit (before the evaluation) the objectives of the evaluation and the possible actions that will be implemented, by the ONEMI unit that carries out the training, based on its results.

On the other hand, you should not miss the opportunity to evaluate reaction. Reaction evaluations are usually carried out at the end of the last day of the training activity, for which it is recommended to include it explicitly in the training program, allocating enough time to allow participants to answer it appropriately.

In addition, the recommendation of the Civil Service that this type of evaluations be carried out one day after the end of the training activity can also be considered, in order that the people who participate have time to adequately analyze the factors to be evaluated and reduce possible biases with instructors. However, this option will require the respective follow-up by the ONEMI unit conducting the training, in order to obtain 100% of the responses, which may represent a challenge if the people trained are not ONEMI officials.

Considerations for Analysis and Register of Reaction Evaluation Results

As indicated above, each level of evaluation that is carried out has specific objectives, therefore the results of the reaction evaluation of a certain course or cohort must always be analyzed by the ONEMI unit conducting the training, in order to make management decisions about the analyzed course.

Some of the possible management decisions that can be taken based on the information generated by the reaction evaluation could be:

i. **Decisions about instructors:** request instructors who receive poor evaluations to adjust their performance in the areas evaluated, in order to continue to participate in future similar courses, or, consider changing those who repeatedly receive inadequate qualifications in a cohort of the same or different ONEMI training courses.

ii. **Decisions about courses:** make modifications or adjustments to content, emphasis, instructional media, course structure, materials delivered, etc.

iii. **Decisions about participants:** have information regarding whether the course is perceived as necessary, pertinent, relevant to the performance of the participants, in order to adjust the profile at the time of inviting ONEMI and the National Civil Protection System staff.

iv. **Decisions about the place:** decide whether or not to continue using the venue used for face-to-face training, based on elements such as: easy access for participants, facilities (rooms) duly conditioned for the methodology of the course, temperature of the training place, and availability of complementary services that are relevant to a particular training activity (hygienic services, food, transportation, etc.)

v. **Decisions on the platform:** decide on the platform used for virtual training (online) regarding accessibility, stability, exchange spaces, intuitive use, available support and other relevant elements to consider in virtual or mixed training activities.

To the extent that the evaluations are concatenated, the information of the results of the reaction evaluation should be crossed with both the results of the learning evaluation and the transfer evaluation, since, as mentioned before, the level of satisfaction of a training activity is a good predictor of learning and this in turn of performance (transfer).

For those training courses that ONEMI organizes periodically, whether carried out by the Civil Protection Academy or another ONEMI unit, it is recommended that the information generated from the reaction evaluations be registered considering:

i. **Central register:** If the course is replicated in several regions, or in several versions, the information generated from the reaction evaluation should be registered in a consolidated way to guide the management decisions presented above.
ii. **Information availability:** information on the results of evaluations reaction should be available, so all who are related and make decisions about a particular course or training activities can access, such as: ONEMI unit that organizes training, Civil Protection Academy, headquarters, people in charge of instruction involved in the courses, etc.
iii. **Dimensions:** register the results for the different dimensions evaluated.
iv. **Relationship of variables:** cross and analyze the information generated by different variables: by instructor, by cohort, by type of target audience, by modality (face-to-face / virtual / mixed), etc.

Learning Evaluation

As indicated above, it is expected that the learning evaluation (Level 2) will be applied to all (100%) the people participating in the training activity, since through these it is sought to determine to what extent they achieved the learning objectives, that is, it measures the degree to which the contents, techniques, models, principles, skills, etc., have been acquired by those who participated.

On the other hand, measuring learning obtained during a training activity provides information to know if the transfer (or non-transfer) in your workplace or role in the National Civil Protection System is related to factors of the training carried out, or for other reasons, which will be seen in more detail when the transfer evaluation is discussed (Level 3).

Considerations for the application of the learning evaluation

Considering that a large number of participants of the courses offered by ONEMI are members of the National Civil Protection System, and not members of ONEMI, it is recommended to conduct the learning evaluation within the framework of the course development, which can be done in a partial way when the courses are developed over several days, or apply only one learning evaluation during the same day of completion of the training activity.

Despite the above, if deemed necessary or recommended, the learning assessment could also be applied one (1) or two (2) weeks after the end of the training activity, in order for the participants to understand the knowledge acquired.

In the case that it is chosen to carry out partial learning evaluations, during the development of a training activity, it is recommended to give feedback to those who participated based on the analysis of the results of said evaluations, and if necessary, reinforce the contents that the evaluations show have not been assimilated.

For those training activities that have considered a diagnostic evaluation (before the start of the course), the results of the final learning evaluation should be compared with the results obtained in the evaluation applied before the execution of the activity, to determine the changes in knowledge, skills and attitudes.

Considerations for designing the learning evaluation

To evaluate learning there are numerous instruments, which have different characteristics and which may or may not be more appropriate, depending on what you want to achieve with them. Commonly used learning evaluation instruments fall into two categories:

i. **Performing tasks:** It includes the development of "tasks" (plans, for example), simulations, drills and "role plays". These instruments seek the application of the contents addressed during the training.
ii. **Written tests:** They can be "open answers" (for the development of the participant), or "fixed answers". In the category of "fixed answers" we found multiple-choice learning evaluations, paired terms, complete sentences and true or false.

Determining what type of learning evaluation instrument to use in each activity is a factor that must be decided by the ONEMI unit that is organizing the training activity, for which they will be able to count on the support of the Civil Protection Academy if necessary. In addition, instruments from both categories can be used for the learning evaluation of the same training activity.

Regardless of the category selected to perform the learning evaluation, the evaluation instruments to be used must be built based on the learning objectives and contents that were established in the instructional design stage of the training course to be evaluated, such as those that are presented in Chart 7 related to the Emergency Operations Course, Level I taught by the Civil Protection Academy.

Chart 7. Summary of the instructional design of the Emergency Operations Course, Level 1

Course name: Emergency Operations Course, Level I

Performance Objective: Facilitate the coordination of the Civil protection system with the resources and tools associated with current regulations, in a specific geographic territory, through the implementation of actions associated with the disaster risk management cycle.

Associated behaviors:

1. Participate in the Emergency Operations Committee, in accordance with the provisions of the emergency operational plans.
2. Report to ONEMI using the instruments of the damage and needs assessment system.
3. Inform the members of the Civil Protection Committee about the emergency operations management instruments.
4. Maintain permanent coordination with the Provincial Civil Protection and Emergencies Directorates and with the ONEMI Regional Offices.

Learning objectives:

At the end of the course, participants will be able to:

1) Define the concepts associated with comprehensive risk management and the National Civil Protection System
2) Describe the general operation of the National Civil Protection System.
3) Use emergency management terminology.
4) Distinguish the characteristics and differences between Civil Protection Committees and Emergency Operations Committees.
5) Strategic framework for the management of Risk Plans and Emergency Plans.
6) Use the instruments of the damage and needs assessment system, during an emergency or disaster.
7) Keep the members of the Civil Protection Committee informed about the actions for coordination and timely management regarding the deployment and articulation of resources associated with the management of emergencies, disasters and catastrophes at local level.

Contents:

The course includes the execution of six working modules, and a content exercise workshop, where the following topics are addressed:

1) Conceptual framework in Civil Protection.
2) National Civil Protection System.
3) Civil Protection Committee and Emergency Operations Committee.
4) Strategic framework for the management of Risk Plans and Emergency Plans.
5) Damage and Needs Assessment System, DEDO$ Plan.
6) Emergency Resource Management.

It is recommended that once the learning evaluation instrument is built, it is also reviewed by key people in the activity (headquarters, Civil Protection Academy, etc.), to determine if the evaluation is targeting the core content, learning objectives, problem or challenges of ONEMI and / or the National Civil Protection System that you want to address with the training activity.

A fairly practical tool for reviewing the built instrument is the so-called Blueprint (presented later in this document), which allows analyzing and monitoring that all learning objectives are covered by the evaluation.

Considerations for the analysis and register of the results of the learning evaluation
As indicated, each level of evaluation is carried out with specific objectives, for which the results of the learning evaluation of a certain course must be analyzed by the ONEMI unit that carries out the training, in order to make management decisions about the evaluated course.

To analyze the results of the learning evaluation, it will be necessary to record the information generated by said evaluation, for which it is convenient to consider the following.

i. **Central Register.** If the course is replicated in multiple regions, or in multiple versions, the information generated from the learning evaluation should be recorded in a consolidated way. Both the initial evaluation (if applied) and the final evaluation are registered.
ii. **Information availability.** That information is available, so those who are related to the subject and make decisions about it can access, such as: ONEMI unit that organizes the training, Civil Protection Academy, headquarters, instructors involved in the courses, etc.
iii. **The result of the evaluation of each participant** should be **registered**.
iv. **Relationship of variables.** The results can be crossed with multiple variables: by instructor, by content evaluated, by learning objective, by cohort, etc.

In relation to the management decisions that can be made with the information obtained from the learning evaluation, some of these could be the following:

i. **Decisions on instruction,** ask the person who teaches the course to adjust his/her performance in the training activity itself to deepen the contents that have not obtained a sufficient learning evaluation.
ii. **Decisions about courses,** make modifications or adjustments to content, emphasis, instructional means, etc., preferably with the participation of the leadership involved.
iii. **Decisions on learning evaluation instruments,** make modifications or adjustments to the learning evaluation instruments (tests) to ensure their quality.
iv. **Decisions about participants,** deliver an individual report of results to each participant or review the results of the evaluation (give feedback) in a meeting. Generate support alternatives for participants who do not meet the learning standard (leveling workshops, taking the test again, etc.)

For the decision making that is proposed, the same will be better informed, if the results of the learning evaluation are also crossed both by participant or collectively, with the results of the reaction evaluation, as well as, the transfer.

It is important that the people who are involved in the design and development of training activities have some basic knowledge about the learning evaluation, so here are some concepts to take into account.

Advantages and disadvantages of learning evaluation instruments

As mentioned above, the learning evaluation instruments that are commonly used are divided into two categories: i) Performing tasks; and ii) Written tests. Each of these instruments has advantages and disadvantages, which are presented in Table 3.

Table 3. Advantages and disadvantages of learning evaluation instruments

Analysis concept	Open answer	Fixed answer
Learning objective	It allows to show ability in problem solving, analysis and synthesis	It allows to show ability in understanding, in remembering concepts and contents
Scope of the content to be evaluated	It allows to evaluate content in greater depth, but in less quantity	It allows to evaluate content in less depth, but in greater quantity
Writing and reading practice	Yes	No

Analysis concept	Open answer	Fixed answer
Time to reply	Long	Short
Number of recommended people to apply the instrument	Few	A lot
Score reliability	It takes work and considerations to be reliable [6]	Reliable
Construction time of assessment tools	Short	Long
Possibility of using again	Low	High

Correction instruments

The correction instruments allow assigning scores to the learning evaluations instruments, standardizing criteria for correction. The evaluation instruments are of two types:

i. **Correction guidelines (for written tests):** They establish the criteria for the answers that are considered correct. The correction guidelines allow a review according to the responses or expected performances, being able to specify the score for correct response, with an itemization if necessary. In Figure 3, a correction guideline developed by the CPA is presented for one of the learning evaluations considered in the Emergency Operations Course - Level 1.

   Additionally, in Annex 3, a correction guideline is presented, prepared by the CPA, to a previous work questionnaire for the participants of the Level II risk scenarios course.

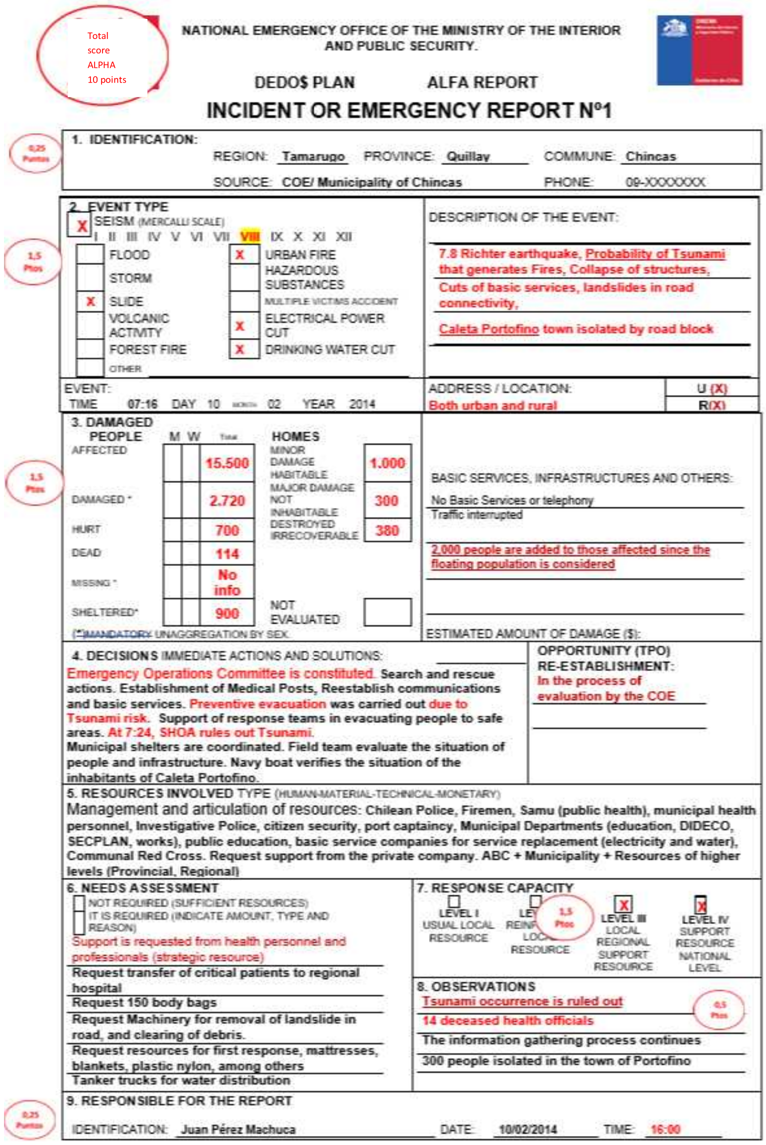
ii. **Rubric:** It is a tool that assigns a score to the different levels of achievement in the presence of certain criterion, in order to correct with greater accuracy.

Indicator	Range		
	Not achieved	Moderately achieved	Achieved
Officialization of the Civil Protection Committee.	There is no document that proposes members and functions of the Civil Protection Committee.	A document has been prepared on the definition and constitution of the Civil Protection Committee.	An administrative act has been conducted (resolution, decree, etc.) that formalizes the definition and constitution of the Civil Protection Committee.
Public institutions, part of the Civil Protection Committee, are identified.	The public institutions, part of the Civil Protection Committee, are not identified.	Only some of the public institutions are identified as established for the respective jurisdictional level.	All public institutions are identified as established for the respective jurisdictional level.
The private institutions, part of the Civil Protection Committee, are identified.	Private institutions, part of the Civil Protection Committee, are not identified.	Only private institutions in charge of basic services are identified as part of the Civil Protection Committee.	A wide variety of private institutions are identified.
The voluntary[7] institutions part of the Civil Protection Committee are identified.	Volunteer institutions, part of the Civil Protection Committee, are not identified.	Only firefighters and the Red Cross are identified as part of the Civil Protection Committee.	In addition to firefighters and the Red Cross, other voluntary institutions, part of the Civil Protection Committee, are identified.
The form of operation of the Civil Protection Committee is defined.	The form of operation of the Civil Protection Committee is not indicated.	Only the form of convocation and / or periodicity of the sessions is defined.	The form of convocation, periodicity of the sessions, functions and / or way of working is defined.

[6] For example, to avoid biases or differences in criteria, only one person may be appointed to review the learning assessment of all participants.

[7] Such as: Firefighters, Regional Civil Defense, Red Cross, Andean Aid, Radio amateurs, others.

Figure 3. ALFA report application evaluation correction guideline based on the Chincas city case study considered in the Emergency Operations Course - Level 1


Total score ALPHA 10 points

NATIONAL EMERGENCY OFFICE OF THE MINISTRY OF THE INTERIOR AND PUBLIC SECURITY.

DEDO$ PLAN ALFA REPORT

INCIDENT OR EMERGENCY REPORT Nº1

0,25 Puntos

1. IDENTIFICATION:
REGION: Tamarugo PROVINCE: Quillay COMMUNE: Chincas
SOURCE: COE/ Municipality of Chincas PHONE: 09-XXXXXXX

1,5 Ptos

2. EVENT TYPE
X SEISM (MERCALLI SCALE) I II III IV V VI VII VIII IX X XI XII
FLOOD
STORM
X SLIDE
VOLCANIC ACTIVITY
FOREST FIRE
OTHER
X URBAN FIRE
HAZARDOUS SUBSTANCES
MULTIPLE VICTIMS ACCIDENT
X ELECTRICAL POWER CUT
X DRINKING WATER CUT

DESCRIPTION OF THE EVENT:
7.8 Richter earthquake, Probability of Tsunami that generates Fires, Collapse of structures, Cuts of basic services, landslides in road connectivity,
Caleta Portofino town isolated by road block

EVENT: TIME 07:16 DAY 10 MONTH 02 YEAR 2014

ADDRESS / LOCATION: Both urban and rural U (X) R(X)

1,5 Ptos

3. DAMAGED

PEOPLE	M	W	Total
AFFECTED			15.500
DAMAGED *			2.720
HURT			700
DEAD			114
MISSING *			No info
SHELTERED*			900

(*MANDATORY UNAGGREGATION BY SEX.

HOMES	
MINOR DAMAGE HABITABLE	1.000
MAJOR DAMAGE NOT INHABITABLE	300
DESTROYED IRRECOVERABLE	380
NOT EVALUATED	

BASIC SERVICES, INFRASTRUCTURES AND OTHERS:
No Basic Services or telephony
Traffic interrupted
2,000 people are added to those affected since the floating population is considered

ESTIMATED AMOUNT OF DAMAGE ($):

4. DECISIONS IMMEDIATE ACTIONS AND SOLUTIONS:
Emergency Operations Committee is constituted. Search and rescue actions. Establishment of Medical Posts, Reestablish communications and basic services. Preventive evacuation was carried out due to Tsunami risk. Support of response teams in evacuating people to safe areas. At 7:24, SHOA rules out Tsunami.
Municipal shelters are coordinated. Field team evaluate the situation of people and infrastructure. Navy boat verifies the situation of the inhabitants of Caleta Portofino.

OPPORTUNITY (TPO) RE-ESTABLISHMENT:
In the process of evaluation by the COE

5. RESOURCES INVOLVED TYPE (HUMAN-MATERIAL-TECHNICAL-MONETARY)
Management and articulation of resources: Chilean Police, Firemen, Samu (public health), municipal health personnel, Investigative Police, citizen security, port captaincy, Municipal Departments (education, DIDECO, SECPLAN, works), public education, basic service companies for service replacement (electricity and water), Communal Red Cross. Request support from the private company. ABC + Municipality + Resources of higher levels (Provincial, Regional)

6. NEEDS ASSESSMENT
NOT REQUIRED (SUFFICIENT RESOURCES)
IT IS REQUIRED (INDICATE AMOUNT, TYPE AND REASON)
Support is requested from health personnel and professionals (strategic resource)
Request transfer of critical patients to regional hospital
Request 150 body bags
Request Machinery for removal of landslide in road, and clearing of debris.
Request resources for first response, mattresses, blankets, plastic nylon, among others
Tanker trucks for water distribution

7. RESPONSE CAPACITY
LEVEL I USUAL LOCAL RESOURCE
LEVEL II REINFORCED LOCAL RESOURCE
1,5 Ptos
X LEVEL III LOCAL REGIONAL SUPPORT RESOURCE
X LEVEL IV SUPPORT RESOURCE NATIONAL LEVEL

8. OBSERVATIONS
0,5 Ptos
Tsunami occurrence is ruled out
14 deceased health officials
The information gathering process continues
300 people isolated in the town of Portofino

0,25 Puntos

9. RESPONSIBLE FOR THE REPORT
IDENTIFICATION: Juan Pérez Machuca DATE: 10/02/2014 TIME: 16:00

Blueprint

It is an instrument that allows to analyze and monitor that all the learning objectives are covered by the learning evaluation, it also allows to visualize the type of evaluation instrument that is being used, the relative weight that each learning objective has, etc.

In general, this instrument provides a global overview of the learning evaluation. Based on it, the coherence and consistency of the evaluation with the set of learning objectives can be analyzed. The following example shows the use of the Blueprint for a written evaluation of 14 questions, for a training course that has defined 9 learning objectives.

Table 4. Blueprint example for a 14-question assessment for a course with 9 learning objectives

Learning objective	Associated question	Question type			Score	Weighing (% of the total)
		Multiple choice	Paired terms	Short answer		
Objective 1						0%

Learning objective	Associated question	Question type			Score	Weighing (% of the total)
		Multiple choice	Paired terms	Short answer		
Objective 2	11			X	3	11%
Objective 3	1	X			1,5	6%
Objective 4	2, 3, 4	X			4,5	17%
Objective 5	5, 6, 7	X			4,5	17%
Objective 6	8, 10	X	X		3	11%
Objective 7	9, 12	X		X	4,5	17%
Objective 8	13			X	3	11%
Objective 9	14			X	3	11%
				Total points	**27**	**100%**

Keys to verify that a learning evaluation is correctly built
There are six keys, which are framed in two aspects: a) a general view of the evaluation through the blueprint tool, and, b) a specific view of the instrument, which are presented in Table 5 and each of these keys are further developed.

Table 5. Keys for the construction of a learning evaluation

Six keys to building a learning assessment	Evaluation overview (Blueprint)	1. That the assessment adequately covers the learning objectives
		2. That the type of assessment instrument is in accordance with the type of learning objective
		3. Use of various instruments for evaluation
		4. Privilege known or recommended instruments
	Specific look at the instrument	5. That the assessment considers the complexity of the learning objectives
		6. That specific aspects of each instrument are considered

- ✓ **Key 1:** That the assessment adequately covers the learning objectives.

  The contents to be evaluated are defined by the learning objectives, which are established in the instructional design of the course, for which it must be verified that the learning evaluation is focused on the learning objectives defined for the course.

  There are two key questions to ask at this point:
  i. Are all the learning objectives of the activity evaluated, or only some (the most relevant)?
  ii. Are "more complex or relevant learning objectives" more represented in the assessment?

- ✓ **Key 2:** That the type of assessment instrument is in accordance with the type of learning objective and the instructional methodologies developed during the course.

  It should be analyzed whether it is a "written test", "performing tasks", or another that is more appropriate to measure the stated performance objective. If the course has been primarily theoretical, the assessments should emphasize knowledge tests and / or case analysis. For example, if you want to assess "the participants' knowledge of the normative and institutional framework of the National Civil Protection System", then a knowledge test on the subject could be applied.

  On the other hand, if the course has been fundamentally experiential (first aid, evacuations, filling out forms, etc.), the learning evaluations should favor simulations, drills or role play.

- ✓ **Key 3:** Use of different instruments for evaluation.

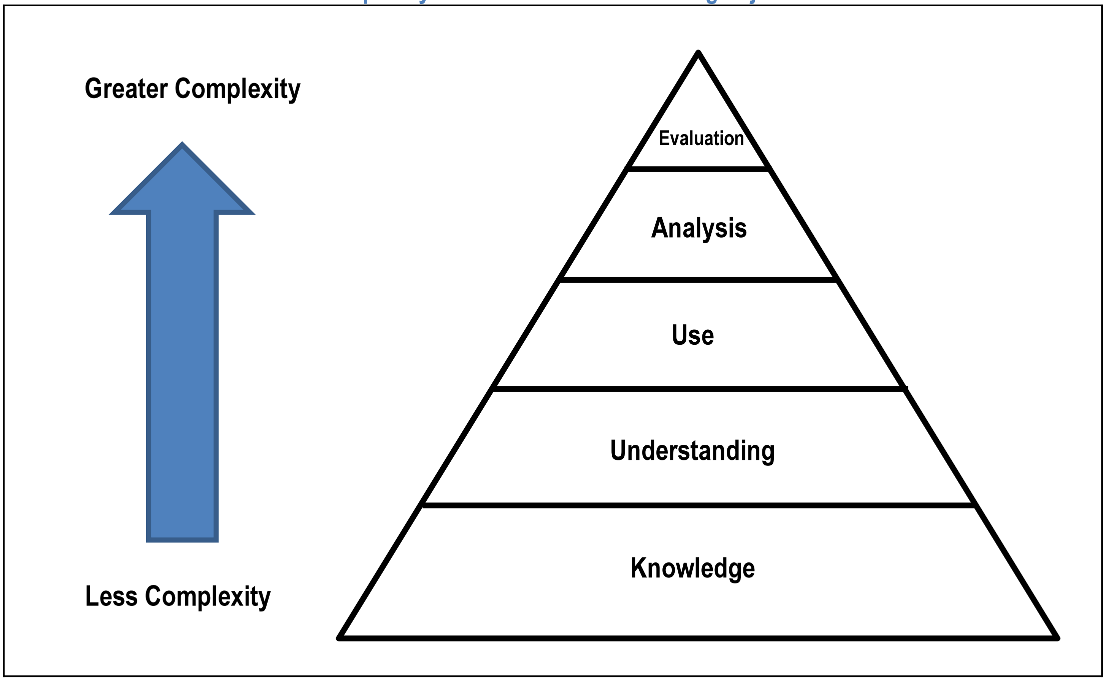
  It is convenient to use different types of tests, combining instruments and number of questions. For example, if taking a fixed answer written test, use multiple choice and / or true or false.

- ✓ **Key 4:** Privilege the instruments that the ONEMI unit that organizes and develops the training activity is most familiar with, or those that are recommended by the Civil Protection Academy for a particular course.

- ✓ **Key 5:** That the assessment considers the complexity of the learning objectives.

  For which it must be borne in mind that the evaluation of the objectives may have different levels of complexity, as shown in Chart 8.

Chart 8. Complexity in the evaluation of learning objectives



In this way, the learning objectives that pursue the acquisition of knowledge have less complexity at the time of their evaluation, compared to those that seek, for example, that the participants are able to analyze certain contents or contexts.

If the level of complexity of the learning objectives is related to the evaluation instruments, some of these turn out to be more appropriate, as shown in Table 6.

Table 6. Relationship between the level of complexity of the objectives, with the evaluation instruments

Complexity of learning objectives	Knowledge Understanding	Use	Analysis Evaluation
Evaluation instruments	Multiple choice True False Paired terms Complete sentences Short answer	Multiple choice Short answer Case resolution Essays Simulation	Multiple choice Short answers Essays

		Drill Practical execution	

✓ **Key 6:** That specific aspects of the learning assessment instruments are considered.

Below are specific recommendations for some of the learning assessment instruments that are used in different training activities carried out by ONEMI both for its staff and for members of the National Civil Protection System.

Multiple choice. For this type of instrument, you should consider:
- That there are several questions with this modality.
- That they have a specific and clear problem in the statement.
- That the statement has all the necessary information.
- That the alternatives are written clearly and concisely.
- That the alternatives are mutually exclusive.

Short answer**.** For this type of instrument, you should consider:
- The requested response must be brief and specific.
- The wording and / or grammar of the sentence should not give clues to the answer.
- The indications must be well written and point to a single answer. For example, if you ask, where is the Villarrica Volcano located? There are several possible and correct answers: Chile, Araucanía Region, Pucón, Villarrica, etc. The correct question would be: In which region is the Villarrica volcano located? In this case the answer is one: Araucanía Region.

Role play, simulation or drill**.** For this instrument, you should consider:
- That there is always a rubric to evaluate the role play, simulation or drill.
- The rubric must specify the evaluated indicator, the levels of achievement of the indicator and the weighting of each one.
- The indicators contained in the rubric must account for and be aligned with the learning and performance objectives.
- The weighting must reflect the weight of each variable in the total achievement of the objective.

True or false**.** For this instrument, you should consider:
- That there is a 50% probability of "guessing the answer".
- It is asked to "recognize" the correct answer, not to "know it."
- Therefore, if the option chosen is not asked to justify, there is no evidence that the evaluated person “knows” the correct answer. Therefore, it is recommended that the participant justify his/her choices of "true or false".

Paired terms. For this instrument, you should consider:
- That the instrument consists of relating the elements that appear in two different columns to each other.
- That there may be difficulty in achieving homogeneous material to build this type of instrument.
- That can be useful to evaluate topics in which association, classification, relationship and ordering of various contents are required.

Transfer Evaluation

As mentioned above, the evaluation of the transfer of training seeks to determine the extent to which those who participated were able to apply or transfer the knowledge acquired and skills developed during the training activity to their job and/or role in the National Civil Protection System.

Therefore, the purpose of the transfer evaluation is to determine the degree to which the training activity has met the performance objectives that were determined during the training needs assessment process.

The two questions presented below correspond to what the transfer evaluation is intended to answer.
- To what degree did the participants apply what they learned in the training activity in their work or in their role in the National Civil Protection System?; and,
- If not, why not? That is, to identify possible factors that are influencing the transfer of learning.

It follows from the above that transferring what has been learned to the job or role that a person plays in the National Civil Protection System depends not only on the quality of the training, but also on many other factors. These are the factors that make up the so-called **"System of Forces"** that intervene in the degree of transfer of training.

Por lo anterior, evaluar trasferencia es complejo, pues el sistema de fuerzas influye en la puesta en práctica de los conocimientos, habilidades y/o actitudes de quienes se capacitaron, en sus trabajos o en su rol dentro del Sistema Nacional de Protección Civil. Si bien muchos de estos factores no pueden ser controlados por la ONEMI, pero si los mismos son identificados pueden ser influenciados.

Therefore, evaluating transfer is complex, since the system of forces influences the implementation of knowledge, skills and/or attitudes of those trained, in their jobs or in their role within the National Civil Protection System. While many of these factors cannot be controlled by ONEMI, if they are identified they can be influenced.

Therefore, not all training courses organized and developed by ONEMI must necessarily consider the evaluation of transfer, some criteria to be considered to identify the courses to which to perform this type of evaluations are presented below:
- Training courses for ONEMI officials whose learning and performance objectives are key to the proper functioning and provision of services of the institution.
- Courses in which ONEMI allocates relevant resources, both human and financial. For example, courses included in the Management Improvement Program (PMG) and/or Collective Performance Agreement (CDC).
- Courses aimed at members of the National Civil Protection System (SNPC) whose learning and performance objectives are key to the proper functioning of the SNPC.
- Courses with a duration of two or more days (16 hrs).
- Courses where it is feasible and possible to develop and implement transfer evaluations with the resources available at ONEMI.

Forces in the transfer system

The system of forces in transfer involves the following components: **The person** being trained, **the training** itself, and the **work environment** in which the trainee operates.

These are the factors that determine and influence the degree of transfer, and can become obstacles or facilitators of it.

Regarding the person component, three factors act in the transference. The first of these is "self-efficacy", understood as the degree to which the trained persons feel capable of applying the learning; the second factor is "motivation", defined as the degree to which they feel motivated to apply the learning, and finally, the third factor is "valuation", understood as the degree to which they value the new learning.

As for the training component, the level of transfer is influenced by the organization and execution of activities, specifically the degree to which the detection of training needs is designed to facilitate transfer and the degree to which the instructional design has been elaborate to stimulate transfer.

Finally, regarding the work environment component, the working conditions that should facilitate the implementation of training, the incentives that stimulate it, the management of the direct supervisor for the application of new learning, the feedback and support for new behaviors, the collaboration of the team or peers and the culture of the organization influence the transfer of training.

Therefore, when evaluating the results of the transfer of a training activity, all these aspects should be considered, in order to weight them according to their level of influence in the process, according to the characteristics of the institution to which the trained people belong.

In this way, if problems are found in the transference, we can identify, if they are related to:

- The person.
- The work environment.
- The management of the training activity.
- The above factors combined.

In Table 7, shows a summary of the system of forces that affect the level of transfer of a training activity, according to the components or dimensions detailed above. These components determine a standard for the analysis of training activities that are subjected to a transfer evaluation.

Table 7. Force system that influences transfer

Performance dimension	**Factors influencing transfer**	**Definition of factors**
Person	Self-efficacy	The degree to which they feel capable of applying the learning
	Motivation	The degree to which they feel motivated to apply what they have learned.
	Valuation	The degree to which they value new learning
Training	Detection of training needs (DNC)	The degree to which the NCD is designed to facilitate transfer.
	Instructional design (DI)	The degree to which the instructional design is designed to stimulate transfer.
Work environment	Working conditions	The degree to which job conditions facilitate or hinder the transfer of learning.
	Rewards and incentives	Existence of incentives and rewards that facilitate or hinder the occurrence of desired behaviors.
	Leadership	Degree to which the management of the direct supervisor facilitates or obstructs the application of learning.
	Feedback	Extent to which there is support and feedback for the expected behaviors.
	Peer team	Level to which the peer team facilitates or obstructs the application of learning.
	Organizational culture	Characteristics of the organizational culture that may interfere with the transfer of learning.

In this system of forces, there is a transversal element that largely determines the results obtained, that is, the commitment of managers, participants and instructors.

Thus, managers should be committed to the transfer to the workplace in two ways:

a. With their central role in facilitating the conditions and providing opportunities for the trainees to practice what they have learned.
b. With the follow-up and evaluation, as well as with the feedback of the behavior in the workplace and/or in their role in the National Civil Protection System.

For their side, those who participate in the training should know and agree with the performance objectives set for the activity.

Likewise, those who deliver the training should be committed and aligned with the performance objectives of the activity and with the transfer measurement.

Considerations for transfer evaluation design

When choosing the transfer evaluation method, the general strategy to be applied to measure transfer, which may vary from one course to another, is being chosen, and for which there are three methods, which are presented and described in Table 8.

Table 8. Transfer evaluation methods

Method	Description
One time	An evaluation is applied at some point after the training. If necessary, this same instrument can be applied again.
Pre and post	A pre-activity and post-activity evaluation is applied using the same transfer evaluation instrument. Although this is an ideal way to determine changes in performance as a result of the training, it requires more time and dedication of the human resources available for the evaluation.
Control group	It is applied once the activity has been carried out, to the group that received the training (experimental group) and also to a group with similar characteristics that did not receive the training (control group).

Despite the existence of the methods described above, it is recommended that the "one time" method be used in ONEMI courses, considering that it is adequate to the possibilities of applying this type of evaluations, taking into consideration the time and resources available in the institution. However, if there are specific needs, some of the other methods that are better suited to what is to be evaluated in a particular training course could be used.

Choice of the instrument to be used in the transfer evaluation

Among the instruments recommended to carry out the transfer evaluation are the following: Questionnaires, Performance Observation, Work Sample, Individual Interviews or Focus Groups, which are presented in Table 9.

The performance observation, the work sample and the questionnaire attempt to answer the degree of transfer to the job or role in the National Civil Protection System. The individual interview or focus group and the questionnaire attempt to find reasons why there was or was not a transfer to the job or role in the National Civil Protection System. Therefore, the ideal is to complement two (2) types of instruments.

But, how to choose the most appropriate instrument if most of the participants of the training courses given by ONEMI are not institutional personnel, but officials from other public, academic and civil society agencies?

The answer to this question depends primarily on the performance objective to be evaluated. In general, if the performance objective is easily observable, it would be advisable to use the "Performance Observation". On the contrary, if the activity seeks to have the person define a plan, elaborate a document or complete a form, it is recommended to use a "Work Sample". However, if the use of these instruments is not feasible, the most appropriate instrument to use is the "Questionnaire".
.

Table 9. Types of transfer evaluation instruments and their objectives

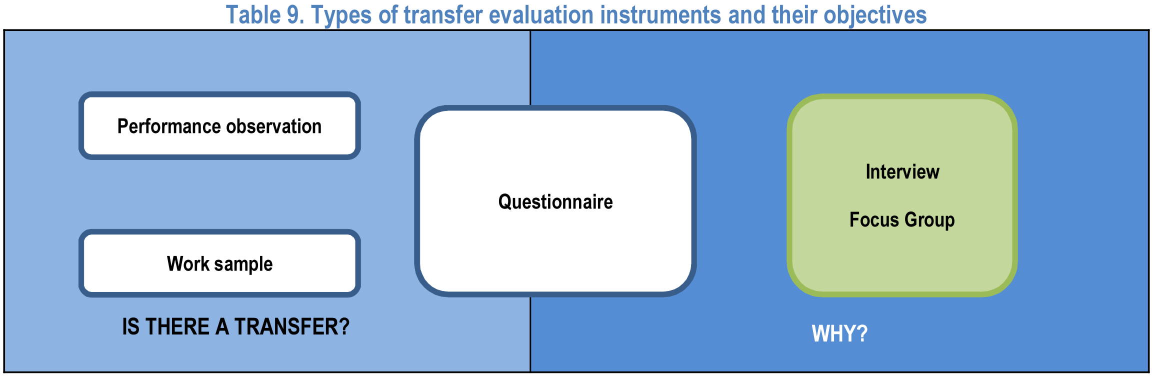
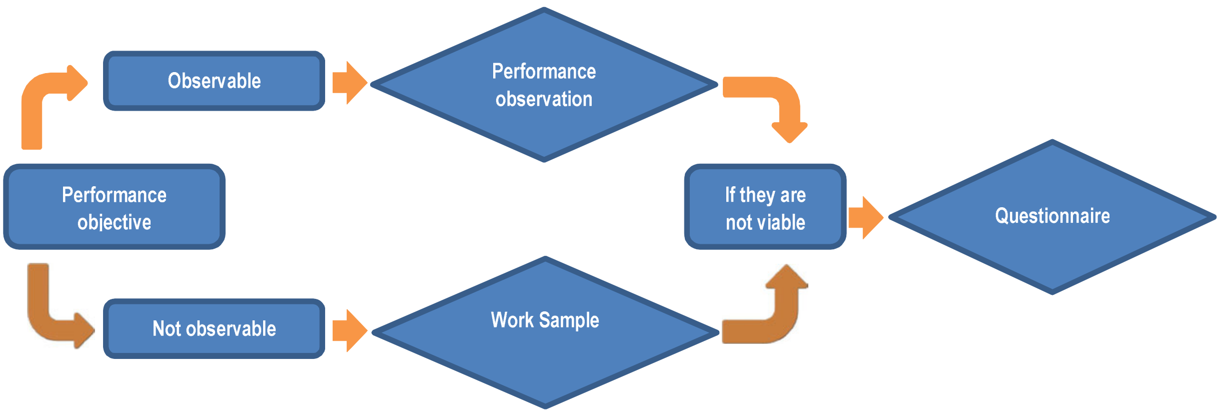


Figure 4 shows the type of analysis to be performed to decide the type of instrument to be used in the transfer evaluation of a training course.

Figure 4. Analysis to decide the type of transfer evaluation instrument to use



Further background information on the instruments shown in the figure above is presented below.

- ✓ **Questionnaire**: Corresponds to a written question form that evaluates the perception of the degree of transfer and the reasons for it.

Responses can be recorded using Likert[8] or open-ended scales, which can be answered by anyone who knows and observes the trainee's behavior (supervisor, peer, co-workers, the trainee by theirself, etc.).

The disadvantage of this instrument is that it is an indirect measurement, since the responses are based on perceptions of training effectiveness. Therefore, to overcome this disadvantage, it is recommended, if possible, to use it in a complementary manner with another transfer evaluation instrument.

Despite the above disadvantage, this is one of the most widely used instruments to evaluate transfer.

For the elaboration of a questionnaire that evaluates the transfer of a course, it should consider at least the following sections:

1. **Statement**, identifying the activity being evaluated, who is being evaluated, date, place and instructions for completion.
2. **Questions about the level of transfer**, which should be oriented to the behaviors to be evaluated.
3. **Questions about the reasons for the degree of transfer**, for example: Have you had the opportunity to use the learning from the training?

Table 10 shows an example of the questionnaire developed for the transfer evaluation of the Emergency Operations Course - Level 1 given by the Civil Protection Academy.

Table 10 Questionnaire developed for the transfer evaluation of the Emergency Operations Course - Level 1

It corresponds to an individual conversation (interview) based on structured questions, which are used as a reference to develop a frank and sincere dialogue with the interviewee. Although it is not necessary that the questions are used in the order they appear in the tool developed, it is important to cover all the questions proposed during the interview.

The aim is to qualitatively assess the degree to which the new behaviors are being used in the workplace and/or details of the implementation, which provides important qualitative information about the Emergency Operations Course - Level I.

This instrument can be applied by any person who is familiar with the objective of the training and the purpose of the interview to be conducted, such as one of the training instructors.

A semi-structured interview format will be used, with a guiding guideline that will allow to deepen the elements that appear during the interview, which are presented below.

If it is possible to conduct the interview in person, it is suggested that the interview be conducted in a place where the interviewee feels comfortable, creating an atmosphere of trust and empathy, in order to later use the tool.

1. Background information

- Name of training activity:
- Location of training activity:
- Dates of conducting the training activity:
- Name of participant being evaluated:
- Name of evaluator:
- Place, date and time of evaluation:

2. Questionnaire

Factors influencing transfer	Factors affecting transfer	Rationale for responses
Person	1. Do you feel motivated to apply the contents covered in the course?	
	2. Do you feel confident in your ability to apply what you have learned?	

[8] In the Likert technique, a person's level of agreement or disagreement with a statement is specified. An example of a Likert scale is 1.Strongly disagree; 2.Disagree; 3.Neither agree nor disagree; 4.Agree; and, 5.Strongly agree.

	3. Have you had opportunities to apply the knowledge acquired in the course?	
Links with committee stakeholders	1. Have you had the support of your colleagues or superiors to apply the knowledge acquired in the course?	
	2. With which actors of the Civil Protection Committee and/or COE have you established collaboration?	
	3. In which COE activities have you had the opportunity to participate?	
	4. What relationship have you established with the Regional Directorate of ONEMI?	
Training program	1. Did the contents of the training program allow you to achieve the expected performance?	

3. Guideline to deepen the elements that appear during the interview.

Factors influencing transfer	Factors affecting transfer	Guideline to deepen answers
Person	1. Do you feel motivated to apply the contents covered in the Course?	What motivates or demotivates them?
	2. Do you feel confident in your ability to apply what you have learned?	What makes you confident or distrustful?
	3. Have you had opportunities to apply the knowledge acquired in the course?	What have these opportunities been?
Links with committee stakeholders	1. Have you had the support of your colleagues or superiors to apply the knowledge acquired in the course?	What results have they had?
	2. With which actors of the Civil Protection Committee and/or COE have you established collaboration?	From which areas are the colleagues or superiors who have supported you? What kind of support have you received from them?
	3. In which COE activities have you had the opportunity to participate?	What kind of collaboration have you received from them? Have any of them stood out?
	4. What relationship has the Regional Directorate of ONEMI established with you?	What is your opinion of the activities carried out?
Training program	1. Did the contents of the training program allow you to achieve the expected performance?	Why have you not had the opportunity to participate?

- ✓ **Performance observation**, this instrument collects the "observation" of the behavior of the trained person in his job, evaluating the desired behavior based on a guideline or checklist that should be constructed as accurately as possible, using a rubric or possible evaluation guideline, similar to those used in learning evaluations.

  When it comes to evaluating the transfer of a given training to an ONEMI staff member, this is a very good instrument to evaluate the level at which the behaviors are being executed and the degree to which they are being done correctly. However, when it comes to using this type of instrument to evaluate the transfer of learning to other participants who are part of the National Civil Protection System, where ONEMI personnel cannot perform direct observation, it should be delegated to a third person who can perform performance observation, who should receive an induction in the use of the instrument that is developed for this purpose.

- ✓ **Work sample**, this instrument is used to analyze "products" of the performance of a person who has been trained, but not their behavior. The products can be documents or other work that the trained person produces within the framework of the expected performance, so that they demonstrates that they apply the behaviors sought and reinforced in the training.

It is recommended to use this instrument when a person's performance is not easily observable, which is often the case with participants in courses organized by ONEMI who are not ONEMI officials.

As with the "performance observation" instrument, a rubric or evaluation guideline should also be used to evaluate the work sample. In addition, it is suggested that this instrument be answered by a person who is technically proficient in the subject being evaluated.

Table 11 11 shows the Instrument developed by the Civil Protection Academy for the evaluation of the transfer of the Emergency Operations Course - Level 1, which is complemented with the questionnaire presented in Table 10.

Table 11. Instrument developed for the transfer evaluation of the Emergency Operations - Level 1 Course

Sample of Work (Act of Constitution of the Civil Protection Committee)

When to perform the transfer evaluation: 3 or 6 months after the training.
Responsible for conducting the evaluation: APC Instructors and/or ONEMI Regional Directorates.

General recommendations for the analysis of the Act of Constitution of the Civil Protection Committee

- Verify whether or not there is a Civil Protection Committee Minute.
- If the Civil Protection Committee Minute does not exist or has not been officialized, inquire about the reasons that have not made it possible to have the Civil Protection Committee Minute or the non-officialization of the same.
- If there is a Civil Protection Committee Minute that has not been officialized, use this version for analysis.

1. Background information

- - Name of training activity:
- - Location of training activity:
- - Dates of conducting the training activity:
- - Name of participant being evaluated:
- - Name of evaluator:
- - Place, date and time of evaluation:
-

2. Work sample evaluation

Indicator	Not achieved	Moderately achieved	Achieved
Officialization of the Civil Protection Committee	There is no document proposing members and functions of the Civil Protection Committee.	A document has been prepared on the definition and constitution of the Civil Protection Committee.	There is an administrative act (resolution, decree, etc.) that formalizes the definition and constitution of the Civil Protection Committee.
Public institutions are identified as part of the Civil Protection Committee.	The public institutions that are part of the Civil Protection Committee are not identified.	Only some of the public institutions are identified as established for the respective jurisdictional level.	All public institutions are identified as established for the respective jurisdictional level.
Private institutions are identified as part of the Civil Protection Committee.	Private institutions are not identified as part of the Civil Protection Committee.	Only private institutions in charge of basic services are identified as part of the Civil Protection Committee.	A wide variety of private institutions are identified.
Volunteer institutions[9] are identified as part of the Civil Protection Committee.	Volunteer institutions are not identified as part of the Civil Protection Committee.	Only firefighters and Red Cross are identified as part of the Civil Protection Committee.	In addition to firefighters and the Red Cross, other volunteer institutions are identified as part of the Civil Protection Committee.
The functioning of the Civil Protection Committee is defined.	There is no indication of how the Civil Protection Committee operates.	Only the form of convocation and/or periodicity of the meetings is defined.	The form of convocation, frequency of meetings, functions and/or working methods are defined.

[9] Such as: Firefighters, Regional Civil Defense, Red Cross, Andean Rescue, Amateur Radio, others.

- ✓ **Interview/Focus Group,** corresponds to an individual (interview) or group (Focus Group) conversation based on structured questions, which seeks to qualitatively evaluate the degree to which the new behaviors are being used by the participants in a training or to know the details of the implementation, providing important qualitative information.

  This type of instrument can be applied by any person who is familiar with the objectives of the training or the objective of the interview or focus group, such as those in charge of the training course to be analyzed or those who taught the course.

  It is recommended to use a semi-structured interview format, with a guide guideline that allows to deepen the elements that allow to know the reasons for the degree of transfer. To construct the questions, the behaviors to be evaluated and the components and factors of the system of forces involved in transfer should be considered (see Table 7).

  Table 12 shows the tool designed by ONEMI's Department of Community Prevention for the evaluation of the transfer of the Community Emergency Response Teams-CERT program through the use of the focus group instrument, with the participation of members of the Community Emergency Response Team-CERT who have participated in the program.

For the evaluation of the transfer of this program, it was also considered convenient to develop an interview instrument with the community emergency manager to which the Community Emergency Response Team-CERT community belongs, which is presented in

Table 13.

Table 12. Focus group instrument developed for the evaluation of the transfer of the Community Emergency Response Teams (CERT) program.

Group members of the Community Emergency Response Team

Focus group participants: Community Team Members
When to conduct the transfer evaluation: At the end of the training program update workshop-Community Emergency Response Teams.
Responsible for conducting the evaluation: ONEMI Regional Management Team involved in the development of the Program.

General recommendations for Focus Group planning and development

- Make sure that the people invited to be part of the Focus Group have participated in the training activities carried out within the framework of the Community Emergency Response Teams Program.
- Agree with the CERT Team coordinator on the modality (face-to-face, virtual, telephone), day and date for the Focus Group.
- Before addressing questions with the Focus Group, share the objectives and methodology that will be used during the Focus Group, as well as fostering an atmosphere of trust and empathy.
- Although it is not necessary that the questions are used in the order they appear in the tool developed, it is important to cover all the questions proposed during the focus group.
- Adjust and adapt the proposed questions so that they are understood by the Focus Group members, avoid reading them as they appear in the tool. Contextualize them to the community and Focus Group participants (mention the municipality to which they belong, recent events, community institutions, etc.).
- Based on the answers received from the Focus Group, use the guideline to deepen answers and elaborate your own questions to deepen the answers you receive, keeping in mind that the transfer evaluation seeks to answer the following general questions:
    - ✓ **To what extent did the participants apply what they learned in the training in their community?**
    - ✓ **In what way have the knowledge and skills acquired during the training been applied,**
    - ✓ **If not, why not? In other words, to identify possible factors that are influencing the transfer of learning.**
- The Community Emergency Response Team behaviors that will be evaluated with this tool are as follows:
    1. Implement actions to mitigate disaster risk at home and in the community, based on the identification of existing hazards and vulnerabilities.
    2. Develop community plans to respond to emergencies and disasters.
    3. Participate in community coordination activities to prevent and respond to emergencies and disasters.
    4. Implement basic emergency response actions such as fire prevention and control, first aid, surface search and rescue, among others.
    5. Strengthen coordination mechanisms between the community, the municipality and the local civil protection system agencies, based on the agreements established between the teams and the municipality.

1. Background information

- Name of training activity:
- Location/community where the training activity will be conducted:
- Dates of conducting training activities:
- Name of participants evaluated:

- Name of evaluator:
- Place, date and time of the focus group:

2. Evaluation

Factors influencing transfer	Factors affecting transfer	Rationale for responses
Person	1. Do they feel motivated to apply the contents and skills addressed in the program?	

	2. What is the importance of applying the contents of the program?	
	3. What could be the consequences of misapplying the skills and knowledge acquired during the program?	
	4. Do they feel confident in their ability to apply what they have learned?	
	5. Have you had the opportunity to apply the knowledge and skills acquired in the program?	
	6. What aspects have facilitated or hindered your management as a Community Team?	
Linkages with Local Civil Protection System stakeholders	1. With which actors of the local civil protection system have you established collaboration?	
	2. In which activities of the local civil protection system have you participated?	
	3. In which instances of coordination of the local civil protection system have you participated?	
	4. With whom have you shared the Community Emergency Plan?	
Training program	1. Did the contents of the training program allow you to achieve the expected performance?	
	2. During the program, were there spaces to practice knowledge and skills?	

3. Guideline to deepen the elements that appear during the Focus Group.

Factors influencing transfer	Factors affecting transfer	Guideline to deepen answers
Person	1. Do they feel motivated to apply the contents and skills addressed in the program?	What motivates or demotivates them?
	2. What is the importance of applying the contents of the program?	What results can they attribute to the work done by the CERT?
	3. What could be the consequences of misapplying the skills and knowledge acquired during the program?	What are the skills that may be misapplied?
	4. Do they feel confident in their ability to apply what they have learned?	To what might the misapplication be due?
	5. Have you had the opportunity to apply the knowledge and skills acquired in the program?	What do they suggest to correct them?
	6. What aspects have facilitated or hindered your management as a Community Team?	How do they support each other among CERT members to build or reinforce trust?
Linkages with Local Civil Protection System stakeholders	1. With which actors of the local civil protection system have you established collaboration?	With whom others would you like to collaborate, and why?
	2. In which activities of the local civil protection system have you participated?	With whom have you not been able to collaborate, why?
	3. In which coordination bodies of the local civil protection system have you participated?	How have they been invited and involved?
	4. With whom have you shared the Community Emergency Plan?	Which ones would you have liked to participate in?
Training program	1. Did the contents of the training program allow the expected performance to be achieved?	What content has been most relevant? What other contents could be considered?
	2. During the program, were there spaces to practice knowledge and skills?	Which spaces are more relevant? What other spaces could be considered?

Table 13. Interview instrument developed for the evaluation of the transfer of the Community Emergency Response Teams CERT Program

Interview with municipal emergency manager

Interview participant: Municipal emergency manager who participated in the CERT formation process.
When to conduct the transfer evaluation: 3 months after the end of the Program.
Responsible for carrying out the evaluation: ONEMI regional directorate team involved in the development of the Program.

General recommendations for the planning and development of the Interview.

- Find out if the person to be interviewed participated in the training activities carried out within the framework of the Community Emergency Response Teams Program.
- Agree with the municipal emergency manager on the modality (face-to-face, virtual, telephone), day and date for the interview.
- Before addressing the questions with the municipal emergency manager, share the objectives and methodology that will be used during the interview, emphasizing that it is an evaluation of the performance of the Community Emergency Response Team (CERT) and not of the municipality or the municipal emergency manager.
- While it is not necessary that the questions be used in the order they appear in the developed tool, it is important to cover all of the proposed questions during the interview.
- Adjust and adapt the proposed questions so that they are understood by the interviewee; avoid reading them as they appear in the tool.
- Based on the answers received, use the guideline to deepen answers and elaborate your own questions to deepen the answers you receive, keeping in mind that the transfer evaluation seeks to answer the following general questions:

  ✓ **To what extent did CERT participants apply what they learned in the training in their community?**
  ✓ **In what ways have the knowledge and skills acquired during the training been applied,**
  ✓ **If not, why not? In other words, to identify possible factors that are influencing the transfer of learning.**

- Keep in mind that the behaviors of the Community Emergency Response Team that will be evaluated with this tool are the following:
  1. Implement actions to mitigate disaster risk at home and in the community, based on the identification of existing hazards and vulnerabilities.
  2. Develop community plans to respond to emergencies and disasters.
  3. Participate in community coordination activities to prevent and respond to emergencies and disasters.
  4. Implement basic emergency response actions such as fire prevention and control, first aid, surface search and rescue, among others.
  5. Strengthen coordination mechanisms between the community, the municipality and the local civil protection system agencies, based on the agreements established between the teams and the municipality.

1. Background information

- Name of training activity:
- Location/community of training activity:
- Dates when training activities were conducted:
- Name of person interviewed:

- Name of evaluator:
- Place, date and time of interview:

2. Evaluation

Factors influencing transfer	Factors affecting transfer	Rationale for responses
Person	1. What aspects have facilitated or hindered the relationship between the Community Team and the Municipality?	
	2. Has a work plan been established with the Community Team?	

Work environment	1. Has the Community Team participated in activities organized by the Municipality? Which ones?	
	2. In what specific actions has the Municipality supported the Community Team?	
Training program	In what ways did the program facilitate the establishment of links between the Municipality and the Community Team?	
	2. Do you know what actions to prevent and prepare for emergencies and disasters have been developed by the Community Team?	

3. Guideline to deepen the elements that appear during the interview.

Factors influencing transfer	Factors affecting the transfer	Guideline to deepen answers
Person	1. What aspects have facilitated or hindered the relationship between the Community Team and the Municipality?	How has the CERT program contributed?
	2. Has a work plan been established with the Community Team?	Has there been an opportunity to revise or update it?
Work environment	1. Has the Community Team participated in activities organized by the Municipality? Which ones?	How was the invitation and/or participation handled? What changes have you seen from CERT following participation?
	2. In what specific actions has the Municipality supported the Community Team?	How was support managed? What changes have you seen on the part of the CERT following the support provided?
Training program	1. In what ways did the program facilitate the establishment of links between the Municipality and the Community Team?	Are the links similar to other existing CERTs in the commune? To what would you attribute the differences/similarities?
	2. Do you know what actions to prevent and prepare for emergencies and disasters have been developed by the Community Team?	In what ways do you suggest the City can maintain communication with CERTs?

Determine who will apply the transfer evaluation instrument(s).

The definition of who can or should evaluate the transfer of training, i.e. who will apply the instruments to be developed. In principle, the following can be considered:

- People involved in the design and development of the course.
- The managers or supervisors of the person being evaluated.
- Course participants, through a behavioral self-evaluation.
- Peers at work or experts..

Among the requirements that should also be met by those who perform the transfer evaluation are the following:

Know in detail the information about the assessment and instrument to be used;
- Be conservative with their judgments based on objective evidence;
- Maintain contact with the evaluated, and;
- Be neutral in their judgments.

It is worth mentioning that the competence or level of mastery of the person evaluating should focus only on the behavior(s) to be observed and that were addressed during the training activity.

As can be seen in the transfer evaluation instruments that have been developed so far by ONEMI, which have been presented in the tables above, at the beginning of the instruments there are details of who is responsible for carrying out the transfer evaluation for those particular courses.

Determine to whom the transfer evaluation will be applied
To determine the universe of participants to whom the instrument(s) developed for the transfer evaluation will be applied, although it can be considered to apply it to all the participants of a training activity that have the effective possibility and conditions to transfer to the job position, considering the resources and purpose that ONEMI pursues with this type of evaluations, the most advisable is to apply the transfer evaluation to a representative sample of participants, who are expected to develop the behaviors associated to the course that is being evaluated.

When a given training is repeated on a frequent basis, participants can be selected from the same or different cohorts of the same course, depending on the objectives pursued with the transfer evaluation.

It should be noted that the larger the sample, the more representative it will be, and therefore, the greater the validity of the results.

Considering the diversity of participant profiles in some of ONEMI's training courses, it is suggested that the sample should not be taken at random, but should be stratified, i.e., grouped by variables such as position, function, age, gender, region or other variables that could influence the results.

Determine when to apply the transfer evaluation
As a general rule, the transfer evaluation should be applied until the trained persons have the opportunity to use the new behaviors in their workplace or role in the National Civil Protection System, so the application of the instrument should wait for some time, which may vary from one week to six months approximately, depending on the training activity, being three months an adequate time for most of the courses.

Notwithstanding the above, in critical behaviors that require immediate application, such as safety issues, risk prevention, early warning system, etc., transfer could be evaluated immediately after the training activity is completed.

As can be seen in the transfer evaluation instruments developed by ONEMI, which have been presented in the previous tables, at the beginning of the instruments it is detailed when the transfer evaluation should be carried out for each particular course.

Considerations for recording and analyzing transfer evaluation results
In order to analyze the results of the transfer evaluation, it will be necessary to record the information generated by such evaluation and make it available to those potentially interested in accessing it, for which it is convenient to consider the following.

i. **Central recording**: The information generated from the transfer assessment should be recorded in a consolidated manner for each course that has a transfer assessment. The result of each participant, in each competency or skill, should be recorded and cross-referenced with the results of the reaction (satisfaction) and learning evaluations, in order to analyze possible links between these evaluations that may or may not be favoring transfer.
ii. **Availability of information**: The information that is generated in the framework of the transfer evaluation must be available, so that it can be accessed by all persons who are related to the topic addressed in the training and who make decisions about the course, such as the Civil Protection Academy, chiefs and persons in charge of teaching the course.

iii. **Relation of variables**: The results can be crossed by multiple variables such as region, cohort, modality (classroom/virtual), person in charge of the instruction, etc.

Regarding the management decisions that can be made with the information obtained from the transfer evaluation, some of these could be the following:

i. **Instructional decisions**: adjusting the trainer's performance in the training activity itself to facilitate transfer;
ii. **Decisions about training activities**: making modifications or adjustments to content, emphasis, instructional media, etc.
iii. **Decisions about the instruments used to measure transfer**: make modifications or adjustments to the transfer instruments to ensure their quality.
iv. **Decisions on trained persons**: give feedback on their evaluation to each person, through an individual report of results or, if possible, through a meeting to review the results of the evaluation. Generate alternatives for those who do not meet the learning standard (e.g., leveling workshops, coaching, on-the-job follow-up, etc.).

Recording and analysis of information

In order for the training evaluations described in this guide to be a real contribution to ONEMI and/or the National Civil Protection System, the information resulting from them must be managed, since evaluation is not an end in itself, but a means to obtain information, being relevant the question: What will I do with the evaluation results?

Once the three dimensions of evaluation (reaction, learning, transfer), or only some of them, have been applied, information will be generated as a result of them and must be managed, some of which have been presented at the end of the sections that address each of the dimensions of evaluation.

At this point, the ONEMI unit that has designed and implemented a given training course must analyze and understand the degrees of satisfaction, learning and/or transfer obtained by the evaluated participants, as well as the causal factors of the levels achieved.

As a start to this process, a distinction must be made between the concepts of results, conclusion and recommendations, where each one represents a part of the analysis and which are linked sequentially, as presented in Figure 5, where the "result" is the raw data and corresponds to the information obtained without analysis; the "conclusion" is the reading made of the results obtained, in which there are judgments, which give meaning to the results obtained; and finally the "recommendation" corresponds to the suggestions for action, based on the conclusions.

Figure 5. Sequence for the analysis of training evaluations

Results of an evaluation

The results of any of the evaluations that have been discussed above should be consolidated or tabulated according to the criteria contained in the evaluation instrument, allowing their analysis to subsequently draw the conclusions on which the recommendations to be considered in the training course will be based.

For those courses in which concatenated evaluations (reaction, learning and transfer) are carried out or are planned, the consolidation or tabulation of the results of the different evaluations should be carried out in such a way as to identify the evaluations of each of the course participants who have participated in the three levels of evaluation.

The way in which the results are consolidated and tabulated will depend, among other things, on the type of instruments used to carry out the evaluations and the type of analysis or recommendations that are expected to be obtained.

Identification of the results
The results of an evaluation can be visualized in general terms by using, among others, percentages, frequencies, averages, graphs. Thus identifying the lowest or highest results, the most relevant, a desired behavior with higher or lower results, etc.

From the visualization of the results, it is advisable to write and summarize the results, either considering all the results obtained or only the most representative ones.

The way to summarize and write the results of the evaluations of a given course should be written in a concise manner, making reference to the information recorded in the instrument used in the consolidation or tabulation of results, so that the reader can clearly see the results written with what is shown in the tabulation.

The following are some examples of the type of wording used to summarize the results of a course evaluation

Examples of feedback evaluation:
- "70% of participants evaluated rapporteur 1 with grade 6.0 (Very good and excellent), on his mastery of the topics presented in the course."
- "40% of participants evaluated the instructional design of the course as insufficient or below expectations".
- "80% of participants evaluated the facilities where the training activity took place as very good or excellent".

Examples on learning evaluation:
- "Learning assessments yield a learning level of 94%, with all indicators above 80%."
- "The learning assessments show a deficient level of learning in the content related to the management of temporary shelters."
- "In participants who stated that they had prior knowledge about the National Civil Protection System, the results of their learning evaluations obtained scores above the course average."

Examples on transfer evaluation:
- "Based on the instrument applied, it can be established that the participants obtained a 63% transfer of learning to the workplace".
- "45% of the people participating in the course were able to demonstrate the elaboration of Civil Protection Plans using the ONEMI format, 4 months after the end of the training."

Analysis of results
To facilitate the analysis of the results obtained in a given type of evaluation (reaction, learning or transfer), it is advisable to define some key questions that are of interest to ONEMI as an institution or to whoever organizes the training activity. In order to answer the questions that will guide the analysis, the evaluation instruments that are developed should consider evaluating the relevant aspects that will make it possible to answer them.

Thus, for the analysis of a feedback evaluation, questions such as the following could be asked:
- Which are the best and worst evaluated instructors?
- What contents are most relevant for the participants? Are there differences according to the type or

profile of participant?
- Was the information provided prior to the start of the course positively evaluated?
- What aspects in particular do the participants suggest improving for future versions of this training activity?
- What technological devices were used for the development of the virtual course?

On the other hand, the analysis of the results of learning evaluations could be guided by questions such as:
- Do the results of the final learning evaluation of the course match the evaluation made at the beginning of the course?
- What course content gets the best and worst learning assessments? Is there any relationship with the assessment obtained by those who taught the lessons in the feedback assessment?
- In which type(s) of institution(s) do the participants with the best and worst learning ratings work?
- Is there any relationship between the learning assessment results of this course and the learning outcomes measured in other courses where the individuals participated?

For the analysis of the results of the feedback (satisfaction) and learning evaluations, the way in which these results are systematized and tabulated will facilitate or not the answering of the guiding questions, so it is recommended to define the questions to be answered in the analysis and then develop the evaluation tools that will be applied to a particular training activity. Failure to do so could mean that the guiding questions are only partially answered or do not allow for the identification of the reasons that may be influencing a particular outcome.

Finally, for the analysis of the results of a transfer evaluation, the following questions should be answered in general:
- To what degree was what was learned in the training applied in the work space (or role in the National Civil Protection System)?
- How have the knowledge and skills acquired during the training been applied?
- If not, why not? In other words, identify possible factors that are influencing the transfer of learning.

In the answers to the above questions, the "System of Forces" presented Table 7, is involved, which has three (3) components that determine and influence the degree of transfer and can become obstacles or facilitators of it. These components are: The person being trained, the training itself, and the work environment in which the person operates.

Each of these components has factors that allow the results obtained in the transfer evaluation to be analyzed, regardless of the type of tools used in the transfer evaluation. Table 9, shows for each factor, examples of questions that can guide the analysis, constituting a diagnostic guideline of transference. Where the columns "Performance Dimension" and "Factors Influencing Transfer" correspond to the elements of the system of standard forces that influence transfer.

Table 9. Diagnostic guideline for transfer

Performance dimension	Factors influencing transfer		Transfer assumptions (Transfer increases when...)	Example of diagnostic questions by influencing factors
Person	Self-efficacy	The degree to which participants feel able to apply the lessons learned.	Capability: participants feel able to apply what they have learned.	Do participants feel able to apply the new knowledge and/or skills in their jobs?
	Motivation	The degree to which participants feel motivated to apply what they have learned.	Motivation: New learning makes sense to participants. They understand its importance and meaning.	Do participants understand the importance/meaning of applying the new knowledge and/or skills?

	Valuation	The degree to which participants value new learning	Appreciation: participants see the relationship between learning and performance.	Do participants believe that applying the new knowledge and/or skills will improve their performance?
Training	Training Needs Assessment (DNC)	The degree to which DNC is crafted in a way to facilitate transfer.	Performance objective: The DNC is able to identify performance gaps and define clear and specific performance objectives.	Did the training aim to produce concrete behavioral changes?
	Instructional Design (DI)	The degree to which the instructional design is made in such a way as to stimulate transfer.	Learning objectives: Learning objectives are directly linked to the performance objective.	Do the learning objectives meet the performance objective?
			Content-what: Training content is related and adapted to the workplace.	Is the training content clearly linked to on-the-job performance?
			Content-How: How to apply the behaviors to the workplace is clearly stated.	Does the training work on the "how" to do it and not only on the "what" to do?
			Methodologies: Teaching methodologies provide space for testing new behaviors.	Does the training provide opportunities to rehearse the new behaviors?
			Tools: The tools (working guidelines, examples, cases) used in the activity are close to work reality.	Are the examples and tools used in the courses similar to those used in the work environment?
Work environment	Working conditions	The degree to which job conditions facilitate or hinder the transfer of learning.	Opportunity: Participants have the opportunity to apply what they have learned.	Do participants have the opportunity on the job to apply skills and knowledge?
			Resources: Participants have the necessary resources (equipment, information, materials, etc.).	Do participants have the necessary resources to use their learning?
			Absence of stress: Participants have adequate stress levels, not high.	Do stress levels allow for the incorporation of new changes?
			Time: Participants have the necessary time to implement the changes.	Do participants have the time needed to implement the required changes?
	Rewards and incentives	Existence of incentives and rewards that facilitate or hinder the occurrence of desired behaviors.	Rewards: Applying the new performance brings positive consequences for the participant (personal satisfaction, respect, incentives, development opportunities).	Does the use of new knowledge and skills lead to rewards for the participant?
			Absence of retaliation: Applying the new performance brings no negative consequences for the participant (challenges, sanctions, peer resentment, additional work).	Does the use of new learning lead to negative consequences for participants?
	Headquarters	Level to which the direct head's management head facilitates or obstructs the application of the apprenticeships.	Head - Knowledge: Management is aware of changes.	Does the management know the new performances expected after the training?
			Head - Management: Management manages new performance.	Does management include the new behaviors in daily management?
			Head - Recognition: The management gives recognition when there are desired behaviors.	Does the manager give recognition to those who successfully apply the new behaviors?
			Head - Absence of contradictions: Management does not oppose expected performance.	Does the manager establish guidelines or ways of working different from those reviewed in the training or does he/she oppose them?
		Extent to which there is support and feedback for expected behaviors.	Accompaniment: Participants receive support to implement the changes.	Do the participants receive any kind of help or support to apply the new behaviors?

	Feedback		Feedback: Participants receive feedback on their performance for continuous improvement.	Do they receive feedback (formal or informal) from people in their work environment (bosses, peers, collaborators)?
	Peer Team	Extent to which the peer team facilitates or obstructs the application of learning.	Support: Participants have a peer support network.	Do peers support each other in applying the knowledge?
	Organizational Culture	Characteristics of the organizational culture that may interfere with the transfer of learning.	Positive change: There is a culture of accepting and valuing change.	At a general level, is the change initiative being implemented valued?
			Change as a process: There is a culture of understanding change as a process.	Is there room for error or for getting used to the difficulties of implementing the changes?
			Absence of opposing forces: There are no group interests against change.	Are there group or area interests that prevent changes from being implemented?

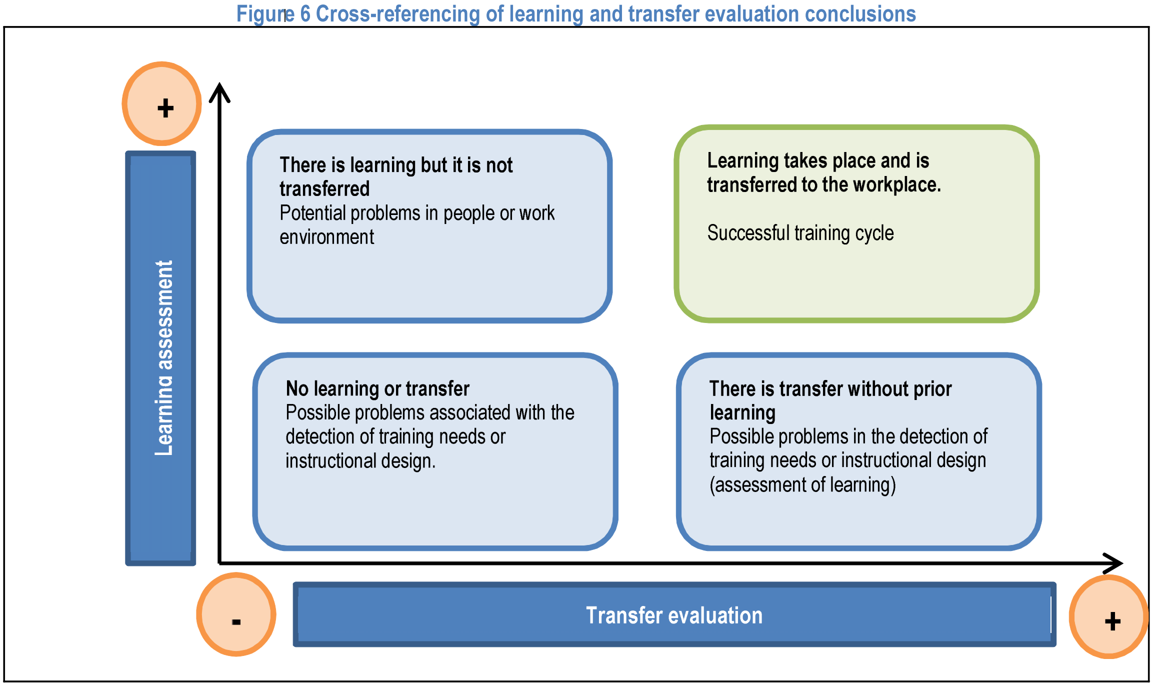
Conclusions

With the analysis of the results obtained, conclusions should be drawn up, which are the judgments made on the results obtained, for which it is suggested to consider the following five (5) recommendations:

- They should be in response to the level of achievement of the performance objective, learning objectives, or other relevant aspects defined in the stage of detection of training needs, or related to the instructional design, as well as on the execution of the training.
- Each conclusion should be based on at least one outcome of the evaluation (reaction, learning or transfer) being analyzed. There can be no baseless conclusions, avoiding subjectivity in the development of the conclusion.
- Be careful with language, do not state as facts ideas that are hypotheses. The use of the conditional is recommended, for example, "people are not motivated" for "people would not be motivated".
- When there are concatenated evaluations for a training course, the conclusions should be elaborated by crossing the results obtained in the different evaluation instruments used (reaction, learning, transfer).

Cross-referencing the conclusions between the learning and transfer evaluations can yield the four possible scenarios shown in Figure 6. Likewise, cross-referencing the results of reaction evaluations (satisfaction) with learning evaluations or other evaluations of interest can be carried out.

Figure 6 Cross-referencing of learning and transfer evaluation conclusions



Recommendations
After generating conclusions, recommendations should be defined for each of them, which are suggestions for concrete actions to continue improving a given course or training program.

When drafting the recommendations, it is suggested to consider at least the following:

- Think of concrete actions, not just ideas, i.e., contextualize the recommendation in something achievable in the management of the training activity that has been analyzed.
- Each recommendation should be based on at least one conclusion. This suggestion covers the chain of results analysis and management: Results are obtained, which support the conclusions and from them the recommendations are supported.
- Use a propositional language to guide changes, acting as an agent of change from the proposal for continuous improvement.

Prepare a report on the results of an evaluation
With the information obtained in the previous steps, it is always recommended to prepare a report, which should have, at least, the following sequential structure:

- Activity background: Name, performance objective, ONEMI unit that organized the training, duration, number of participants, number of people evaluated at each level, date of activity execution, profile of participants, observations. In the case of a transfer evaluation, the date of transfer measurement, time elapsed between the execution of the activity and the transfer evaluation, etc. should be recorded.
- Results obtained: Show the results of the applicable evaluations (reaction, learning and/or transfer), which can be done using tables, charts, graphs, etc.
- Analysis of the information of the results and conclusions.
- Recommendations.
- Annexes (if necessary).

It is very important to have an activity report that provides data to evaluate implementation and results. It is also important that this report has a homogeneous structure so that the results and information are comparable.

Concluding remarks

Although this guide provides guidance on the training evaluation stage, within the framework of the training management model proposed by the Civil Service in its "Practical Guide to Manage Training in Public Services", it is recommended that any ONEMI unit that starts planning a training activity for ONEMI officials or members of the National Civil Protection System consider this resource to develop the stages of training needs detection, training needs assessment and training evaluation. It is recommended that any ONEMI unit that starts planning a training activity for ONEMI officials or members of the National Civil Protection System, consider this resource to develop the stages of detection of training needs, instructional design and implementation of training.

Promoting an improvement in the quality and impact of the training activities carried out by ONEMI is one of the key factors to be developed to improve the performance of ONEMI staff and members of the National Civil Protection System, which will contribute to achieving the goals established in the National Policy for Disaster Risk Reduction 2020-2030.

One of the ways to achieve the above is to systematically carry out the types of evaluation presented in this guide and make management decisions on the training that is analyzed. The strategic value of conducting transfer evaluations to know the impact that the training is having on the performance of the people who participated is highlighted, in order to have the necessary empirical evidence and to know the variables that are influencing the results, to take the necessary corrective actions and achieve the expected performance.

Annexes

Annex 1. Instructor Evaluation Form

Please answer the following questions that will allow us to gather your impressions and comments regarding your participation as an Instructor in the Civil Protection Academy courses, conducted in Online mode.

*Mandatory

Civil Protection Academy ONEMI 2021

I. INSTRUCTOR IDENTIFICATION

Complete the following information regarding the course and module taught

1. Full Name
2. Indicate the course in which you participated as an instructor.
   Check one oval only

   - Emergency Operations Course Level I (OPE NI)
   - Risk Scenarios Course, Level II (ER NII)
   - Humanitarian Aid Course (AH)
   - DRM Plan Elaboration Course (DRM Plans)

3. Indicate the module you have taught
   Select all that apply

   - OPE NI Course, Module 1: Conceptual Framework
   - OPE NI Course, Module 2: National Civil Protection System Module
   - OPE NI Course, Module 3: Civil Protection Management Platforms module (Civil Protection Committee and Emergency Operations Committee)
   - OPE NI Course, Module 4: Strategic Framework for Plan Management.
   - OPE NI Course, Module 5: Damage and Needs Assessment System: DEDO Plan
   - OPE NI Course, Module 6: Emergency Resources Management
   - ER NII Course, Module 1: Risk Analysis
   - ER NII Course, Module 2: Seismic Hazards
   - ER NII Course, Module 3: Tsunami Risk
   - ER NII Course, Module 4: Volcanic Risk
   - ER NII Course, Module 5: Meteorological Risk
   - ER NII Course, Module 6: Structural Fire Hazards
   - ER NII Course, Module 7: Risk of Forest Fires
   - ER NII Course, Module 8: Hazardous Materials Risk
   - AH Course, Module 1: International and National Context of Humanitarian Aid
   - Course AH, Module 2: ESFERA Project

- AH Course, Module 3: Administration of the International and National Humanitarian Aid Network
- AH Course, Module 4: Mental Health Protection in Emergencies and Disasters
- AH Course, Module 5: Shelter Administration
- AH Course, Module 6: Administration of Emergency Relief Elements
- DRM Plans Course, Module 1: Context of DRM Plan Management
- DRM Plans Course, Module 2: Emergency Plan Template
- DRM Plans Course, Module 3: Contingency Plan Template
- DRM Plans Course, Module 4: Templates Specific Emergency Plan by Risk Variable
- Course DRM Plans, Module 5: DRR Plan Template

4. Indicate the date when the module was held (day and month)

INSTRUCTOR EVALUATION REGARDING THE COURSE

Please answer the following questions to evaluate the coordination, contents, methodologies, infrastructure and equipment aspects of the course in which you have

II. EVALUATION OF COURSE COORDINATION

Below you will find a set of questions regarding the evaluation of the coordination established with the Civil Protection Academy for the realization of the course and its module delivery.

5. 1.- How do you evaluate the coordination established with the Academy for the delivery of the assigned module?
Check only one oval

1 2 3 4 5
Very bad ( ) ( ) ( ) ( ) ( ) Excellent

6. 2.- What recommendations can you make to improve coordination between the Academy and Instructors?

III. EVALUATION OF COURSE CONTENTS

Below you will find a set of questions regarding the aspects associated with the content used for the delivery of this module

7. 3.- How do you evaluate the delivery of the content associated with your module? (consider the time of exposure and amount of content used)
   Check only one oval

	1	2	3	4	5	
Very bad	( )	( )	( )	( )	( )	Excellent

8. 4.- What changes can you suggest regarding the presentations, in terms of PPT design and amount of content?

9. 5.- What recommendations can you provide to improve the delivery of the module assigned under the online modality?

IV. EVALUATION OF THE COURSE METHODOLOGY

Below you will find a set of questions regarding the evaluation of the methodological aspects used in the course.

10. 6.- Do you consider that as an instructor you were able to generate spaces for interactivity and student participation in the instruction of your module?
    Check only one oval

    - o Not achieved
    - o Moderately achieved
    - o Achieved

11. 7.- How do you evaluate the formative evaluation system using Google Forms?

Check only one oval

1 2 3 4 5

Very bad ( ) ( ) ( ) ( ) ( ) Excellent

12. 8.- How do you evaluate the design of the formative evaluation questions?

Check only one oval

1 2 3 4 5

Very bad ( ) ( ) ( ) ( ) ( ) Excellent

13. 9.- How do you evaluate the joint review of formative assessments with students?

Check only one oval

1 2 3 4 5

Very bad ( ) ( ) ( ) ( ) ( ) Excellent

V. EVALUATION OF INFRASTRUCTURE AND EQUIPMENT

Below you will find a set of questions regarding the aspects of infrastructure and equipment used for the realization of the course.

14. 10.- How do you evaluate the Virtual Platform used for the instruction of your module?

Check only one oval

1 2 3 4 5

Very bad ( ) ( ) ( ) ( ) ( ) Excellent

15. 11.- How do you evaluate the equipment used to teach the module? (Consider: computer, microphone, headset, internet, among others.)

Check only one oval

1 2 3 4 5

Very bad ( ) ( ) ( ) ( ) ( ) Excellent

VI. GENERAL EVALUATION

Below you will find a set of questions regarding the general aspects associated with the teaching of the module.

16. 12.- Do I require any material, additional equipment or additional knowledge in the use of digital tools to develop the assigned module? If yes, please indicate which ones.

17. 13.- If you have any comments or observations that have not been addressed in the previous questions, please indicate them below.

Thank you very much for your cooperation.

Your answers contribute directly to the continuous improvement of the Civil Protection Academy for the delivery of its online courses.

If you have any questions, please contact us at: academia@onemi.gov.cl

Annex 2 - Course Satisfaction Survey Risk Scenarios Level II

Name and Institution	Date of evaluation	City where the activity was performed

In order to continually improve our training activities, we ask you to complete this brief survey, so that we can consider your input for future training activities.
We appreciate your cooperation

Below you will find a set of activity statements regarding the evaluation of the content presented, evaluation of the speakers and evaluation of the facilities. We ask that you evaluate each of these areas using a scale of 1 to 7 (consider decimals, if required). E.g.: 5.8 (good)

Very bad	Bad	Insufficient	Sufficient	Good	Very Good	Excelent
1.0	2.0	3.0	4.0	5.0	6.0	7.0

1. CONTENT EVALUATION:

N°	AREAS TO EVALUATE	Grade
1	The contents of the course are in line with the performance objectives and according to the program.	
2	The level of the contents has been of quality	
3	The contents have been presented in a clear and understandable way.	
4	The contents covered in the course are applicable in their current tasks, allowing them to improve them.	
N°	**MODULE EVALUATION**	
5.1	Conceptual framework for civil protection	
5.2	National Civil Protection System	
5.3	Civil Protection Committee and operational emergency committee	
5.4	Strategic framework for risk management plans and emergency plans	
5.5	Damage and needs assessment system, DEDO plan	
5.6	Emergency resource management	
5.7	Exercise workshop	

2.METHODOLOGY

No	AREAS TO EVALUATE	Grade
1	Pre-course work	
2	Reference materials given to the participant at the beginning of the course	
3	Interactive course methodology	
6	Use of audiovisual tools (videos, testimonials, etc.)	

3. SELF-EVALUATION:

N°	Evaluate your motivation to improve the coordination actions you perform in your job.	Grade
1	Before taking the course	
2	After taking the course	

4. EVALUATION OF THE FACILITIES:

N°	AREAS TO EVALUATE	Grade
1	The facilities complied with the required comfort aspects: light, heating, adequate furniture, etc.	
2	The technological support was adequate for the purposes required in this training.	
3	The quality of the attention in the intermissions was adequate and allowed effectively recovering the capacity of concentration in the course.	
4	The location of the venue allowed timely access to the activity.	

5. EVALUATION OF RAPPORTEURS:

N°	AREAS TO EVALUATE	Rapporteur's grade 1	Rapporteur's grade 2	Rapporteur's grade 3
		Grade 1	Grade 2	Grade 3
1	The rapporteur demonstrates mastery of the topics presented.			
2	The rapporteur responds clearly to the consultations made.			
3	The rapporteur encourages participation during the session.			

6. CONSIDERATIONS TO BETTER UNDERSTAND SOME OF YOUR ANSWERS:

- **Point out which elements would help us to understand some of your answers:**

- **Point out other aspects that you consider relevant with respect to the rapporteurs:**

- **Factors that would help improve future training:**

7. IMPACT OF TRAINING

- **In what areas of your work (and in what way) can you apply the knowledge and tools acquired in this training course?**

- **What are the most important aspects for you to strengthen coordination and management capabilities? Prioritize the following elements by listing them.**

AREAS TO EVALUATE	Priority
Training	
Budget	
Equipment (communications, appropriate institutional clothing, transportation units, etc.)	
Technological equipment (tablets for damage and needs assessment system, GIS viewer system, others)	
Human resources networks (Know each other personally, keep in touch)	
Technical support and follow-up by experts	
Reference material	
Other (if any, please specify)	
Other (if any, please specify)	
Other (if any, please specify)	

THANK YOU VERY MUCH!

Annex 3 - Questionnaire correction guideline for pre-leveling work - Risk Scenario Course, level II

QUESTIONNAIRE CORRECTION GUIDELINE PRELIMINARY WORK LEVELING 2019
RISK SCENARIO COURSE, LEVEL II

The present evaluation has a total of 20 questions, each of which has a weighting of 0.4 points, the total of the test is 8 points.

Nº	TRUE	FALSE	STATEMENT
1	X		Law No. 18,695 of the Organic Constitution of Municipalities, states that one of the functions of the municipality is the prevention of risks and the provision of assistance in emergency situations.
2		X	The basic principles on which the National Civil Protection System is based are: Risk Management and the Staggered Use of Resources. They are mutual aid and the staggered use of resources.
3	X		The ACCEDER methodology is designed to develop planning for emergency situations, considering the principles of mutual aid and staggered use of resources.
4		X	Emergency Reports should consider all details and elements that can best describe the event that occurred, regardless of the time required for this information to be gathered. It conflicts with the criteria of Timely, Accurate and Reliable.
5	X		The concept of Disaster is defined as a serious disruption of the functioning of a community or society, which may cause widespread human, material, economic or environmental losses that exceed the response capacity of the Regional levels, requiring assistance from the National level.
6		X	The Yellow Alert is established when a threat grows in extent and severity, requiring the mobilization of all necessary resources available for the attention and control of the destructive event. This definition corresponds to the Red Alert.
7	X		As for the actions of the National Civil Protection System, it considers the management platforms, constituted by the Civil Protection Committee and the Emergency Operations Committee.
8	X		The integrated management of the National Civil Protection System implies a participatory work that includes the permanent vision and commitment of the organized community in local security management.
9		X	The report to the Population is a report issued by the technical agencies directly involved in the Emergency or Disaster response, providing information within the framework of their competence. This definition corresponds to the Emergency Technical Report.
10		X	The AIDEP Methodology is a simple and easy to use tool, designed to guide and facilitate the development of an Emergency Plan, and contemplates planning and field investigation actions, among others. The definition corresponds to the ACCEDER, the stages, in fact, are the AIDEP.

Nº	TRUE	FALSE	STATEMENT
11	X		Risk is the probability of exceeding a specified value of social, environmental and economic damage at a given location and during a given exposure time.
12		X	Hazards of sudden manifestation are characterized by systematic damage over a period of time. For example: droughts, environmental contamination, and desertification, among others. This definition corresponds to slow onset hazards.
13	X		The National Civil Protection Plan constitutes a structuring basis for the coordination between the different sectors and actors of the National Civil Protection System.
14		X	Emergency management involves comprehensive management of the event, assessing damages and needs and reporting only to the appropriate authority. It involves the delivery of information to the community
15	X		The DEDO$ Plan is a method that allows to remember, in a simple way, the key elements that must be taken into account for the capture of information and effective decision making in the event of an emergency, disaster or catastrophe, helping the work of emergency managers.
16		X	The **phases** of the Risk Management Cycle are: prevention (suppression), mitigation, preparedness, rehabilitation and reconstruction. These concepts correspond to the stages of the risk management cycle.
17	X		Integrated Risk Management can be defined as the systematic approach and practice of managing uncertainty to minimize potential damages and losses. It implies a task that should be incorporated into all territorial planning processes in order to reduce negative impacts at all levels in the event of emergencies, disasters or catastrophes.
18		X	Corrective or Compensatory Management refers to all those actions that seek to avoid and control risk within the economic and territorial development of a community or state. This definition corresponds to Prospective Management.
19	X		Civil protection can be defined as the system by which each country provides protection to people, their property and the environment in the event of emergencies, disasters or catastrophes.
20		X	With respect to the evolution of the concept of disaster as a social construct, it implies the recognition of a threat, which manifests itself through the occurrence of an adverse natural phenomenon. Only the occurrence of this adverse phenomenon is sufficient for a disaster to materialize. In order for a disaster to materialize, a community prone to suffer damage, i.e., vulnerable, is required.

Guía para la evaluación de los cursos y programas del SENAPRED para el Sistema Nacional de Prevención y Respuesta ante Desastres

Elaborado en base a la "Guía práctica para gestionar la capacitación en los servicios públicos" del Servicio Civil (2014)

"Proyecto de fortalecimiento del SENAPRED para el desarrollo de capacidades en el ámbito de la Reducción del Riesgo de Desastres"

Guía para la evaluación de los cursos y programas del SENAPRED para el Sistema Nacional de Prevención y Respuesta ante Desastres

Elaborado en base a la "Guía práctica para gestionar la capacitación en los servicios públicos" del Servicio Civil (2014)

La información y hallazgos que se presentan en este documento contribuyen al logro del Resultado 3 del proyecto que indica que "se establece el mecanismo para el desarrollo de recursos humanos y su capacitación sobre la reducción del riesgo de desastres en la Academia del Servicio Nacional de Prevención y Respuesta ante Desastres (SENAPRED)"

Tabla de contenido

Introducción

El presente documento ha sido desarrollado en base a la "Guía Práctica para Gestionar la Capacitación en los Servicios Públicos"[1] desarrollada por el Servicio Civil el año 2014, y en el marco del Proyecto SENAPRED-JICA "Proyecto de fortalecimiento del SENAPRED para el desarrollo de capacidades en el ámbito de la Reducción del Riesgo de Desastres" que se desarrolló durante el periodo 2018-2021 con el apoyo de la Agencia Japonesa para la Cooperación Internacional (JICA)[2].

Durante el proceso de contextualización y adecuación de la guía desarrollada por el Servicio Civil, junto con contar con la autorización formal para realizar dicha adaptación a las necesidades del SENAPRED, también se contó con la colaboración y asistencia técnica de profesionales del Servicio Civil, que permitió entre otras: revisar algunos de los instrumentos de evaluación utilizados por el SENAPRED en sus cursos y programas de capacitación; identificar los cursos y programas de capacitación del SENAPRED susceptibles a ser evaluados a nivel de transferencia; desarrollar instrumentos de evaluación de transferencia para los cursos seleccionados; y atender de manera oportuna los requerimientos surgidos en el marco de la presente iniciativa.

La adaptación de la "Guía Práctica para Gestionar la Capacitación en los Servicios Públicos" (Servicio Civil, 2014), fue realizada enfocándose en los procesos de evaluación de las actividades de capacitación, con el objetivo de contar con las herramientas necesarias para la mejora continua de la calidad y el impacto de las actividades de capacitación que ofrece el SENAPRED tanto a sus funcionarios, así como a otros miembros del Sistema Nacional de Prevención y Respuesta ante Desastres.

1 Servicio Civil (2014) "Guía Práctica para Gestionar la Capacitación en los Servicios Públicos"

2 Esta guía fue elaborada y finalizada antes de la promulgación de la Ley Núm. 21.364 que establece el Sistema Nacional de Prevención y Respuesta ante Desastres.

El adaptar y hacer propia esta "Guía para la evaluación de los cursos y programas del SENAPRED para el "Sistema Nacional de Prevención y Respuesta ante Desastres", busca fortalecer las capacidades del SENAPRED para evidenciar la medida en la cual los conocimientos y habilidades adquiridos en los cursos de capacitación son usados por los participantes en sus puestos de trabajo y roles que desempeñan en el marco del Sistema Nacional de Prevención y Respuesta ante Desastres, así como detectar elementos que pueden ser mejorados en el ámbito de la Gestión del Riesgo de Desastres y realizar las modificaciones que sean necesarias en las actividades de capacitación que ofrece el SENAPRED.

Es así como el SENAPRED, con esta guía busca complementar las actividades de evaluación que realiza actualmente en sus cursos y programas de capacitación, con evaluaciones adicionales que pretenden medir el impacto que las actividades de capacitación en el desempeño de los miembros del Sistema Nacional de Prevención y respuesta ante Desastres que participan en las capacitaciones organizadas y ofrecidas por el SENAPRED.

La propuesta metodológica que se presenta en este documento no constituye la única vía para gestionar y evaluar las capacitaciones, pero es la recomendada por el Servicio Civil ya que los conceptos y herramientas prácticas que se incluyen permiten una efectiva utilización por parte del SENAPRED.

Se espera que la presente guía sea utilizada tanto por la Academia del Sistema Nacional de Prevención y Respuesta ante Desastres (SINAPRED) y otras dependencias del SENAPRED (Central y por las Direcciones Regionales) que llevan a cabo actividades de capacitación tanto para el personal del SENAPRED como para otros actores del Sistema Nacional de Prevención y Respuesta ante Desastres.

Finalmente deseamos agradecer y reconocer el apoyo del Servicio Civil, parte del Ministerio de Hacienda, y destacar su misión de "Fortalecer la función pública y contribuir a la modernización del estado, a través de la implementación de políticas de gestión y desarrollo de personas y altos directivos, para promover un mejor empleo público y un estado al servicio de los ciudadanos", y para instalar las capacidades que este desafío conlleva, la adecuada inversión en programas de formación y capacitación de los funcionarios públicos adquiere particular relevancia.

PARTE 01

Modelo de Gestión de Capacitación

El modelo de gestión de capacitación que es impulsado por el Servicio Civil, considera cuatro etapas principales, que se presentan en la Figura 1: la detección de necesidades de capacitación; planificación de la capacitación, ejecución de la capacitación; y la evaluación de la capacitación.

Figura 1. Modelo de gestión de capacitación impulsado por el Servicio Civil

A continuación se detalla brevemente cada una de las etapas presentadas en la figura anterior, para posteriormente centrar el contenido de la presente guía en la etapa 4, relacionada con la evaluación de la capacitación.

Para los lectores que deseen profundizar en las diferente etapas, se recomienda revisar "Guía Práctica para Gestionar la Capacitación en los Servicios Públicos"[3] desarrollada por el Servicio Civil el año 2014.

1. Detección de necesidades de capacitación (DNC)

Busca determinar con claridad, ya sea con el personal del SENAPRED o bien con otros miembros del Sistema Nacional de Prevención y Respuesta ante Desastres, "el problema, necesidad o desafío" que está interfiriendo en el desempeño del funcionario del SENAPRED o de otro actor del Sistema de Prevención y Respuesta ante Desastres para lograr las conductas y desempeños deseados.

También en esta etapa, la unidad del SENAPRED que esté impulsando la actividad de capacitación, debería determinar y acordar las expectativas sobre la capacitación: y consensuar con actores relevantes del SENAPRED o del Sistema Nacional de Prevención y Respuesta ante Desastres, cuáles serán los objetivos de desempeño o conductas que el participante, una vez finalizada la capacitación, debería poner en práctica en su puesto de trabajo y/o en el rol que debería desempeñar en el marco del Sistema Nacional de Prevención y Respuesta ante Desastres (SINAPRED).

Es así, como en esta etapa se busca determinar con mayor claridad, con los diferentes públicos objetivos definidos por la Academia del Sistema Nacional de Prevención y Respuesta ante Desastres (SINAPRED), otras unidades del SENAPRED y el mismo personal del SENAPRED, "el problema, necesidad o desafío" que está interfiriendo en el desempeño de la persona miembro del Sistema Nacional de Prevención y Respuesta ante Desastres, y que afecta en términos agregados el desempeño ya sea institucional (SENAPRED) o del Sistema Nacional de Prevención y Respuesta ante Desastres como un todo.

Para lo anterior, es importante recolectar la mayor cantidad de evidencias posibles (resultados de indicadores de gestión, observación directa del desempeño, planes estratégicos institucionales, política nacional de reducción de riesgo de desastres, entre otros) que demuestren esa realidad y consensuar al interior del SENAPRED, Plataforma Nacional de RRD y otros miembros del Sistema Nacional de Prevención y Respuesta ante Desastres si "el problema" puede ser subsanado con una actividad de capacitación.

También en esta etapa, se deberían determinar y acordar al interior del SENAPRED y/o con los potenciales participantes de la actividad de capacitación en relación a las expectativas sobre la capacitación: ¿Cómo cree que la capacitación puede ayudar a resolver el problema?; ¿Se han considerado otras soluciones?, ¿Cuáles?; ¿Qué es lo que espera de la capacitación (en términos de desempeño y de resultados)? y ¿Se incentiva el compromiso de los participantes con la solución de capacitación, acordando su nivel de participación durante el proceso?

Luego, considerando la información disponible, el siguiente paso es consensuar los objetivos de desempeño que los participantes deben poner en práctica una vez finalizada la capacitación en su puesto de trabajo o rol asignado en el marco del Sistema Nacional de Prevención y Respuesta ante Desastres. Por lo cual, estos objetivos de desempeño deberían ser observables por un tercero.

3 Servicio Civil (2014) "Guía Práctica para Gestionar la Capacitación en los Servicios Públicos"

Para definir los objetivos de desempeño, se debe tener claridad de la conducta deseada (lo que deben hacer los participantes), las condiciones en la que debe ejecutarse la conducta (circunstancia o marco en el que ocurren) y el criterio (calidad o estándar de desempeño que es considerado exitoso).De esta manera toda la información anterior debe quedar claramente redactada en los objetivos de desempeño de un curso de capacitación, lo cual posteriormente facilitará las evaluaciones que se lleven a cabo.

2. Planificación de la Capacitación

Corresponde al proceso durante el cual se generan las especificaciones instruccionales (objetivos de aprendizaje, metodología, contenidos, actividades, duración, materiales, modalidad, etc.) de la actividad de capacitación, mediante la cual permitirá que los participantes aprendan y den sentido a los contenidos que reciban.

Para lo anterior, se deben transformar los objetivos de desempeño, definidos en la detección de necesidades de capacitación (DNC), en objetivos de aprendizaje, los cuales deberían responder a la siguiente pregunta: ¿Qué conocimientos, habilidades y actitudes se necesitan para lograr los resultados deseados?

Los objetivos de aprendizaje son medidos en el lugar donde se realiza la capacitación (evaluación de aprendizaje) y deben ser los que orienten la definición de los contenidos de una determinada actividad de capacitación, y para lo cual se debe:

- Identificar los factores que inciden en el aprendizaje de adultos
- Definir contenidos, metodologías y duración de la actividad, lo que implica:

a. Determinar los contenidos de la actividad, los que dependerán de los conocimientos, actitudes y habilidades que se desarrollarán y que fueron determinados previamente, y alineados a los objetivos de aprendizaje: ¿Qué temas/materias deben incluirse en el curso para satisfacer las necesidades y lograr los objetivos de aprendizaje?;

b. Considerar las capacidades con que debe contar instructores e instructoras para satisfacer estas necesidades y demandas;

c. Definir la modalidad de ejecución de la actividad, por ejemplo, presencial, e-learning o b-learning, fuera o dentro del trabajo, horas, tamaño del curso, entre otras;

d. Determinar el tipo de actividad (curso, taller, seminario, conversatorio, pasantía, etc.);

e. Definir metodologías y herramientas de enseñanza-aprendizaje, como estudio de casos, ejercicios, simulaciones, videos, entre otros.

Así mismo, se deberían considerar elementos que faciliten una mayor probabilidad de transferencia desde la actividad de capacitación al puesto de trabajo o en el rol del participante en el Sistema Nacional de Prevención y Respuesta ante Desastres, lo cual significa considerar en el diseño de la actividad de capacitación, lo siguiente:

- Que los participantes visualicen en la actividad de capacitación soluciones a problemas reales relacionados con su desempeño laboral.
- Cuando sea requerido o recomendable, realizar un diagnóstico de los conocimientos de base con los que cuentan los potenciales participantes, con la finalidad de integrarlos de la mejor forma posible al proceso de aprendizaje.
- Mostrar durante las sesiones de capacitación, las diversas formas de aplicación del nuevo conocimiento, por ejemplo, haciendo uso de estudio de casos o buenas prácticas.
- Que los participantes tengan la oportunidad de mostrar durante la capacitación, la aplicación de los nuevos conocimientos de manera práctica, por ejemplo mediante simulaciones.

Durante la etapa de Planificación, deberían definirse los mecanismos de evaluación de aprendizaje (pruebas de conocimientos declarativos) a ser utilizados, basándose en los objetivos de aprendizaje definidos para el curso. Además definir si la actividad de capacitación será evaluada en los niveles de satisfacción y de transferencia.

Finalmente, en esta etapa también se deben prever las condiciones logísticas relacionadas con la modalidad del curso que se ha planificado.

3. Ejecución de la Capacitación

En esta etapa, se busca asegurar la calidad de la implementación de la actividad de capacitación, para lo cual es necesario contar con una estrategia de seguimiento y monitoreo, así como con una metodología que permita tomar decisiones de gestión y ajustes de la actividad de capacitación, sobre factores que influyan en la calidad del aprendizaje, tales como: modalidad (presencial, virtual, etc.), calidad de los instructores, calidad del diseño de las actividades de formación, duración de las actividades, frecuencia, materiales utilizados, calidad de las tutorías (si las hubiese), rol de las jefaturas, entre otras variables.

Es relevante en esta etapa del proceso, que el diseño instruccional y la estrategia de implementación hayan sido validadas por la jefatura del SENAPRED de la unidad que organiza la capacitación o bien con el apoyo de la Academia del SINAPRED, para comenzar la ejecución de acuerdo a lo planificado.

4. Evaluación de la Capacitación

Corresponde al proceso de conocer los resultados alcanzados por la actividad de capacitación, teniendo en cuenta cada una de las etapas anteriores. El desafío para esta etapa, es buscar información, a través de los resultados de las mediciones que se lleven a cabo, para que los involucrados en una determinada capacitación puedan tomar decisiones basadas en evidencias, que permitan la mejora continua de las actividades de capacitación desarrolladas por el SENAPRED.

Tal como lo propone el Servicio Civil en el documento "Guía Práctica para Gestionar la Capacitación en los Servicios Públicos", el modelo de evaluación propuesto a ser usado por el SENAPRED, corresponde a la metodología desarrollada por Donald Kirkpatrick , en la cual se establecen cuatro áreas o niveles de evaluación, donde cada nivel determina el tipo de información y datos que se deben recoger, tal como se muestra en la Tabla 1.

Tabla 1. Niveles de evaluación desarrollado por Donald Kirkpatrick

Nivel	Medición
1. Reacción (Satisfacción)	Mide la satisfacción de los participantes ante una actividad de capacitación.
2. Aprendizaje	Mide los cambios en los conocimientos, habilidades y actitudes
3. Transferencia (Aplicabilidad)	Mide los cambios de comportamiento en el puesto de trabajo.
4. Resultados	Mide los cambios en variables organizacionales a nivel de producción y resultados, para determinar el impacto de las actividades de capacitación

En este contexto, ¿Cómo evaluamos el impacto que tiene una determinada capacitación en el logro de los objetivos institucionales del SENAPRED y/o del Sistema Nacional de Prevención y Respuesta ante Desastres?; ¿Cómo medimos el aporte que una actividad de capacitación del SENAPRED en el quehacer del Sistema Nacional de Prevención y Respuesta ante Desastres?; ¿Por qué es importante medir y tener resultados de esta medición?

Algunas respuestas a estas interrogantes, señalan que evaluamos para:

- Diagnosticar el nivel de logro de los objetivos de capacitación que fueron definidos para el curso.
- Determinar conocimientos, comportamientos y percepciones de los involucrados de un modo estructurado y comparable.
- Comparar los beneficios de la actividad en relación a los costos de realizarla.
- Identificar los aspectos positivos y negativos de una actividad de capacitación, para determinar lo que se debe modificar. Esto incluye aspectos como metodologías de presentación, contenidos, lugar, horario, instructores, etc.
- Probar la claridad y validez de las técnicas utilizadas en la actividad (exposición de los instructores y participantes, estudio de casos, ejercicios prácticos, etc.).
- Identificar los participantes que destacaron y los que obtuvieron bajos resultados en la actividad, buscando las razones que posibilitaron o impidieron el aprendizaje.
- Determinar la necesidad de refuerzos a quienes lo necesiten.
- Generar una base de información que permita tomar decisiones.

Si bien en la Tabla 1, se presentan los cuatro niveles de evaluación propuestos por Kirkpatrick[4], el hecho que la mayoría de los participantes en las actividades de capacitación del SENAPRED sean personas externas a la institución, lo cual dificulta la medición de resultados, por lo cual las evaluaciones que impulsará el SENAPRED en sus actividades de capacitación solamente considerarán los tres primeros niveles (reacción, aprendizaje y transferencia).

En la evaluación de transferencia (aplicabilidad), se mide el grado en que los conocimientos, las habilidades y actitudes aprendidas en la capacitación, han sido transferidas a un mejor desempeño en el trabajo o rol en el SINAPRED. Es en este nivel de evaluación en el que se focalizará la metodología que se abordará más adelante, para mostrar la contribución de la capacitación en la mejora del desempeño del personal del SENAPRED así como los miembros del Sistema Nacional de Prevención y Respuesta ante Desastres.

4 Donald Kirkpatrick y James Kirkpatrick, "Evaluación de acciones formativas. Los cuatro niveles". Colección Formación y Desarrollo. Ediciones Gestión 2000. Tercera Edición revisada y actualizada, Barcelona, 2007.