CAPACITY
BUILDING
COMMISSION

Identification of Training Needs and linking to Course Design

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Chapter 1: Introduction

1.1 Training as a tool for capacity building

Training is defined as a planned and systematic effort to modify or develop knowledge/skills/attitudes through learning experience, to achieve effective performance in an activity or range of activities1.

Training is one of the tools for capacity building. It allows the acquisition of specific skills and knowledge to be learned for presently known tasks and applied immediately.

1.2 Introduction to Training Needs Assessment

Training Needs Assessment (TNA) is an examination of an organisation's present and expected operations and the workforce necessary to carry them out, to identify the numbers and categories of employees needing to be trained or re-trained. Training and needs assessment places the training into an organisational context by aligning training objectives with organisational goals. TNA also refers to the training needs of individuals to enable them to reach the required standard of performance in their current or future jobs.

In a Civil Service Training Institutes' context, the individual level is about civil servants at various levels in the government and across different groups (A, B, C) where the difference between an individual's actual performance and expected performance is mapped.

At an individual level, training needs analysis identifies the difference between an individual's actual performance and expected performance.

Currently, a very smaller number of CSTIs conduct systematic and structured Training Needs Analysis which indicates that there is a need for processes to conduct training in a systematic and demand-driven way. Capacity Needs Assessment (CNA) has been conducted for 110 ministries as a part of the Annual Capacity Building Plans (ACBPs) which shall be utilized by ministry-based CSTIs as a part of the TNA process.

1.3 Features of Training Needs Assessment

a. Looking at an organisation to understand it, wherever possible to turn problems into opportunities.
b. Looking at the people employed by an organisation, to find out how they can help to improve their performance
c. Looking at an organisation to identify significant performance problems.
d. Analysing problems to identify training needs
e. Helping individual employees plan their training and development.
f. Recommending training and non-training solutions.
g. Helping management to prioritise, and benefit from an investment in training.

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[1] *Buckely and Caple 1990 pg.13*

h. Helping management to plan training initiatives

1.4 Key Tenets for Conducting TNA

a. Design training programs based on systematically identified needs
b. To develop specific competencies through training programs
c. Deploy adult learning techniques in training
d. Deliver demand-based training

Chapter 2: Impact of TNA on Course Designing

Public service delivery has the capacity to affect and direct a nation's future. Therefore, the training of civil servants has the potential to carry the seed of development for the nation's growth. What sets apart the training given to civil service officers is that it is not a simple educational effort or a corporate training endeavour. Rather, it is a complex exercise which seeks to align performance and accountability with the core values of public service in the context of an ever-changing socio-political and global environment. To meet the dynamic needs of the training of the civil service officers. Training Need Analysis (TNA) tool helps in updating the training needs and steers the course of designing the programme/Module/ Course.

2.1 The core principle of Mission Karmayogi: Adult Learning

One of the main principles of Mission Karmayogi is 'Adult Learning', which focuses on the fact that the officers should be trained with experience-oriented teaching techniques while training them for the next level of their responsibilities. But the core substance remains that the officers should own the responsibility for their competence development. In this regard, the competence ladder model developed by Leslie Rae offers an interesting take on how an employee of an organisation could potentially progress from a state of blissfully ignorant ineptitude or 'unconscious incompetence' to such a highly evolved state of efficiency, that it is almost second nature to the individual or 'unconscious competence' (Rae, 1997). The transition from conscious incompetence to conscious competence and eventually to a state of unconscious competence could be facilitated by imparting training to the right people in the right areas at the right time. An Officer's journey of learning owing to training can also be explained from three basic types of learning theory context as depicted in Table 1. TNA is the best tool to identify who are the individuals in need of training, what are the areas in which they should be trained and what should be the time frame within which the training should take place. (Trutkowski, 2016)

Table 1: Adapted for the training context from three basic types of learning theory (Berkeley Graduate Division, 2019

	Behaviourism	**Cognitive Constructivism**	**Social Constructivism**

Attitude towards Knowledge & Learning	**Passive** Knowledge augmentation & learning occur in a passive manner and relies on rote memorization	**Active** The trainee is engaged in an active role in the process of learning & knowledge augmentation	**Collaborative** Knowledge augmentation & learning become a social & collaborative activity that result in building knowledge networks within the organisation
Effect on Motivation	**External factors** Trainees are influenced by a matrix of rewards and punishment	**Internal factors** The Trainee are self-motivated learners who set their own learning targets	**External & Internal factors** While they set their own goals with respect to learning, the Trainees also draw motivation from their colleagues who form their knowledge network
Impact on Training	**Sage-on-Stage** Narrow focus - Trainer is focused on 'teaching' the right approach or 'correcting' the wrong approach.	**Guide-by-side** Trainer is a facilitator – builds a learning environment that encourages the trainee to learn on their own	**Guide-by-side + peer-to-peer** The Trainer facilitates the building of a robust knowledge network through which trainees could learn from each other.

2.2 The interrelationship between TNA and course designing

This chapter would focus more on how TNA would be helpful in carefully designing the Programme/Module/ Course for different levels (Induction Training Programme, Mid-Career Training Programme etc) of training across different ministries/ departments. To understand how TNA results will shape the course design, it is imperative to know the functioning and relationship of TNA and course design.

TNA is essentially an endeavour that seeks to identify the individuals to be trained and the extent to which they need to be trained so as to bridge the gap between the desirable level and current level of competence of the trainees. (Trutkowski, 2016). A needs assessment can help determine whether training is the appropriate solution to a performance deficiency. If increasing an employee's knowledge and skills will not help resolve a deficiency, then training is not appropriate; TNA is the first step in the establishment of a training programme. TNA provides primary inputs for determining instructional objectives, the selection and design of instructional programmes, the implementation of the programmes and the evaluation of the training provided. These processes form a continuous cycle which always begins with a needs assessment as explained below.

Step 1: Guiding questions of TNA

The guiding questions of TNA would help CSTIs to design their TNA questionnaires. These are generic questions, which can be further developed aligning with the training goals of respective CSTIs. Table 3 tabulates the alignment of the TNA questions with different stages/components of course designing and their learning objectives. The important point here is that the right information gathered through TNA, in the beginning, can lead to effective course designing and therefore achieving its learning objectives.

Step 2: Course designing

Whenever the course coordinator starts designing the course, he/she has to face two major concerns from the participants regarding the effectiveness of the module and more importantly its usability in their functioning as an officer. Here is the conjunction point between the inputs from TNA and course design. The following sections will describe how guiding questions of TNA can help in the process of course design. The output received from TNA can then help in building the foundation of course design.

Course Designing process in CSTIs has been divided into four parts:

a) Developing Public Service Oriented- Learner Centric Comprehensive goals
b) Developing Definitive Aims Emerging from the Comprehensive Goals
c) Choosing Instructional Strategies for Achieving Aims
d) Choosing Assessment Methods

a. Developing Public Service Oriented-Learner Centric Comprehensive goals:

The most desirable outcome of any training programme would be if there is a significant overlap between the training expectations of the officials being trained and the development needs of the organisation/department/Ministry they represent. As shared in the beginning, the complexity of the civil service officers' training lies in the fact that "Learner centric" and "Public service-oriented" are two closely related but distinct concepts, - which need to be at the centre of the training outcomes for all GOI officers. Maintaining the balance between the two important factors demand a scientifically structured approach. For that to happen, the course design should take care of the fact that the components of the training should not tilt to either side. Rather the components of the training should be able to bring out the synergy of the two and provide clear actionable for the officer. To elaborate on the balancing public service orientation and learner-centric approach, the table below will highlight the key features of these two important comprehensive goals.

Table 2: Key features of the comprehensive goals

Comprehensive Goals	Key Features of the goals
Public service oriented	• The vision and mission of respective Ministry/Department/Organization should be the central point. • Citizen centricity in efficient service delivery. • Coherence in the functioning of inter/intra departmental activities.
Learner Centric	• Importance should be given to the experience of participants. • Interweaving their reflection on their experience as a part of the training to make it more effective and engaging. • Understanding their requirement of the skill training.

TNA guiding questions for comprehensive goals: Major purpose of TNA is to identify the gap in the training, the guiding questions addressing the comprehensive goals should focus on identifying:

1. What is the larger goal of MDO which is to be imparted in the training?
2. What are officers' practical expectations and skill requirements?

CSTIs should be able to understand if the participants are aware of the ministries' expectations of the skills to be demonstrated for effective public service delivery. E.g., Do they need any specific/ specialized training for performing one's duty as an officer in a particular department?

b. Developing Definitive Aims Emerging from the Comprehensive Goals:

Comprehensive goals are the ones which present the big picture of the training of CSTIs. The real job of the course coordinator commences when he/she starts translating the comprehensive goals aligning with the technological and socio-political changes into concrete achievable aims. Comprehensive goals act as an overarching theme in most of the training in the institute. But it is the concrete goals which demand thoughtful action for the training to be effective. Therefore, CSTIs need to develop achievable, measurable, definitive skills aligned with the roles to be framed.

c. Choosing Instructional Strategies:

For learning to take place, effective instructional strategies need a closer look. Though the audience in CSTIs is officers and principles of adult learning are in action yet learning demands engagement. Instructional strategies should focus on the combination of different formats like simulation, case study etc. as described in Table 3. It becomes imperative for the course coordinator to balance different strategies to achieve the aims and goals set for the training.

d. Choosing Assessment Methods:

As assessment has become an integral part of the training courses at CSTIs. One message, that the academy/institute should share clearly with the officers is that this assessment is not to measure their ability but to measure the learning outcomes of the courses. This messaging is important for captivating officers' attention and learning interests.

In TNA, questions related to assessment should focus on the awareness of the new assessment method, if introduced in the course. Also, on the facilities requirement of the officers regarding any assessment method. It is elaborated in Table 3.

Table 3: Alignment of the TNA questions with different stages/components of course designing and their learning objectives

<table>
<tr><th>S. No.</th><th>Guiding questions in TNA</th><th>Steps in Course Designing</th><th>Alignment with the Learning objectives of the course design</th></tr>
<tr><td>1</td><td>What do you expect the officer to know and be able to do? (Public service oriented)

What do you expect the officer to know and be able to perform his/her role upon completing the course in the ministry? (Knowledge, Skills, Attitude)

1. What is the larger goal of MDO of the training?
a. What effect will this module have on officers' functioning by the end of the course? Or in a few years?
b. Ability to function across teams in different department/ ministries.
c. Understanding of professional and ethical responsibility and implication on the citizens involved.

2. What are the practical expectations of the officers? (Learner centric)
a. Understanding of the importance of the competencies required for the new role in the department.</td><td>Inputs from these questions will help in developing "Public Service Oriented- Learner Centric" Comprehensive goals</td><td>• To ensure that the officers are well aligned with the larger goals of their respective MDO.
• To ensure that the officers are aware of functional/ operational/ technical skills of their respective MDO.
• To ensure that the expectations and training needs of the officers addressed in the course designing are met.</td></tr>
</table>

S. No.	Guiding questions in TNA	Steps in Course Designing	Alignment with the Learning objectives of the course design
	b. Ability to effectively apply the knowledge gained through the module in his/her department/level.		
2	What issues are currently being faced by the officer? How might these be solved? How could efficiency be increased in performing the task? How can these services add value in citizens' life? What kind of new technological or procedural changes and therefore updated training are anticipated?	Inputs from these questions will help in developing Definitive aims emerging From the Comprehensive Goals	• To convert comprehensive goals into role specific goals. • To design definitive behavioural goals.
3	Questions related to preference of Instructional strategies can be asked. Questions can be asked, if they need coaching or mentoring in the development of a particular skill.	Inputs from these questions will help in developing Instructional Strategies for achieving the aim	• To ensure that combination of different formats of instructional strategies be used for engaging the participants. **Examples of Formats** Lectures, Seminar, Exercises/ simulations, Activities, Discussions, Demonstrations, Practice/coaching, Work in pairs/ groups/ collectively, Learning based on case studies/ problem-solving, Technology-supported learning/ gamification
4	Questions pertaining to availability of the technological facilities required for assessment can be asked. Questions related to any facility requirement for assessment, e.g., availability of latest research papers for research paper writing.	Inputs from these questions will help in developing Choosing Assessment Methods	• To ensure that learning outcomes can be measured. • To ensure that assessment methods are reliable, valid, and fair. • To ensure that the officers are comfortable with the technology used in the assessment.

S. No.	Guiding questions in TNA	Steps in Course Designing	Alignment with the Learning objectives of the course design
			Examples of assessment techniques Open or closed-ended (multi-choice) exams (Foundation course), Individual assignments, Group assignments / projects, Individual or group project presentations in the class, Peer assessment, Self-assessment, Research paper writing, etc.

1. Step 3: Course Implementation

As described in Figure 1, the relationship between TNA and course designing is cyclic in nature and course implementation is the last step which will further provide inputs to the process of TNA for effective outcomes of future courses.

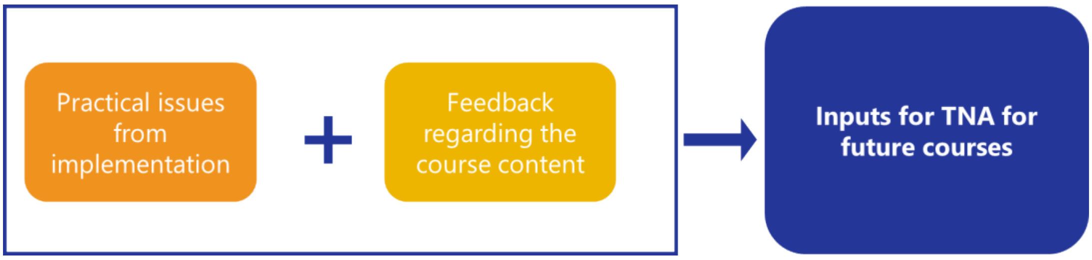

Figure 1: TNA & Course Design

Course implementation will provide inputs related to practical issues faced by CTIs/ATIs.

Feedback will provide an understanding of how effective was training in meeting its objectives. One point to ponder with respect to feedback is that it should focus on asking learner-centric questions rather than trainer-specific questions. Rather than just asking about how the speaker's performance was, it should contain questions like which part of the skill can be applied to your current job role.

Conclusion: The basic goal of training is to build a system of continuous improvement within any organization/institution. The public sector in India, in its pursuit of excellence in public service delivery, can benefit from a systemic change in its approach to training. By using a systematic and scientific approach like TNA in developing courses, training institutes can definitely add value in their own way to efficient public service delivery, and thereby nation building.

Chapter 3. How to conduct Training Needs Analysis[2]

This guide focuses on the process that may be followed by the institute for conducting TNA for all courses. It centralises around how the questionnaires are developed, how the data is collected and analysed, and presented to relevant MDOs, and implementing the outcomes of the need analysis in the course designing. The following sections will explain step-by-step procedures and key learning points.

3.1 Training Needs Analysis: Model Step by Step procedure

This section will explain how the TNA was developed, surveyed, and incorporated into the course design. The whole procedure is divided into 4 main steps and each step has been further divided into sub-parts for ease of understanding. While explaining the steps, the model method of conducting is elaborated, so that other CSTIs can customize and conduct as per their own requirement. The table below outlines four major steps and their sub-parts.

Table 4: Steps in TNA implementation (As done by SVPNPA)

Step 1	Step 2	Step 3	Step 4
Developing the Questionnaire(s)	**Conducting the Survey**	**Critical assessment of the insights and outcomes of the survey and recommend the changes**	**Presenting before Apex Committee/Academy Board and seeking approval from MHA/Ministry or Department Concerned**
a) Identification of Competencies through Competency mapping	a) Length and Breadth of Survey/ Geographical Area	a) Data Analysis	a) Apex Committee/ Academy Board
b) Association with an External Expert	b) Nodal Officers	a) Bringing out relevant insights	b) Presentation and seeking approval from the concerned MDO
	c) Sample size/ Stakeholders	b) Sub-committees and Focus Groups	
c) Designing of Questionnaires	d) SOP for carrying out the TNA		
	e) Survey Agency		
	f) Involvement of Heads of the Field Organizations		

[2] *Based on TNA done by Sardar Vallabhbhai Patel National Police Academy*

Step 1: Developing the Questionnaire(s)

a. **Identification of Competencies:**

Generally, while planning for TNA, training institutes choose from distinct types of TNA. Table 5 given below lists the answers that a particular kind of TNA would provide as an output. As per the requirement, different combinations of TNA can be used by CSTIs.

Table 5: Types of needs analysis and what questions the analysis would provide answers for

Types of Needs Analysis	
Type of Needs Analysis	**What the Analysis Answers**
Performance analysis or gap analysis	• Is this issue a skill/knowledge deficiency? • How can the deficiency be addressed? • Is training the appropriate way to fix the deficiency?
Feasibility analysis	• Why should this training be done? • Are the benefits of training greater than the cost of the current deficiency?
Needs versus wants analysis	• Why should this training be done? • Is the deficiency tied to a need?
Goal analysis	• What is the specific behaviour improvement behind a vague desire?
Job/task analysis	• What is the best and correct way to do this work? • How can this job and task be broken down into teachable parts?
Target group analysis	• Who are the trainees of this training? • What is known about them to help design and customize this training? • What other groups might benefit from training?
Contextual analysis	• When will the training be presented? • What are the other requirements to deliver the training successfully?

(Adapted from Jean Barbazette, 2006, Training Needs Assessment: Methods, Tools, and Techniques)

b. **Association with an External Expert:**

To bring in the expertise, neutrality, and legitimacy, it would be ideal to associate with a DoPT-certified Master Trainer for Training Needs Analysis (TNA). The other option would be to go with empanelled agencies which have the competency to guide this process. The third option of developing TNA Master Trainers in-house will take more time and can be considered for the long term.

c. Designing of Questionnaires:

Generally, TNA uses a combination of different survey methods. This section will provide a brief description of different methods; key elements in writing the survey; Wording of the Questionnaire; and Types of questions.

Table 6: A brief description of survey methods

Questionnaire survey	• It is a quantitative method which consists of a series of questions for the purpose of gathering information from respondents. • Statistical analysis is conducted on the responses collected from the respondents
Structured Interview	• It is a qualitative research method in combination with a questionnaire survey. • Each interviewee is presented with the same questions in the same order so that answers can be reliably aggregated and comparisons can be made between subgroups. • Interviewers read the questions strictly following the order provided in the questionnaire. • Generally, close-ended questions are preferred. • As per requirement, open-ended questions can also be included.
Focus Group	• It is a qualitative research method whose purpose is to obtain in-depth information on a group's ideas and perceptions on a certain topic and to be more than a question answer. • A relatively small group meeting (between 10-12 participants) is convened for a specific purpose under the direction of a facilitator, during which group members talk freely and spontaneously about a certain topic.

Table 7: Fourteen Key Elements in Writing Surveys

Use this checklist and list of questions when developing written surveys:
1. Write your objective for the assessment. 2. Decide what will be done with the results of the assessment. 3. Decide who will interpret the data, report data, and so forth. 4. Decide whom will you survey (level or levels of employees, customers, etc.) 5. Gather preliminary information 6. Identify issues to assess and sequence issues. 7. Decide the focus of the assessment. • Skill test • Attitude survey, values clarification • Problem identification • Preference, interest, opinion • Self-perception, perception of others

8. Decide on question format that ensures ease of answering the survey • Multiple choice • Continuum • Rating • Ranking 9. Write clear and simple instructions for completing the survey. 10. Write and sequence questions. 11. Check the reliability of a questionnaire by administering it at various times under the same conditions. If you obtain the same results from multiple administrations, the questions are reliable. 12. Check validity of the content. Do your questions measure conditions that meet the objectives of the assessment? 13. Write a cover letter from an executive. 14. In scoring, look for trends and patterns in behaviour, attitudes, or values. Exact measures and percentages are rarely meaningful.

(Adapted from Jean Barbazette, 2006, Training Needs Assessment: Methods, Tools, and Techniques)

Table 8: Wording of the questionnaire

Does your choice of open or close ended questions lead to the types of answers you would like to get from your respondents?
Is every question in your survey integral to your intent? Superfluous questions that have already been addressed or are not relevant to your study will waste the time of both respondents and the researcher.
Does a question warrant more than one question?
Do you give enough prior information/context for each set of questions? Sometimes lead-in questions are useful to help the respondent become familiar and comfortable with the topic.
Are the questions both general enough (they are both standardized and relevant to your entire sample), and specific enough (avoid vague generalizations and ambiguity)
Is each question as succinct as it can be without leaving essential information?
Finally, and most importantly, write a survey that you would be willing to answer yourself and be polite, courteous, and sensitive. Thank the responder for participating both at the beginning and the end of the survey.

(Adapted from Kavita Gupta, 2007, The practical guide to Need Assessment)

Table 9: Types of questions

Types of questions	When to use the questions
Open ended or fill in the blank	• Obtain qualitative answers • Capture respondents' own words • Probe for more information

	• Seek more information as to follow up to a close ended question
Closed ended	Obtain quantitative information
Multiple choice question	• Obtain one response from a list of choices (with instructions to "check only one") • Obtain multiple responses from a list of choices (with instructions to "as many as possible")
Likert scale	Obtain ratings (possible rank order)
Interval Scale	• Obtain interval data • Obtain demographic data

(Adapted from Kavita Gupta, 007, The practical guide to Need Assessment)

Step 2: Pilot Survey

Generally, it is preferable that after designing the questionnaire, the institute should conduct a pilot survey. As it will help in improving the questionnaire and getting concrete feedback for the survey, such as:

1. if the instructions are clear
2. if questions were clear to the respondents
3. if the survey was able to meet our end goal

Based on the above-mentioned competency mapping, in consultation with the TNA expert, the questionnaires should be designed to make sure that they are covering the aspects of Domain, Functional and Behavioural competencies, in line with the Roles and Activities the trainees are required to perform. The questionnaires may be designed using Likert Scale with a range of 1 (least) to 5 (highest), with an option for open-ended response at the end (as explained in the tables given above). Ideally, a questionnaire should not have more than 25-30 questions.

Here, a special mention would like to be made regarding the development of the ***Vernacular Questionnaire*** by SVPNPA. Basis the feedback from nodal officers that the target group is not comfortable understanding the language of the questionnaires in English/Hindi. SVPNPA translated the questionnaires into the language understood by the target group to elicit true responses. For instance, the state of Odisha was part of the TNA conducted by the SVPNPA. The questionnaires served to the respondents/target group/stakeholders in that state were translated into Odia language to make it convenient and effective.

a. **Length and Breadth of Survey:**

For any training institute, choice should be given to identify the geographical area in which the survey to be conducted, as per their requirement to draw outcomes based on analysis.

b. Nodal Officers:

The Nodal officers may be consulted while designing the questionnaires and fine-tuning and evolving the final version to make it more inclusive. Regular meetings may be held with nodal officers to follow up on the progress and iron out any issues/concerns aired by them to bring back the survey on track/timeline. The Nodal Officers are instrumental in translating the questionnaires into vernacular language to meet the requirements of the field which was not envisaged by the academy. This will help to reach out to the target groups/respondents in an effective manner and get feedback from the ground level and various sections of society who otherwise would not have been comfortable responding to questions in the English language.

c. SOP for carrying out the TNA:

To maintain uniformity across the states/geographical units, the institute carrying out the TNA should design the SOP comprising of ways and means of carrying out this exercise. Ideally, the SOP should have the details of the stakeholder's size keeping in view the demographic profile and the distribution of population in their respective states/geographical units. The Academy was in regular touch with the Nodal Officers throughout the process to ensure uniformity and completion of the survey within timelines.

d. Sample size/Stakeholders:

It is a critical part of the entire survey process. If the sample size is too small, it might not give the real picture transpiring in the field and what exactly the stakeholders feel about the officers. At the same time, a large sample size might pose difficulty in compilation and analysis. In view of limited time and resources, a moderate sample size comprising all the possible stakeholders from various walks of life may be identified.

e. Other partners: Survey Agency/Expert Organization / Academic Organization:

The institute may associate with a reputed institute for bringing academic rigour to the exercise, making it more comprehensive and credible, and for data analysis, and documentation to assist the Academy in TNA.

f. Involvement of Heads of the Field Organizations:

It is important to involve the heads of the field organizations of respective departments to make them aware of the TNA and elicit their observations and expectations. The training institutes should not work in silos and revise the curriculum and method of teaching solely based on the TNA but incorporate the suggestions from the field units to train the recruits in an effective manner to meet the expectations.

Step 3: Critical assessment of the insights and outcomes of the survey and recommend the changes

a. Data Analysis:

As mentioned earlier, the competencies required were incorporated into the questionnaires and hence the analysis should be done accordingly. Many competencies are interlinked with each other and would have implications on the entire training. Hence, they should not be analysed in silos but assessed with the aim of integrating all learnings. The analysis should be done in the backdrop of the training objectives so that the outcome will not get deviated from the core and would be easy to work backwards.

b. Bringing out relevant insights:

Once the analysis is done, based on the weighted averages of the responses received for the questionnaires based on the Likert Scale and the open-ended questions, relevant insights may be sorted out where the respondents felt the need for improvement either in the curriculum being taught or the method it is being taught, so that the same may be compiled to present before the internal or external committee or combination of both to bring in the validation and legitimacy to the proposed changes. Members of the faculty of the institute(s) should involve themselves personally in ensuring the sequencing of the inputs, and interlinkages in the content being covered in any other subject(s) to avoid any duplication.

Somewhere also explain the importance of conducting this survey with the in-house faculty as well, who are most well informed about the difficulties being faced presently in training. Remember how we ironed out duplications, gaps and prioritised the inputs? Also categorised them appropriately.

c. Sub-committee(s)/ Focus Groups:

Based on different verticals of training, sub-committees comprising existing and ex-faculty members of that training institute may be constituted to critically analyse the outcomes and recommend changes to the curriculum and the method of training/teaching.

At the academy, three sub-committees for Indoor Training, Outdoor Training and Training Methodology were constituted to critically analyze the insights/outcomes of the survey process. It is felt that the more minds that get applied to this, the better for its comprehensiveness and acceptability. Serving seniors, who would be critical for its implementation should be roped in for this and be confronted with irrefutable data for convincing them.

Step 4: Presenting before Apex Committee/Academy Board and seeking approval from Ministry or Department Concerned

a. Presenting to Apex Committee/Academy Board

The recommendations of the sub-committees may either be presented before Apex Committee or the Academy Board whichever is relevant for the institute before escalating and submitting before the concerned Department/Ministry.

b. Role of the Ministry/Department concerned

The findings/recommendations of the apex committee/academy board are to be presented to the relevant MDO approval and seek approval to bring in the changes in the existing training by having the concerned MDO in the loop *ab initio*, thereby ensuring better acceptability of the findings.

3.2 Key Lessons

Some of the key lessons are:

1. **Teamwork:** A good team coming together with the same objective and participative is a crucial part.
2. **Be appreciative of differences of opinion:** One cannot expect everyone to agree with your views. Individuals with different perspectives should be encouraged to air their views so that the missing links can be forged together to make the exercise foolproof to the extent possible.
3. **Be open to new ideas/suggestions:** It was realised that new ideas may come from unexpected horizons. One should keep eyes and ears open to receive ideas to make the whole exercise robust. For instance, the Nodal Officers believed the Questionnaires to be translated into the vernacular language instead of kept in English so that the respondents will be proactive in responding. The same was appreciated, which brought so much effectiveness to the entire survey process.
4. **Timeline:** The exercise should have a timeline, so that the progress may be monitored and reviewed periodically to meet the requirements.
5. **Surrender the Confirmation Bias:** It is highly likely that a survey of such magnitude will come with something which shatters one's notions and convictions towards training. Though it is tough but that is the fact.
6. **Recognition:** Being a teamwork, the institute should not hesitate in recognising the efforts and midnight oil burnt by the team members to make sure that the whole exercise is taken to a logical conclusion. It is additional work for the faculty apart from their day-to-day academic engagements and might have to sacrifice their family time and personal time for the larger good.
7. **Collaborations with other institutions:** One of the major contributors to the efficacious implementation of the TNA survey was the collaboration with other institutions. It may be with the ministry as well as external institutions on various aspects of TNA.

Chapter 4. Translating Training Needs Assessment to Course Design

Right after training needs have been identified and analysed, the next step is to check whether existing training modules address the identified needs. A team at the Training Institution could be set up to review and recommend changes to the existing training modules.

Suggested composition of the team:

- Subject Matter Expert
- Concerned faculty members
- Director of the training institution

Moreover, we can take a cue from the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) Model of Instructional Design which provides a systematic approach to designing effective training programs. The Design phase of the ADDIE model is where the overall training program is designed based on the needs identified in the Analysis phase. During this phase, instructional designers work with subject matter experts and other stakeholders to create a blueprint or plan for the training program

Figure 2: ADDIE Model of Instructional Design

a. Linking to course design

After conducting a training needs analysis, the following steps can be taken for linking it to course design:

1. Identify the learning objectives: Based on the findings of the needs analysis, identify the specific learning objectives that need to be addressed in the training course. These objectives should be clear, measurable, and aligned with the needs of the learners and the organization.
2. Select appropriate instructional strategies: Choose the instructional strategies that are most suitable for achieving the learning objectives. This could include lectures, discussions, case studies, simulations, and other activities that are relevant to the learners' needs and the subject matter.
3. Develop content: Develop the content for the training course based on the identified learning objectives and instructional strategies. This could include creating presentations, handouts, reading materials, and multimedia resources that support the learning objectives and engage the learners.
4. Choose assessment methods: Determine the assessment methods that will be used to evaluate the learners' understanding and retention of the course content. This could include quizzes, tests, assignments, or other performance-based assessments.

5. Plan course delivery: Plan the delivery of the course, including scheduling, logistics, and resources needed to deliver the course effectively. This could involve selecting appropriate trainers, scheduling training sessions, and preparing the training room or other learning environments.
6. Obtain feedback: Obtain feedback from subject matter experts, instructional designers, and other stakeholders to ensure that the training program design is effective, engaging, and aligned with the learning objectives.
7. Revise the design: Revise the training program design as necessary based on feedback and ensure that it is complete, effective, and ready for development in the next phase.

The Design phase is critical to the success of the training program, as it establishes the blueprint for the entire program. By following a systematic and iterative process during the Design phase, instructional designers can ensure that the training program is effective, engaging, and aligned with the needs of the learners and the organization.

b. Institutionalisation process

Institutionalizing the course design process within training institutions can help ensure that instructional designers consistently follow a systematic and effective process for designing and developing training programs. The course design team at institutions will be at the helm and will be responsible for steering the design process.

Here are some steps that can be taken to institutionalize the Design phase:

- Develop a standard design process: Establish a standard design process that outlines the key steps involved in the course design. This process should be well-documented and communicated to all instructional designers and other stakeholders involved in the design of training programs.
- Provide training and support: Provide training and support to instructional designers on the standard design process and any tools or software that will be used in the Design phase. This may include training on needs analysis, learning objectives development, instructional strategies, and assessment methods.
- Establish quality standards: Develop quality standards for training program design and establish clear criteria for evaluating the effectiveness and quality of training programs. These standards should be communicated to instructional designers and other stakeholders to ensure that they are followed consistently.
- Encourage collaboration and feedback: Encourage collaboration and feedback among instructional designers, subject matter experts, and other stakeholders throughout the Design phase. This can help ensure that the training program design is effective, engaging, and aligned with the needs of the learners and the organization.
- Establish a review process: Establish a review process for training program designs to ensure that they meet the quality standards and are effective in achieving the learning

objectives. This review process may include peer review, expert review, or other types of feedback mechanisms.

- Use technology to streamline the process: Use technology to streamline the design process and make it more efficient. This may include the use of design software, learning management systems, or other types of technology that can help automate or simplify the design process.

Chapter 5. System of Auditing

The training rotates around the performance. If we see the definition of training, it says that training is a planned process to modify attitude, knowledge, or skill through learning experiences to achieve effective performance in an activity or range of activities, to satisfy, the needs of the organisation. The training is based on Desired Performance. Every organisation expects that the people working in the organisation should perform up to the desired level. Hence while establishing or defining an auditing system we need to start the process of auditing or evaluation from the initial stage which is at the beginning of Training Needs Analysis. When we say, auditing, it is an assessment of something, with some initially defined parameters or standards. Thus, evaluation of training, which is defined as, the assessment of the total value of a training system, training course, or programme, in social as well as financial terms. Evaluation differs from validation in that it attempts to assess the overall value of the course or programme, and not just the achievement of its laid-down objectives. The term is also used in the general judgmental sense of the continuous monitoring of a programme or of the training function.

The auditing system or the evaluation of training thus starts with training needs analysis. Step one of auditing is identifying, establishing, and defining the standards of performance of a job doer. The basic standards may be about the physical environment, working environment and knowledge, skills, attitude, and competencies required for the job doer to perform the job up to the desired level. In training, we use the desired level of performance frequently, which means we have expected and decided on some level of performance from the job-doer.

This is the basic parameter which we need to establish at the time of training needs analysis. This becomes the base for the auditing system. In the training needs analysis after identifying, defining, and establishing these standards of performance, we find out the level of actual performance of the job doer. This gap between desired and actual level we fulfil with the help of improving the work environment, and physical environment or providing training for modifying knowledge, skills, attitude, and competencies.

Easterby, Smith, Hamblin, and Kirkpatrick have developed some models of evaluation of training. These models together can be used for the evaluation of training. The purpose for Evaluation based on the concepts of Easterby-Smith and the Level of Evaluation based on the concepts of Hamblin and Kirkpatrick gives us a matrix. Based on the purpose of evaluation and level of evaluation we can get an evaluation matrix. This EoT matrix can be used to define auditing systems.

EoT MATRIX	Learning Processes	Proving Learning & Development	Improving L&D Interventions	Monitoring Learning & Development
Level 1: Reaction	L-1	P-1	I-1	M-1
Level 2: Learning Outcomes	L-2	P-2	I-2	M-2
Level 3: Job Performance	L-3	P-3	I-3	M-3
Level 4: Results Achieved	L-4	P-4	I-4	M-4

5.1 Stages of Auditing

1. Identifying, Defining and Establishing standards of performance. Which could be based on factors influencing and affectioning the performance. Establish the desired level of performance.
   a. The physical environment is required to perform up to the desired level.
   b. Working environment required to perform up to the desired level.
   c. Knowledge, skills, and attitude required to perform up to the desired level.
   d. Behavioural competencies required for outstanding performance.
   e. From TNA find gaps in actual and desired performance.

2. Design the training based on TNA.

   a. Segregation of the gaps under four categories. Environmental, motivational, behavioural, and behavioural competencies.
   b. The management and administration will provide solutions for environmental and motivational factors. Make the assessment to check whether the gaps have filled.
   c. Develop the design of training based on gaps identified in knowledge, skills, attitude, and behavioural competencies.
   d. Define the performance objective, training objective and learning objectives of training programme.
   e. Identify and develop the content of training and validate it.
   f. Identify the proper training methods for knowledge, skills, attitude, and competencies.
   g. Identify the learning methods Pedagogy, Andragogy or Heutagogy, according to requirement.

3. Conduct the training as per design.
   a. Identify the initial level of trainees.
   b. Get the reaction of trainees on the training environment.
   c. Assessment to check whether learning objective achieved in training.
   d. Assessment to check whether training objectives were achieved at the end of training.

4. Assessment at the workplace.

   a. After a short interval assessment to check whether performance objectives were achieved.

5. Assessment of the organisation level.
   a. After some time, interval assessment is to check whether the desired performance of the organisation is achieved.

6. At the make assessment to check whether the training solved the problem or improved job performance and are the costs justified.

5.2 Auditing model for training

1. Defined and established desired standards and parameters of performance, by organisation.
2. Actual standards and parameters, From TNA
3. Gaps and solutions. Organisation, consultant, and training centre.
4. Desired performance. Performance objectives, (gaps solution for Environmental + Motivational +Behavioural)
5. Performance objective = Training objective + (E +M) by design and organisation
6. Training objective = Sum of learning objective + Performance Aids by the training centre.
7. Auditing
   a. Assessment before training. Entry behaviour
   b. Assessment at the training. Formative assessment.
   c. Assessment at the end of training. Summative assessment.
   d. Normative assessment (top/last, extraordinary, or poor performer to be taken care of by mentor)
8. Criterion-based assessment (good for the desired performer. Shows Level)
9. Internal assessment at the training centre (Training Objectives fulfilled)
10. Assessment at the workplace (Training objectives + performance aids + improvement in Environmental and Motivational).
11. Assessment and External validation at the workplace.
12. Evaluation at the organisation level. Desired standards and parameters met.

Chapter 6. Defining Periodicity for Conducting TNA

The periodicity of conducting a Training Needs Analysis (TNA) depends on several factors, such as the organization's goals, industry trends, and changes in job roles or technology. Some considerations to help determine the periodicity of conducting a TNA:

1. Organizational goals: The frequency of conducting a TNA should align with the organization's goals and objectives. For example, if the organization is undergoing significant changes, such as governance transformation, it may be necessary to conduct a TNA more frequently to ensure that employees have the necessary skills and knowledge to meet the new demands.

2. Industry trends: Changes in industry trends and best practices may require employees to acquire new skills or knowledge. Conducting a TNA periodically can help identify these changes and ensure that training programs are updated accordingly.
3. Performance gaps: If performance gaps are identified during performance evaluations or other assessments, it may be necessary to conduct a TNA to determine if additional training is needed to close these gaps.
4. Job roles: Changes in job roles, such as the introduction of new positions or changes in responsibilities, may require employees to acquire new skills or knowledge. Conducting a TNA can help identify these changes and ensure that training programs are updated accordingly.
5. Technology changes: Changes in technology can require employees to acquire new skills or knowledge. Conducting a TNA can help identify these changes and ensure that training programs are updated accordingly.

Based on these considerations, it is recommended to conduct a TNA at least once every two years or whenever significant changes occur in the organization, industry, job roles, or technology. It's important to note that the periodicity of conducting a TNA may vary depending on the Ministry/Department/Organization's specific needs and circumstances.

Chapter 7. Sub-committee recommendations

1. **Regularly conduct TNA:** The CSTIs must conduct TNA once every 2 years/ for every batch for all induction and mid-career training programs. Focus on domain/behavioural and functional training for the Ministry officials (rather than induction or MCTP) with a focus on continuous learning needs. They may also conduct TNA for all departments for the CSTIs every once in 2 years to understand the needs of the various departments. Quick analysis or rapid TNAs on new training needs that come up every year may be considered. Institutes may customize TNA components as per their requirements.
2. **The standard procedure to conduct TNA:** The CSTIs must follow the step-by-step procedure mentioned in the guidance report to conduct TNA. The process for each institute must be standard and should be documented across all CSTIs
3. **Involve multiple stakeholders:** Involve multiple stakeholders in the TNA process, including civil service officials, MDOs, citizens and subject matter experts. Their input can provide valuable insights into the training needs.
4. **Use multiple data collection methods:** Use a variety of data collection methods to gather information on the training needs of employees. These may include surveys, focus groups, interviews, and performance evaluations. Leverage technology (AI or ML-based software) to assess the skill sets and training needs.

5. **Continuous improvement:** Use the results of the TNA and evaluation to continuously improve the training program. Regularly updating the training plan ensures that the training program remains effective and relevant.
6. **Collaboration with other institutes:** The institute which is lacking the expertise and experience to conduct should collaborate with other CSTIs and institutes to conduct TNA and learn from the process to build the capacity to conduct TNA internally.
7. **Set procedure for training content updation:** The institute should formalize the standard operating procedures for developing and updating course content which will include integrating inputs from previous TNA and should also update the delivery mechanism.
8. **Developing in-house capacity for TNA:** The faculty & staff members must be trained in conducting TNA such that in-house capacity can be built enabling TNA.
9. **Utilizing data from Capacity Needs Assessment:** Ministry-based CSTIs can utilize the data from Capacity Needs Assessment (CNA) gathered as a part of the Annual Capacity Building Plan (ACBP) for competency mapping of trainees. Non-ministry CSTIs may take a cue from the methodology undertaken for conducting CNA for competency mapping of their cadres.

Annexures

Metrics and Stages of under Trainee Needs Assessment and Course Design Pillar

Metric	***Descriptor - Stage I***	***Descriptor - Stage II***	***Descriptor - Stage III***	***Descriptor - Stage IV***	***Descriptor - Stage V***
Does the Institute identify training needs through collaboration with multiple stakeholders, e.g., ministries, departments, organisations and citizens?	*There are no defined processes for identifying training needs.*	*Processes of identifying training needs are in place but rarely followed and no inputs are sought from ministries, departments, and organisations.*	*Processes of identifying training needs are in place and inputs are sought from stakeholders when needed for developing training courses.*	*Processes of identifying training needs are in place and inputs are proactively obtained from multiple stakeholders for developing training courses.*	*Processes of identifying training needs are in place and stakeholder discussions are conducted periodically at pre-defined intervals. The Institute also analyses identified needs for developing training courses.*
Does the Institute have in-house capacities for conducting Training Needs Assessment?	*The Institute does not have in-house capacity for conducting Training Needs Assessment.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute does not conduct Training Needs Assessment. The Institute re-designs and updates training programmes based on parent ministry/department/organisation directives.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute conducts Training Needs Assessment in collaboration with officers from parent Ministry/department/organisation. The Institute re designs and updates training programmes based on identified needs.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute conducts Training Needs Assessment in collaboration with officers from parent Ministry/department/organisation and other stakeholders (citizens, another ministries/department/organisation). The Institute re-designs and updates training programmes based on identified needs.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute conducts Training Needs Assessment in collaboration with external experts, officers from parent Ministry/department/organisation. The Institute re designs and updates training programmes based on identified needs.*

Metric	Descriptor - Stage I	Descriptor - Stage II	Descriptor - Stage III	Descriptor - Stage IV	Descriptor - Stage V
To what extent are training needs identified through active collaboration with leading national institutes?	*The Institute has no partnerships or collaborations with national institutes for conducting Training Needs Assessment.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute does not conduct Training Needs Assessment. The Institute re-designs and updates training programmes based on parent ministry/department/organisation directives.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute conducts Training Needs Assessment in collaboration with officers from parent Ministry/department/organisation. The Institute re designs and updates training programmes based on identified needs.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute conducts Training Needs Assessment in collaboration with officers from parent Ministry/department/organisation and other stakeholders (citizens, another ministries/department/organisation). The Institute re-designs and updates training programmes based on identified needs.*	*The Institute has in-house capacity for conducting Training Needs Assessment. The Institute conducts Training Needs Assessment in collaboration with external experts, officers from parent Ministry/department/organisation. The Institute re designs and updates training programmes based on identified needs.*
To what extent are training needs identified through active collaboration with leading national institutes?	*The Institute has no partnerships or collaborations with national institutes for conducting Training Needs Assessment.*	*Collaboration and partnerships are established with national institutes, but these are not engaged for Training Needs Assessment.*	*Collaboration and partnerships are established with national institutes and these resources are leveraged for designing training needs assessment for the Institute.*	*Collaboration and partnerships are established with national institutes and these resources are leveraged for designing and implementing training needs assessment for the Institute.*	*Collaboration and partnerships are established with national institutes and these resources are leveraged for designing and implementing training needs assessment for the Institute as well as developing/ re-designing training courses.*
Are training courses offered by the Institute mapped to required	*Required competencies (functional, behavioural and domain)*	*Required competencies (functional, behavioural and domain) are*	*Required competencies (functional, behavioural and domain) are*	*Required competencies (functional, behavioural and domain) are*	*Required competencies (functional, behavioural and domain) are*

Metric	**Descriptor - Stage I**	**Descriptor - Stage II**	**Descriptor - Stage III**	**Descriptor - Stage IV**	**Descriptor - Stage V**
functional, behavioural and domain competencies?	*are not defined by the Institute based on trainee's roles.*	*defined based on trainee's roles. However, the training courses offered have not been mapped to each competency.*	*defined based on trainee's roles. The Institute has mapped <40% of training courses to the full defined set of competencies.*	*defined based on trainee's roles. The Institute has mapped 40-60% of training courses to the full defined set of competencies.*	*defined based on trainee's roles. The Institute has mapped up to 60%of training courses to the full defined set of competencies. The Institute also assigns training courses based on pre-assessment tests of individual trainees.*
Does the institute have standard operating procedures for designing in-service trainings, demand-based trainings, etc.?	*Standard operating procedures are not available.*	*Standard operating procedures are in place but followed for designing <49% of training courses.*	*Standard operating procedures are in place and followed for designing 50-69% of training courses.*	*Standard operating procedures are in place available and followed for designing 70-89% of training courses.*	*Standard operating procedures are in place and followed for designing >90% of training courses.*