Competency Based Learning Materials

(CBLM)

Competency Based Training and Assessment (CBT&A) Methodology

Level-5

CBLM: Conduct Training Needs Analysis

National Skills Development Authority
Prime Minister’s Office
Government of the People’s Republic of Bangladesh

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This Competency Based Learning Materials (CBLM) on "Conducting Training Needs Analysis" under the CBT&A Methodology for Trainers &Assessors, Level-5 qualification is developed based on the national competency standard approved by National Skills Development Authority (NSDA)

This document is to be used as a key reference point by the competency-based learning materials developers, teachers/trainers/assessors as a base on which to build instructional activities.

This Competency Based Learning Materials is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this CBLM for activities benefitting Bangladesh.

List of Abbreviations

CS	-	Competency Standard
ISC	-	Industry Skills Council
NSDA	-	National Skills Development Authority
NSQF	-	National Skills Qualifications Framework
BNQF	-	Bangladesh National Qualifications Framework
OSH	-	Occupational Safety and Health
PPE	-	Personal Protective Equipment
SCVC	-	Standards and Curriculum Validation Committee
STP	-	Skills Training Provider
SOP	-	Standard Operating Procedure
TNA	-	Training Need Analysis
FGD	-	Focus Group Discussion
KIIs	-	Key Informant Interviews
UoC	-	Unit of Competency
EC	-	Executive Committee
CBT&A	-	Competency based Training & Assessment
CBC	-	Competency based Curriculum
CAD	-	Course Accreditation Document
CBLM	-	Competency Based Learning Materials

Approved by

---th Executive Committee (EC) Meeting of NSDA

Held on -------------------

Deputy Director (Admin)
and
Officer of Secretarial Duties for EC meeting
National Skills Development Authority

How to use this Competency Based Learning Materials (CBLMs)

The module, Maintaining and enhancing professional & technical competency contains training materials and activities for you to complete. These activities may be completed as part of structured classroom activities or you may be required you to work at your own pace. These activities will ask you to complete associated learning and practice activities in order to gain knowledge and skills you need to achieve the learning outcomes.

1. Review the **Learning Activity** page to understand the sequence of learning activities you will undergo. This page will serve as your road map towards the achievement of competence.

2. Read the **Information Sheets.** This will give you an understanding of the jobs or tasks you are going to learn how to do. Once you have finished reading the **Information Sheets** complete the questions in the **Self-Check.**

3. **Self-**Checks are found after each **Information Sheet**. **Self-Checks** are designed to help you know how you are progressing. If you are unable to answer the questions in the **Self-Check** you will need to re-read the relevant **Information Sheet**. Once you have completed all the questions check your answers by reading the relevant **Answer Keys** found at the end of this module.

4. Next move on to the **Job Sheets. Job Sheets** provide detailed information about *how to do the job* you are being trained in. Some **Job Sheets** will also have a series of **Activity Sheets**. These sheets have been designed to introduce you to the job step by step. This is where you will apply the new knowledge you gained by reading the Information Sheets. This is your opportunity to practice the job. You may need to practice the job or activity several times before you become competent.

5. Specification **sheets**, specifying the details of the job to be performed will be provided where appropriate.

6. A review of competency is provided on the last page to help remind if all the required assessment criteria have been met. This record is for your own information and guidance and is not an official record of competency

When working though this Module always be aware of your safety and the safety of others in the training room. Should you require assistance or clarification please consult your trainer or facilitator.

When you have satisfactorily completed all the Jobs and/or Activities outlined in this module, an assessment event will be scheduled to assess if you have achieved competency in the specified learning outcomes. You will then be ready to move onto the next Unit of Competency or Module

Module Content

Unit of Competency: Conduct Training Needs Analysis

Module Title: Conducting Training Needs Analysis

Module Description: This module discusses the aspects that must be given attention when conducting training needs analysis. It shows the knowledge and skills requirements for identifying organizational/client needs, developing instruments for training needs analysis, administering training needs analysis, analyzing TNA results, preparing report and providing advice & recommendation.

Nominal Duration: 30 Hours

Learning Outcomes:

Upon completion of this module the trainees must be able to:

1. Identify organizational/ client needs
2. Develop instruments for training needs analysis
3. Administer training needs analysis
4. Analyze TNA results
5. Prepare report
6. Provide advice and recommendation

Assessment Criteria:

1.1. Objectives and expectations are identified through discussion with clients.
1.2. Organizational requirements are identified.
1.3. TNA respondents / target group are selected based on objectives and requirements.
1.4. Resources are identified and verified according to organizational requirements.
2.1 Reliable and appropriate methods for collecting information and data are selected.
2.2 Method for collecting information and data on current, emerging and future training needs is selected with concerned person/s
2.3 Research plan is developed and finalized with concerned person/s
2.4 TNA instruments are prepared according to prescribed format
2.5 TNA instruments are validated
3.1 Orientation regarding TNA is conducted.
3.2 Instruments are disseminated to the identified respondents.

3.3 Filled up TNA instruments are gathered in accordance with selected procedures appropriate method.
4.1 Information is analyzed using reliable and valid data analysis methods.
4.2 Skills requirements and skills gaps are determined that can be addressed through training or other intervention.
4.3 Conclusions on training needs are prepared and supported by evidence and consistent with research objectives.
5.1 Conclusions on training needs are disseminated to the clients.
5.2 Clients are provided with options for meeting identified training needs.
5.3 Report is prepared on training needs.
6.1 Clients are provided with clear advice and recommendations.
6.2 Feedback and comments are obtained with suitable and sufficient advice.
6.3 Recommendations are recorded and applied in future planning if required.
6.4 Final report is completed and presented to the client.

Learning Outcome 1: Identify Organizational/ Client Needs

Assessment Criteria:

1. Objectives and expectations are identified through discussion with clients.
2. Organizational requirements are identified.
3. TNA respondents / target group are selected based on objectives and requirements.
4. Resources are identified and verified according to organizational requirements

Content:

1. Training Need Analysis (TNA)
   1.1 Types of Training Needs Analysis (TNA)
   1.2 Advantages and Disadvantages of TNA
   1.3 Starting points for a TNA/Indicator of a need
2. Objectives and expectations
3. TNA respondents / target group
4. Sampling technique to find the "right respondents"
5. Identify and verify resources

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 1: Identify organizational/ client needs

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Trainee will ask the instructor about Conducting Training Needs Analysis.	1. Instructor will provide the learning materials "**Conducting Training Needs Analysis"**
2. Read the Information sheet/s	2. Information Sheet No:1 Identify organizational/ client needs
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 1 Identify organizational/ client needs Answer key No. 1 Identify organizational/ client needs
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:1- Identify organizational/ client needs Specification Sheet1 – Identify organizational/ client needs

Information Sheet 1.1: Identify organizational/ client needs

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Define and Classify Training Need Analysis (TNA)
2. Identify objectives and expectations
3. Identify Organizational requirements
4. Selected TNA respondents / target group based on objectives and requirements.
5. Identified and verify resources according to organizational requirements

1. Training Need Analysis (TNA)

A Training Needs Analysis (TNA), also known as a training needs assessment, is a systematic process that organizations use to determine the gap between the current and desired knowledge, skills, and abilities of employees.

Training need analysis can be described as the general process through which the organization or one of its parts:

a. **Identifies** the competence needed for the success of its business and operation,
b. **Specifies** the range, extent, and aim of training action needed,
c. **Analyses** how best the training needs can be met.

A TNA is the method of determining if a training need exists and if it does, what training is required to fill the gap. This is achieved by collecting both qualitative and quantitative data for analysis.

The aim of training needs analysis is to ensure that training or any other option addressing the existing problems, is tailored to fit organizational objectives, and is delivered in an efficient and cost-effective manner.

Types of Training Needs Analysis (TNA)

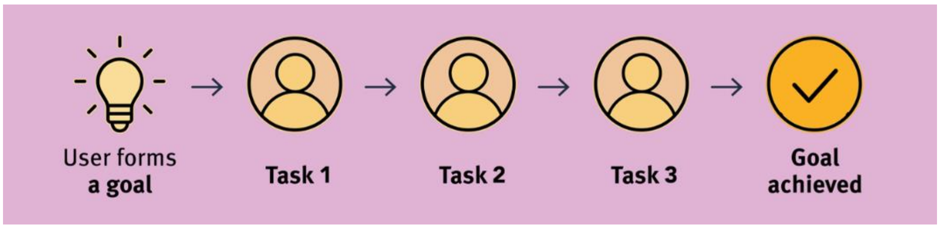
There are three levels of training needs analysis:

i. Organizational Analysis: Analysis of the environment, business strategies, resources and managerial support to determine where to emphasize training

- Mission and Strategies
- Resources
- Internal environment

ii. Task Analysis: Analysis of the work-related tasks and knowledge, skills, attitude; it determines if the content and activities are consistent with trainee on-the-job experience and to develop measurable and relevant content, objectives and methods. It:

- Compares job requirements with existing employee skills and knowledge to identify skills gaps.
- Establishes Tasks frequency, quantity and quality.
- Establishes the level of skills and knowledge required to perform tasks
- Determine where and how these skills are best acquired



iii. **Person Analysis:** Analysis of a persons' performance, knowledge, motivation, prerequisite skills or confidence in order to determine who needs training:

- Define the job
- Determine where to collect information
- Identify the method to use
- Gather and analyze data

Major differences between Organizational Analysis, Task Analysis and Person Analysis

Organizational Analysis	Task Analysis	Person Analysis
Environment, Strategies and Resources to determine where to emphasize training.	**Activities needed to be performed** in order to determine the ASK needed where to emphasize training.	**Performance, Knowledge and Skills** in order to determine who needs training.

An effective TNA addresses questions such as:

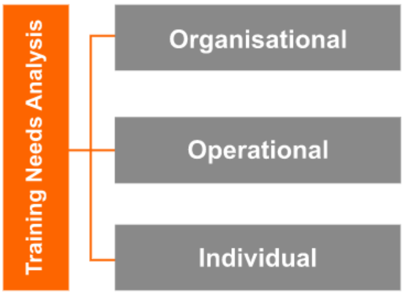
- Who needs training?
- What kind of training do they require?
- Where is training needed?
- How can you design an effective training program for them?
- What will be the impact of training on employee performance?
- How will training be provided?
- What level of investment and resources will be required to implement an effective training program?

Training needs analysis process:

1. Document the problem.
2. Investigate the problem.
3. Plan the needs analysis.
4. Select the technique.
5. Conduct the analysis.
6. Analyze the data.
7. Report the findings.

Components of Training Needs Analysis

McGhee and Thayer's Three Level Analysis is popularly used in the organization to understand the big picture of learning and development. This model of training needs analysis of three components at different levels which need analysis to identify the training needs in the organization.



i. Organizational Level

Providing training to employee which are not aligned with the business goals is considered a wastage of resources. It is very vital that training programs conducted in the organization would help the employees to achieve the strategic business goals of the organization. The organizational level training need analysis using data sources such as business goals, skill inventory, employee inventory, organizational culture, and customer satisfaction data to identify the training needs of the employees.

The organizational level of training need analysis to provide answers to the questions such as-

- Which department needs training the most?
- Which training program will act as a solution to resolve the business issues?

At organizational level analysis, clear and measurable outcomes of the training are identified to improve the success of the training program.

ii. Operational Level

It is a job level analysis that is used to determine what kind of training is needed by the employee in order to achieve the desired level of work proficiency. It identifies the knowledge and skill required to execute a specific job in the organization. The operational level training need analysis using data sources such as work performance standards, job description, job specifications, and analysis of operational problems to determine the training needs of the employee.

The operational level of training need analysis to provide answers to the questions such as:

- What is the standard performance expected for the job?
- How an employee should execute the task to need the set performance standards?
- What training program is appropriate to improve the skills, abilities, and knowledge of the employee to complete the job successfully?

iii. Individual Level

At the individual level, the training need analysis to verify the way employee performs their job. The difference between the expected and actual performance of the employee is analyzed to arrive at the training need of the employee. The individual-level training need analysis using data sources such as performance appraisals, assessment of employee skills, interviews and questionnaires, customer surveys, and work samples to determine the training needs of the employee.

The individual level of training need analysis to provide answers to the questions such as-

- Whether the employees have the essential skills and knowledge?
- What are the barriers to proficient performance?
- What is the appropriate training program to help the employee to meet desired performance standards?

Benefits of TNA

- TNAs enable you to identify knowledge and technical skills gaps before they become a problem to the business
- Helps to determine who what of who needs to be trained
- Highlights training you may not have considered
- Enables training to be focused on the right areas
- Helps you to priorities training needs
- They help you to make efficient annual planning for training
- Cost optimization for training
- Target the right people

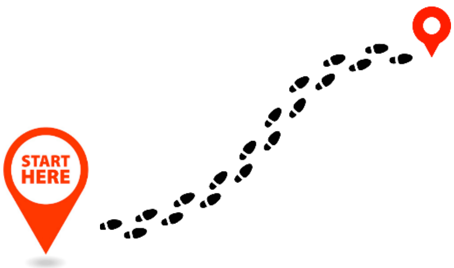
Disadvantages of TNA

- Training need analysis can be a time-consuming process as it includes a lot of assessments and surveys.
- Training need analysis can be a costly affair for the company as often tired party is hired to conduct the training need analysis
- The low response rate of the employees to the internal surveys can have a negative impact on the effectiveness of the training need analysis
- Many times, when the long process of training needs analysis is completed the management is no longer looking to fulfill the same business goals.

- Employees often hesitate to provide an honest response on self-assessment which can affect the result of training needs analysis.

Starting points for a TNA/Indicator of a need

- Complaints from staff, customers/clients
- Poor quality work
- Frequent errors
- Large staff turnover
- Deadlines not being met
- Conflict amongst staff
- New equipment systems



2. Identify objectives and expectations

To identify objectives and expectations for Training Need Analysis through discussion with clients, you can follow these steps:

- Schedule a meeting with the client to discuss their needs and expectations for the training.
- Begin by asking the client to explain their current situation and the challenges they are facing. This will help you understand their perspective and identify potential areas for training.
- Ask the client about their goals and objectives for the training. What do they hope to achieve through the training? What specific outcomes do they expect to see as a result of the training?
- Ask the client about any performance or productivity issues they are experiencing. Are there any processes or procedures that are causing problems or inefficiencies? Are there any skills or knowledge gaps that are impacting performance?
- Ask the client about their employees and their current level of training and development. Are there any areas where employees require additional support or training? Are there any specific skills or knowledge areas that are lacking?
- Ask the client about their industry and the trends and changes that are occurring. Are there any new technologies or best practices that the training should address?
- Based on the information provided by the client, develop a list of objectives and expectations for the Training Need Analysis. These should be specific, measurable, achievable, relevant, and time-bound (SMART).
- Review the objectives and expectations with the client to ensure that they are aligned with their needs and requirements.
- Use the objectives and expectations to guide the Training Needs Analysis process, ensuring that the training addresses the identified gaps and needs.
- Regularly review the progress of the training to ensure that it is meeting the client's objectives and expectations.

By following these steps, you can ensure that the Training Need Analysis is aligned with the client's needs and requirements, and that the training is effective in addressing their identified gaps and needs.

Organizational objectives, issues and parameters

Organizational requirements will vary with the crucial strategic and short-term priorities each business will face. Some of the crucial objective to identify training needs will be tied to requirements for:

- Strategic goals and objectives;
- Business and performance plans;
- Quality assurance and/or continuous quality improvement;
- Change and emerging market opportunities (multi-skilling, up-skilling and re-skilling);

A successful TNA exercises were part of a continuing training planning process. The aim being to scientifically identify activities that will remove targeted performance gaps that inhibit company success.

The plan should translate strategic goals into training outcomes through a dynamic partnership between the training staff and those seeking to achieve outcomes currently not possible with existing competency profiles.

Essential features in a training plan may include:

- Link with a corporate or strategic plan
- Sanctioning of the plan by senior executives
- Means to integrate the training plan with strategic and business planning activities
- Realistic and achievable key result areas that can be achieved as training outcomes (as opposed to problems caused by non-training factors
- Long term goals while articulating short term steps with measurable indicators
- Allocation of responsibility and budgets for each activity
- A means to link operations with training and development
- A process for design and implementation that is participative and embraces involvement of operations managers
- A means to refocus courses and related training materials

3. Organizational requirements

Organizational requirements are:

- Goals, objectives, plans, systems and processes
- Legal and organizational Policy/guidelines and requirements
- Recording and reporting procedures
- Business and performance plans
- Occupational health and safety policies, procedures and programmes

When training is not the solution

Having identified a training need, it is absolutely essential to confirm that the performance gap is caused by a lack of training. But training may not be a solution if poor performance is caused by:

- more than the behavior of the trainee
- poor processes
- inappropriate equipment
- poor motivation caused by working conditions and systems
- incorrect measures or descriptions (standards)
- supervision is hostile to the trainee or training
- lack of practice time to apply learning
- available resources (time, money, etc.)

If the training need is identified in terms of competencies, then the analysis has to be sure the competencies are at both the correct level and addressing the main problem. For instance, the problem may be associated with poor data management system in a technical training center. Analysis may identify this is an activity of data management clerk and he is responsible for inputting data to the system. It may not be sufficient to train the data management clerk in the relevant competencies associated with "Data Management" if the problem really exists in the data manager's failure to "Plan and manage data". This requires a mind-set where competencies must be seen as profiling training needs that can deal with system problems, not just task performance. Hence to overcome such problems the best suggested alternatives are as below:

- trial and error method
- counselling method
- hire and fire approach
- transfer staff
- job redesign
- organizational redesign

But if the analysis finds that such problem occurred due to inefficiency of the clerk, specifically on inputting data into the system then there would be a need of "IT skills training" or, if the data management problem occurred due to poor workload management by the clerk then there requires a training program on "workload management". In these both case the problem is occurring due to lack of performing task.

DETERMINING A TRAINING NEED

During this module you will be planning a training program based on a particular training requirement of an organization. The training program will be designed for a specific group of people so it will have to meet their particular needs. We'll call these people the client group. They will be the people participating in the training program you plan.

As a way of starting to think about how you would plan a training program let's spend a little time looking at why they are needed.

- What starts the whole process of a person being trained?
  We could say, quite simply, that 'someone' sees a need for people to know more and be able to do more.
- Who might that 'someone' be?

Example

The government sees a need for its citizens to be clever.

From this statement any number of scenarios could arise.

Scenario 1—Industry

The company sees a need to purchase new equipment to increase productivity and improve their image overseas.

A supervisor who works for this company sees a need for the staff in their section to learn how to use and maintain the new equipment safely and efficiently.

A worker in this company sees a need to improve their skills in operating and maintaining the new machinery so that they keep up-to-date in their job.

Scenario 2—Government department

The government department sees a need for people in the community to become more familiar with how to use computers.

A project officer who works for this department sees a need for unemployed people in their community to learn basic computing skills for the workplace.

An unemployed person who is thinking of doing a training course sees a need to overcome their fear of computers and gain some hands-on experience with them.

Scenario 3—Private training provider

A training provider sees a need for people to learn human resource management skills.

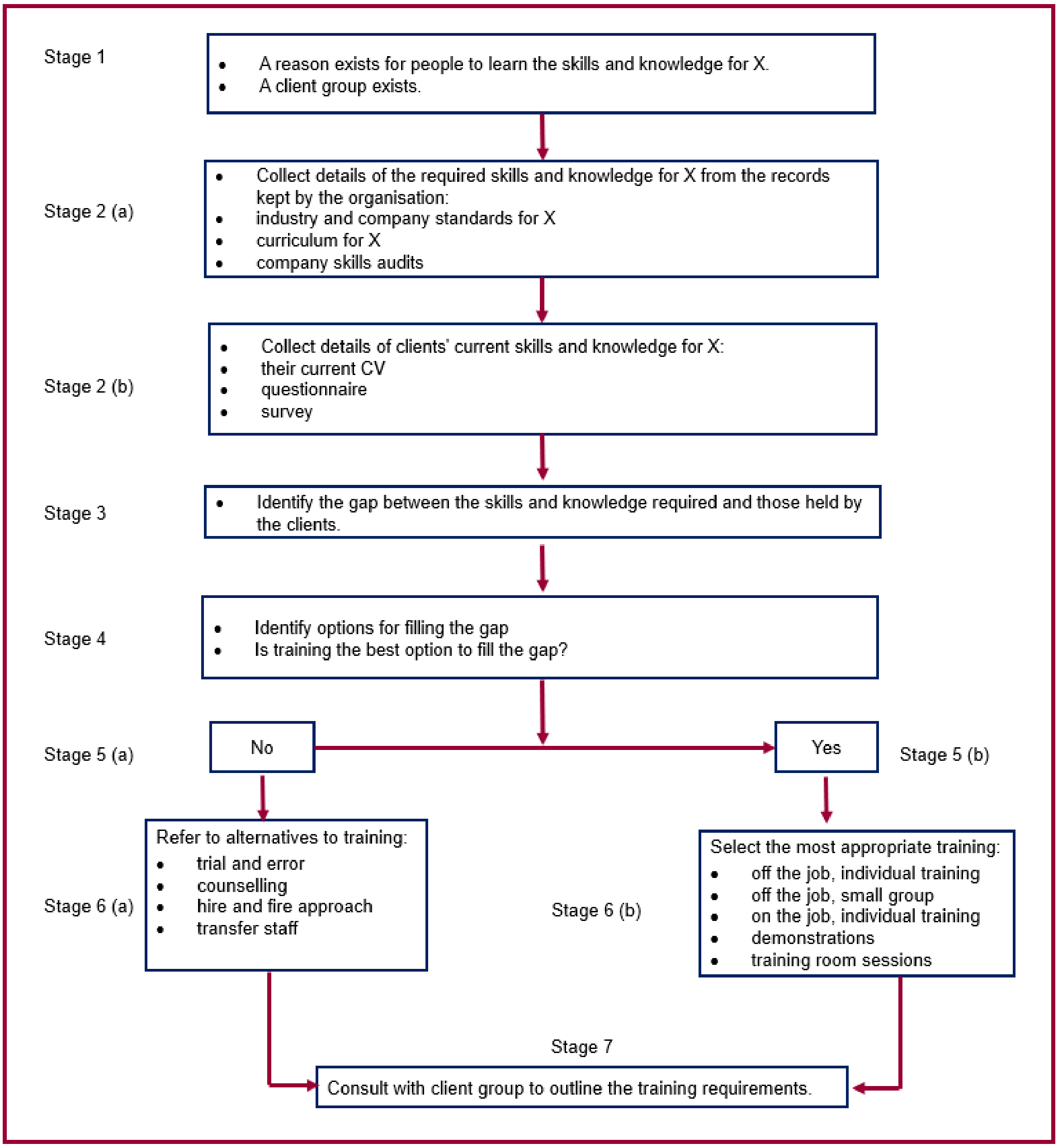
A course facilitator who works for this provider sees a need for people to learn skills in team leadership and conflict resolution in the workplace.

A potential participant in a training course sees a need to improve their workplace communication skills as part of their career advancement


These people can't.......
We want you to train
During the next month everyone needs to learn how to operate the
...... is being installed on the first of January. Arrange for all personnel to use it.
Teach this group all about... .....
I don't know how to.......

DETERMINING THE REQUIREMENTS OF THE CLIENT/ CLIENT GROUP

Let's use a flow chart to establish a context showing how to determine the skills training needs of a client group for skills and knowledge about X.



We will use X to stand for any vocational/technical occupation, unit of competence, task, topic or subject for which a worker has to develop skills and knowledge to do their job. For instance, X could stand for:

- oxy-acetylene welding;
- industrial sewing;
- prawn farming;
- word processing;

- hygienic food preparation;
- clerical work;
- professional cookery;
- and many, many more examples.

Stage 1: Identifying Vocational Needs and client groups

In Stage 1 the vocational need and the client group are identified. The flow chart shows the rest of the stages to go through to work out the following things will be covered in the next information sheet:

Stage 2 (a): The skills and knowledge required to be competent in X

Stage 2 (b): The skills and knowledge the learners currently have about X

Stage 3: The gap between all the learners' skills and knowledge.

Stage 4: Whether training is the best way to bridge the gap

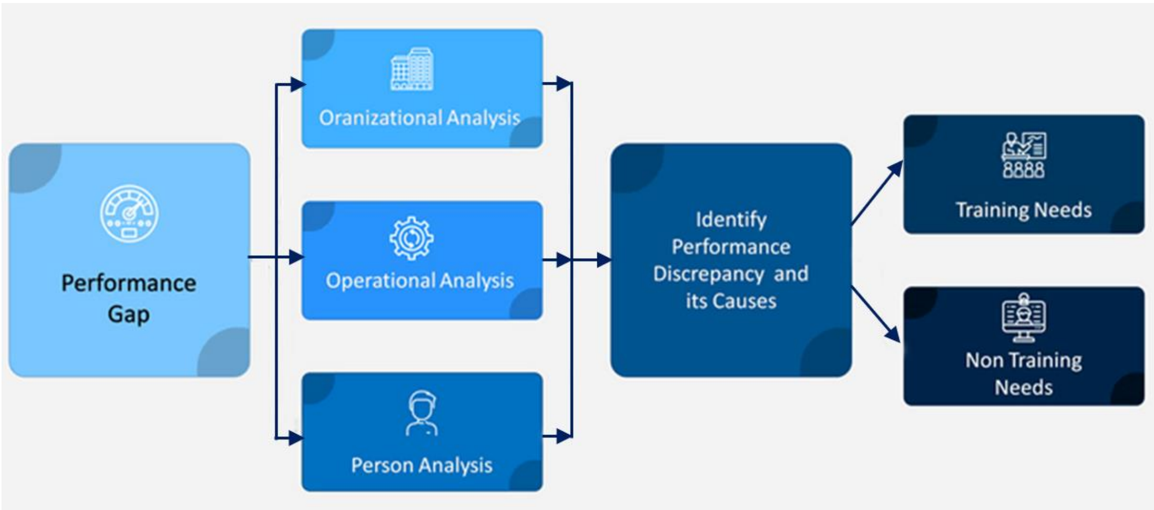
Stage 5: Make decision whether training is the best option to fill the gap yes or not.

Stage 6b: The most appropriate form of training

Stage 6a: Options other than training

Stage 7: Consultation with the client group about training requirements

TNA FRAMEWORK



4. TNA respondents / target group

Finding the right respondents can be tricky. At the core of any good TNA are two things – the right question and the right audience. In most surveys, a lot of importance is given to the questionnaire as it is far simpler to focus on the questions rather than respondent selection. However, the choice of right respondents has a noteworthy influence on the quality of research.

To determine ideal respondents, you have to focus on your research objectives. Your target audience should have direct involvement with the subject matter about which you're posing the questions.

The "right respondents" for TNA typically include individuals who will be impacted by the training, such as employees, management, or other stakeholders. Additionally, it may also include subject matter experts or trainers who can provide insight into the training needs and requirements. **It is important to consider the goals and objectives of the training, as well as the desired outcomes, to determine the most appropriate respondents for the TNA process.**

Find the "right respondents" for training need analysis (TNA)

Finding the right respondents for a Training Needs Analysis (TNA) is crucial to ensure that the analysis accurately captures the training requirements of the target group. Here are some steps to help you find the right respondents for a TNA:

Define the target audience: Start by clearly defining the target audience for the training. Determine the specific job roles, departments, or groups within the organization that will be the focus of the TNA. This will help you identify the appropriate respondents.

Consult with subject matter experts: Engage with subject matter experts (SMEs) within the organization who have a deep understanding of the roles and responsibilities of the target audience. They can provide valuable insights into the knowledge and skills required for effective performance.

Identify key stakeholders: Identify key stakeholders who have a vested interest in the training outcomes. This may include supervisors, managers, or team leaders who have direct knowledge of the performance gaps or skill deficiencies within their teams.

Conduct surveys: Develop a survey questionnaire tailored to gather information about the training needs of the target audience. Distribute the survey to the identified respondents, including employees from different job roles and hierarchical levels. Use a combination of open-ended and closed-ended questions to gather both qualitative and quantitative data.

Utilize focus groups: Organize focus groups consisting of employees from the target audience. These small group discussions can provide in-depth insights into specific training needs, challenges, and suggestions for improvement.

Analyze performance data: Review existing performance data, such as employee evaluations, performance metrics, and feedback, to identify areas where the target audience is struggling or underperforming. This data can guide the selection of respondents who can provide further insights into the underlying causes.

Consider random sampling: If your organization is large and it is not feasible to involve all employees from the target audience, consider using random sampling techniques to select a representative sample. Randomly select participants from different departments, locations, or levels to ensure diversity in perspectives.

Ensure confidentiality and anonymity: Assure respondents that their responses will be kept confidential and anonymous. This will encourage honest and open feedback, increasing the accuracy of the TNA.

Triangulate the data: After collecting the data from various sources, analyze and compare the findings to identify common themes, trends, and patterns. Triangulating the data from different respondents will help validate the training needs and prioritize them effectively.

By following these steps, you can find the right respondents for your Training Needs Analysis and gather comprehensive and reliable data to inform the development of appropriate training programs.

5. Sampling technique to find the "right respondents"

Sampling: Sampling is the process of selecting the group that you will actually collect data for your research. A researcher chooses or selects from a larger population using a pre-defined selection method. For example, if you are researching the opinions of students in your institute, you could survey a sample of 50 students.

There are two main types of sampling:

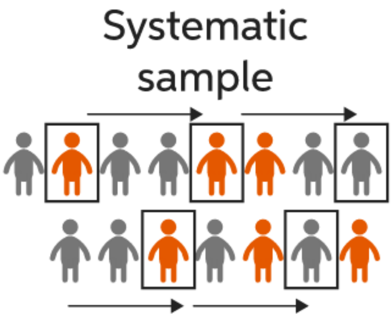
1. Probability sampling and
2. Non-probability sampling.

Probability sampling: Probability sampling means that every member of the target population has a known chance of being included in the sample.

- **Simple random sampling:** A simple random sample is one where every member of the population of interest has an equal probability of being selected, and the selection is done in a completely arbitrary way. You can select randomly from a population using a tool such as a number table or a computer, or by using a draw or lottery system.

- **Stratified random sampling:** Stratified random sampling involves dividing your population into groups (called strata) that are linked by a particular characteristic, such as income bracket or nationality. A random sample is taken from each group, and then these are pooled together to create a random sample of the entire population. The purpose is to make sure each group is represented in your sample.

- **Systematic random sampling:** Systematic sampling is a probability sampling method in which a random sample, with a fixed periodic interval, is selected from a larger population. The fixed periodic interval, called the sampling interval, is calculated by dividing the population size by the desired sample size.



After determining the right sample size, researchers assign a regular interval number they will use to select which members of the target population will be included in the sample.
The sample interval (k) is decided by dividing the population size (N) by the sample size (n).
If you had a list of 1,000 customers (your target population) and you wanted to survey 200 of them, your interval would be 5. This means that you would sample every **5th** person in your list of 1,000 customers.
1,000 / 200 = 5
To ensure a random sample, researchers use a random starting point within the range from 0-k. So, if k = 5 you might randomly start with the 2nd name in the list and then sample every 5th person (e.g. 2, 7, 12, 17 and so on).

- **Cluster sampling:** Cluster sampling is used when an individual sample is not available. It occurs when a random sample is drawn from a cluster of data, rather than individual samples. This sampling is done at various levels until they arrive at an individual value. For example, in geographical groups, a village can be a cluster.

Non-probability sampling: Non-probability sampling methods recognize that not everyone will have the chance to take a survey. This is the opposite of probability sampling. It is defined as a sampling technique in which the researcher selects samples based on the subjective judgment of the researcher rather than random selection. It is a less stringent method. This sampling method depends heavily on the expertise of the researchers. It is carried out by observation, and researchers use it widely for qualitative research.

- **Convenience sampling:** Convenience sampling is a non-probability sampling technique where samples are selected from the population only because they are conveniently available to the researcher. Researchers choose these samples just because they are easy to recruit, and the researcher did not consider selecting a sample that represents the entire population.

- **Consecutive sampling:** This non-probability sampling method is very similar to convenience sampling, with a slight variation. Here, the researcher picks a single person or a group of a sample, conducts research over a period, analyzes the results, and then moves on to another subject or group if needed. Consecutive sampling technique gives the researcher a chance to work with many topics and fine-tune his/her research by collecting results that have vital insights.

- **Judgmental or Purposive sampling:** In the judgmental sampling method, researchers select the samples based purely on the researcher's knowledge and credibility. In other words, researchers choose only those people who they deem fit to participate in the research study. Judgmental or purposive sampling is not a scientific method of sampling, and the downside to this sampling technique is that the preconceived notions of a researcher can influence the results. Thus, this research technique involves a high amount of ambiguity.

- **Quota sampling:** Hypothetically consider, a researcher wants to study the career goals of male and female employees in an organization. There are 500 employees in the organization, also known as the population. To understand better about a population, the researcher will need only a sample, not the entire population. Further, the researcher is interested in particular strata within the population. Here is where quota sampling helps in dividing the population into strata or groups.

- **Snowball Sampling:** While this method is not common for a lot of surveys, snowball sampling is often put to use when a researcher needs to target specific groups that are hard to find or reach, or who may be hesitant to speak with them. Often, the topic is sensitive or personal, such as studies about illegal immigrants, drug users, or those with rare health conditions.

6. Resources for Training Need Analysis (TNA)

Training Need Analysis (TNA) resources refer to the tools, methods, and techniques used to identify and evaluate the training needs of an organization or individual. Some common **TNA resources include:**

- People
- Finances
- Business/organizational needs
- Equipment and technology
- Transport
- Analyzing software

Here are some other common resources for TNA:

Surveys and questionnaires: Design and distribute surveys or questionnaires to gather quantitative and qualitative data about the training needs. You can use online survey tools like SurveyMonkey, Google Forms, or Qualtrics to create and collect responses.

Interviews: Conduct individual or group interviews with employees, managers, and stakeholders to gather in-depth insights into their training requirements. Structured or semi-structured interviews can help gather qualitative data and identify specific skill gaps.

Performance data and metrics: Analyze existing performance data, such as employee evaluations, performance appraisals, productivity metrics, error rates, and customer feedback. This data can indicate areas where training is needed to improve performance.

Job/task analysis**:** Conduct a thorough analysis of job roles and tasks to identify the knowledge, skills, and competencies required for effective performance. This analysis can be done through observations, interviews, or job analysis questionnaires.

Focus groups: Organize focus groups with representatives from different departments or teams to facilitate discussions on training needs. This collaborative approach can generate valuable insights, identify common challenges, and prioritize training requirements.

Training records and evaluations: Review existing training records and evaluations to identify gaps in employee skills and competencies. Analyzing feedback from previous training sessions can highlight areas that need further development.

Industry benchmarks and best practices: Research industry standards, benchmarks, and best practices related to the specific roles or skills you are targeting. This can help identify areas where your organization might be falling behind or where additional training is needed to keep up with industry trends.

Feedback and suggestions: Encourage employees to provide feedback and suggestions regarding their own training needs and areas where they feel additional support would be beneficial. This can be done through suggestion boxes, employee forums, or online collaboration platforms.

External experts and consultants: Engage external training consultants or experts who have experience in conducting TNAs. They can provide specialized knowledge, expertise, and guidance in identifying training needs and developing appropriate training programs.

By utilizing these resources, you can gather comprehensive data and insights to conduct a thorough Training Needs Analysis and ensure that the training programs implemented address the specific needs of your organization and its employees.

Self-Check Sheet 1.1

1. What is Training Need Analysis (TNA) implies?

2. Write down the major differences between Organizational Analysis, Task Analysis and Person Analysis

3. What are the benefits of TNA?

4. How will your TNA help in developing a training program?

Answer Key 1.1

1. What is Training Need Analysis (TNA) implies?
   Answer: A training needs analysis (TNA), also known as a training needs assessment, is a systematic process that organizations use to determine the gap between the current and desired knowledge, skills, and abilities of employees.

   Training need analysis can be described as the general process through which the organization or one of its parts:

   a. **Identifies** the competence needed for the success of its business and operation,
   b. **Specifies** the range, extent, and aim of training action needed,
   c. **Analyses** how best the training needs can be met.

2. Write down the major differences between Organizational Analysis, Task Analysis and Person Analysis
   Answer: Major differences between Organizational Analysis, Task Analysis and Person Analysis:

Organizational Analysis	Task Analysis	Person Analysis
Environment, Strategies and resources to determine where to emphasize training.	**Activities needed to be performed** in order to determine the KSAs needed where to emphasize training.	**Performance, Knowledge and skills** in order to determine who needs training.

3. What are the benefits of TNA?
   Answer: Benefits of TNA are:
   - TNAs enable you to identify knowledge and technical skills gaps before they become a problem to the business
   - Helps to determine who what of who needs to be trained
   - Highlights training you may not have considered
   - Enables training to be focused on the right areas
   - Helps you to priorities training needs
   - They help you to make efficient annual planning for training
   - Cost optimization for training
   - Target the right people

4. How will your TNA help in developing a training program?
   Answer: TNA help us to identify knowledge and technical skills gaps, who needs to be trained, training to be focused on the right areas, to make efficient and cost-effective training plan and Provides insight into new training opportunities.

Activity Sheet 1-1:

Identify organization's/clients' training needs

Task-1.1 Consult with the clients to:

- Confirm objectives of the training
- Confirm scope of the training
- Determine expected outcome of the training.

Task-1.2 Identify resources required for the training needs analysis (TNA)

- Determine qualified trainers required
- Identify equipment and technology required
- Identify budget required

Specification Sheet 1.1

A. Policy and curriculum documents required

- National Technical and Vocational Qualifications Framework (NTVQF)
- National Skills Development Policy
- National Quality Assurance Document
- Competency Standard Document

B. Tools and Materials required

- Notebook
- Handbook
- Office Stationeries

Learning Outcome 2: Develop Instruments for Training Needs Analysis

Assessment Criteria:

1. Reliable and appropriate methods for collecting information and data are selected.
2. Method for collecting information and data on current, emerging and future training needs is selected with concerned person/s
3. Research plan is developed and finalized with concerned person/s
4. TNA instruments are prepared according to prescribed format
5. TNA instruments are validated

Content:

1. Method for collecting information and data on current, emerging and future training needs
2. Develop and finalize research plan
3. TNA instruments preparation process
4. Validation process of TNA instrument

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 2: Develop instruments for training needs analysis

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Conducting Training Needs Analysis.	1. Instructor will provide the learning materials "**Conducting Training Needs Analysis"**
2. Read the Information sheet/s	2. Information Sheet No:2 Develop instruments for training needs analysis
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 2 Develop instruments for training needs analysis Answer key No. 2 Develop instruments for training needs analysis
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:2- Develop instruments for training needs analysis Specification Sheet: 2 – Develop instruments for training needs analysis

Information Sheet 2.1: Develop Instruments for Training Needs Analysis

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Select method for collecting information and data on current, emerging and future training needs
2. Develop and finalize research plan
3. Prepare TNA instruments
4. Validate TNA instrument

1. Data collection method for TNA

The selection of data collection method for TNA based on the job type of the employee. And the analysis that needs to identify skills gaps. Therefore should determine the quality of the current employees' performance. And it is necessary to collect data reflecting areas of strength and weakness.

There is a variety of training needs analysis methods. Each with its strengths and weaknesses. Not every method is appropriate for every company. Choose the method or methods that best suit your goals. Some of the most popular tools include:

- Questionnaires
- Individuals Interviews
- Focus Groups Discussion (FGD)
- Direct Observation/On the job observation Examining work
- Key Informant Interviews (KII)
- Competitor analysis
- Customer Feedback/Input from the working group
- Assessments

1. Questionnaires

Questionnaires are an effective and straightforward quantitative survey tool in which employees are handed a set of written questions with limited answer options. A well-designed questionnaire is distributed among the employees to understand their training needs of the employees. It can be managed in several ways, for example, via social media platforms, the Internet, email, or in person. Thus, these limited responses can be linked to numeric scores and used for objective analysis. Additionally, to improve the survey's credibility, employees can submit answers anonymously . Because anonymous surveys often give employees the confidence to share their honest opinions.

Pros	Cons
Reach a large number of employees quickly	May not go deep into the reasons behind persistent issues
Inexpensive	Need enough time to develop an effective and detailed questionnaire
In case of anonymity, responses are given without fear and hesitation	Accurate responses might not be forthcoming
Easy to analyze, summarize, and report	

2. Individuals Interviews

Individuals interviews allow you to collect data on performance gaps while talking with each employee or a group of employees. This can be formal or informal. You can conduct interviews in person or by phone, at work locations, or anywhere. Sometimes, you can interview the representative of the work group. Furthermore, the interview may be conducted in person or virtual, individually or in small groups, to determine how individuals or groups of employees prefer learning new skills or information.

Pros	Cons
Easy to identify performance issues of a group/team and explore possible solutions	Can be time-consuming
Immediate feedback is possible	Difficult to analyze and quantify results
In case of anonymity, responses are given without fear and hesitation	Need an experienced interviewer to generate data without making the interviewee self-conscious
Easy to analyze, summarize, and report	In a group, reserved employees might shy away from voicing their opinions

3. Focus Groups Disscussion (FGD)

A Focus Group Discussion (FGD) is a qualitative research method and data collection technique in which a selected group of people discusses a given topic or issue in-depth, facilitated by a professional, external moderator.

A focus group discussion (FGD) is a good way to gather together people from similar backgrounds or experiences to discuss a specific topic of interest.

There are three major components of a focus group: moderator, participants, and observers. The moderator poses questions, the participants discuss the topic, and observers watch or listen to the discussion.

Emphasis on:

- Deep insight
- Gain detailed information,
- How they view their current jobs
- How satisfied they are from their current performance and
- The required needs and possibility of suitable future training interventions.

Focus groups typically have these features:

- 4 (four) to 10 (ten) participants meeting for up to two hours
- A facilitator or facilitators to guide discussion using open-ended questions
- An emphasis on the group talking among itself rather than to the facilitator
- Discussion is recorded and then transcribed for analysis by researchers

The main focus of the discussion is on the following areas:

- Training Methodology
- Planning Assessment
- Training Delivery
- Conduct training and assessment
- Training content coverage
- Certification process
- Workshop
- training duration

4. Direct Observation/On the job observation

As the name suggests, this involves monitoring employee performance. Monitors usually carry a checklist that they follow while observing employees.

Direct observation includes observing the technical methodology used to perform the job, the functional aspects of the job, and the behavioral aspects of the employee. This can tend to become subjective, and is possible only in a formal work setting. Training managers or supervisors watch employees on the job to identify performance gaps in their skills/behavior. They also provide qualitative and quantitative feedback on the employee's performance and identify potential knowledge and skill gaps.

The trainer or another person observes the client carrying out work tasks to find out whether they are already competent in certain skills and knowledge. They may observe the client in an actual work situation or a video-recorded situation. The observer keeps a record of the things they see by using a checklist, tally sheet, question/ response sheet, fill in tables, etc.

Observation is appropriate for collecting TNA data from respondents when:

- Can be technical, functional or behavioral.
- Can yield qualitative or quantitative feedback.
- May be unstructured
- Generate real-life data

Pros	Cons
Less interruption to regular workflow	Feedback can be unstructured; more anecdotal
Helps generate real-life data	Need an impartial, expert observer with process and domain knowledge (personal feelings of the observer can cloud judgement)
Provide qualitative and quantitative feedback	Employees may feel “spied on”; can be obtrusive
	Sometimes, results may deviate when employees know that ‘observation is ON’
	Very time consuming and requires much close attention.

5. Key Informant Interviews (KII)

Key informant interviews are qualitative in-depth interviews with people who know what is going on in the community. The purpose of key informant interviews is to collect information from a wide range of people—including community leaders, professionals, or residents, manager of the sampled Public, Private and NGO training institutes—who have first hand knowledge about the community. Key Informant Interviews (KII) are conducted with the administrators of public, private and NGOs and following information are usually gathered:

- developing transparency and accountability mechanism for the trainers and assessors.

- most of training institutes are imparting training both on CBT and traditional courses simultaneously with the same trainers. So, training delivery efficiency of trainer decreasing and reducing training effectiveness.

6. Competitor Analysis

It is essential to know where you stand in your field. How is your closest competitor? Are their sales numbers higher? Better customer satisfaction ranking? If so, what are they doing to make it happen? This means you can keep your business model the same, but your employees may need to acquire and learn new and advanced skills in a particular field that will make them more competitive. Thus, the appropriate training program is designed for that.

7. Customer Feedback/Input from the working group

This is a very important way to gain insights on the training needs of your customer-facing teams – be it the sales technicians, service desk, or more. You get it straight from the horses' mouth! Performance deficiencies can't be hidden with customer feedback. Most service industry failures are identified using customer feedback. Direct feedback from the client indicates the specific work area that needs improvement. Often customer feedback includes indications about the skills and knowledge gaps of the organization's employees. This calls for addressing these gaps through specialized training programs.

Following information can be gathered from the Working Group/ Customer:

- whether trainers and assessors need in-depth training on Competency Based Training and Assessment;
- both trainers and assessors should be qualified and/or certified to ensure whether they possess up to date knowledge and skills on CBT&A
- whether the trainers and assessors must have adequate technical skills aligned to the updated curriculums / Industry needs for their sector.
- whether trainers may need upskilling training to stay abreast of the latest developments in their fields

whether trainers and assessors have good knowledge and skills in using computers.

Pros	Cons
Can make improvements with constructive feedback	Low response rates
Get valuable insights about your target learners	May not give enough time for feedback
	Need responses from a large customer demographic to get the true picture

Not all of these tools may be appropriate for all organizations. Therefore, using the right mix of data collection tools for TNA is essential according to the organization's needs. Moreover, the mere collection of data is optional, and data needs to be studied objectively and comprehensively to make effective training design and implementation decisions.

	Level of Performance and Training Information		
Method	**Individual**	**Team**	**Organization**
Observation	★★★	★	
Questionnaires	★★	★★	★
Interviews (by trainer/ assessor with those doing the work)	★★★	★★	★
Interview (Critical incident technique)	★★	★	★

Key Indicative Effectiveness of Methods:

★ Not very appropriate
★★ Can be customized to provide useful information
★★★ Very appropriate

Feedback of trainees through questionnaires

Written questions may be given to the learner who writes their answers on to the question sheet. To make them more interesting, they can be asked in different ways. Such as:

- **True/false:**

  A commonly used chemical cleaner for eradicating downy mildew is sodium chlorate. True/False

- **Multiple choice items:**

  The red light will appear when:
    - the safety switch has been activated
    - the operator fails to activate the safety switch
    - the safety switch has failed to function

- **Fill in a missing word:**

  Before you shift the incoming spare parts, you need to check them against a .... note.

- **Short answer What if questions:**
    - What would you do if the compressor suddenly stopped?
    - What steps should be taken if you suspect a customer has shoplifted an item?

Advantages

- The questionnaires can be used over and over.
- The clients' answers can be kept for future reference.
- It gives the client a chance to think about their answer for a while.
- It can find out the clients' direct knowledge or comprehension of a subject.

Disadvantages

- It's time consuming to make up the questionnaires.
- It's difficult to know whether the information in the answers will translate into action in the workplace.
- Clients with limited literacy may have difficulties.

2. Develop and finalize research plan

Developing a research plan involves careful planning and organization to ensure that your research study is well-designed and effectively addresses your research objectives. Here are some steps to guide you in developing a research plan:

Define your research objectives: Clearly articulate the purpose and goals of your research. Determine the specific research questions or hypotheses that you want to address. This will provide a clear focus for your study.

Review existing literature: Conduct a thorough literature review to familiarize yourself with the existing knowledge and research related to your topic. This will help you identify gaps in knowledge and provide a theoretical framework for your study.

Determine your research methodology: Select the appropriate research methodology that aligns with your research objectives. Decide whether you will use qualitative, quantitative, or mixed methods. Consider the data collection techniques, sampling strategy, and data analysis methods that will best suit your research.

Develop a research design: Design your study by outlining the overall structure and procedures. Determine the variables or constructs to be measured, the study population or sample, and the timeline for data collection.

Develop a data collection plan: Specify the data collection methods and tools you will use to gather the required information. This may involve designing questionnaires, interview protocols, or observation guidelines. Consider any ethical considerations and obtain the necessary approvals or permissions for data collection.

Plan data analysis: Determine the analytical techniques you will employ to analyze your data. This may include statistical analyses, qualitative coding, or thematic analysis, depending on your research methodology and objectives. Familiarize yourself with the appropriate software or tools needed for data analysis.

Consider resources and logistics: Assess the resources, funding, and logistical requirements for your research. Determine the timeline for each research phase and allocate resources accordingly. Consider any potential challenges or limitations and develop strategies to address them.

Draft a research proposal: Compile all the elements of your research plan into a comprehensive research proposal. This document will outline your research objectives, methodology, data collection procedures, analysis plan, and expected outcomes. It serves as a blueprint for your study and can be shared with stakeholders or funding agencies for review and approval.

Seek feedback and revisions: Share your research plan with colleagues, advisors, or mentors to gather feedback and suggestions for improvement. Revise your plan based on the feedback received to enhance the quality and rigor of your research design.

Implement and monitor your research plan: Once your research plan is finalized, begin implementing your study according to the outlined procedures. Monitor the progress of data collection, make adjustments as needed, and stay organized to ensure the successful execution of your research.

Remember, developing a research plan requires careful thought, consideration, and attention to detail. By following these steps, you can create a robust and well-structured research plan that guides your study effectively.

3. Preparation of TNA Instruments

All the questionnaires are developed in English as all the selected respondents possess good understanding in English. It is rerecommended in the case of foreign trainers, assessors, trainees and other respondents' researcher should provide translated questionnaire in foreign language contexts and administer questionnaires in the original language of participants.

TNA questionnaire is comprised of two parts:

The first part of the questionnaire (**General Information)** includes questions regarding personal data, age, sex, and working experience in Competency Based Training and Assessment and the second part of the questionnaire **(Specific Information)** includes data on trainings attended and trainings needed. The objective of the questionnaire was to provide as with correct information of needed trainings; this will help us in planning and delivering of appropriate training to assessors.

A combination of both qualitative and quantitative data can be collected through the TNA Questionnaire. Self-assessment forms may be developed in consultation with the national and international consultants working for training and assessment process. The objective of such questionnaire is to assess existing trainers and assessors' current individual capacity level and roles/responsibilities and the required skills to carry out their assigned tasks efficiently and confidently.

From the responses of the questionnaire various types of information can be obtained. Such as:

1. Responses on Training Course Materials
2. Responses on Training Methods
3. Responses on Trainer's Attributes
4. Responses on Advice and Guidance
5. Responses on Training Duration
6. Responses on Training Facilities
7. Responses on Lab, workshop and Equipment
8. Responses on Training Consumables
9. Responses on IT Facilities
10. Responses on Support Service

Questionnaires should be avoided

In TNA questionnaires, there are certain types of questionnaires that should generally be avoided due to potential biases, limitations, or ethical concerns.

Here are some examples:

Leading or biased questions: These questions are designed to sway respondents towards a particular answer or opinion. They can introduce bias and compromise the validity of the data collected. It is important to ask neutral and open-ended questions to gather unbiased responses.

Double-barreled questions: These questions combine multiple ideas or concepts into a single question, making it difficult for respondents to provide a clear and accurate answer. It is better to break down complex ideas into separate questions to ensure clarity.

Ambiguous or vague questions: Questions that are unclear or open to interpretation can lead to inconsistent or unreliable responses. It is important to use precise and specific language to avoid confusion and ensure respondents understand the question in the same way.

Sensitive or invasive questions: Asking highly personal or intrusive questions can make respondents uncomfortable and unwilling to provide honest responses. It is crucial to respect the privacy and sensitivity of respondents and avoid questions that might cause distress or violate ethical boundaries.

Socially desirable questions: These questions are designed to elicit socially desirable responses rather than genuine opinions or behaviors. Respondents may feel pressured to provide answers that they believe are more acceptable or desirable, leading to biased or inaccurate data. It is important to create a non-judgmental and confidential environment to encourage honest responses.

Overly long or complex questions: Lengthy or complex questions can confuse respondents and make it challenging for them to provide accurate answers. It is recommended to use concise and straightforward language to ensure clarity and ease of response.

Remember, the appropriateness of questions depends on the specific research objectives and the target population. It is crucial to thoroughly pilot test and review the questionnaire before conducting the actual research to identify and address any potential issues.

A sample Training Needs Analysis (TNA) Questionnaire for Trainers and Assessors

Sample Training Needs Analysis (TNA) Questionnaire for Trainers and Assessors is given below which can be customised and used where suitable for serving the purpose.

TNA QUESTIONNAIRE

General Information

1. Name of respondent : . . . .

2. Mobile Number : . . . .

3. Your Occupation (Work):

a) Non-worker
b) Industry worker
c) TVET Trainer
d) Others

4. Age range:

a) 16-25
b) 26-35
c) 35-up

5. Sex : ☐ Male ☐ Female

6. Educational Qualification:

a) High School graduate
b) College level
c) College graduate
d) Graduate Studies

Specific Information

Sl.No.	Please rate the following:	Excellent	Good	Satisfac-tory	Needs improve--ment	Not Satisf-actory
	Your earlier experience with the Assessment training provided to you					
1	The content of your earlier training course materials on assessment	☐	☐	☐	☐	☐

2	Methodology and Techniques used during training delivery	☐	☐	☐	☐	☐
3	Trainers' attributes (Knowledge, Skills, Attitude) and organizing capacity of the trainer	☐	☐	☐	☐	☐
4	Advice and guidance, you had on career as an assessor	☐	☐	☐	☐	☐
5	The duration of training was sufficient	☐	☐	☐	☐	☐
6	The facilities for disabled and disadvantaged trainees	☐	☐	☐	☐	☐
7	The specialists' rooms/Labs/ workshops furnished with equipment, tools furniture for training & assessment	☐	☐	☐	☐	☐
8	Availability of training consumables and assessment materials	☐	☐	☐	☐	☐
9	The IT facilities for your course	☐	☐	☐	☐	☐
10	The support you received in updating your assessment records	☐	☐	☐	☐	☐

Sl. No.	**Share your thoughts and suggestions on the following:**
11	List in order of importance the main tasks of your job as an assessor
12	List the skills, knowledge, abilities or experience necessary to do your job effectively
13	Are you given enough information about assessments that you need to know and carry out?
14	Is sufficient preparation time available to you?
15	Is sufficient infrastructure available to enable you to carry out assessments effectively?

16	Describe briefly the process that you follow for an assessment
17	Briefly list key 5 concerns or issues that you face while conducting assessments
18	What are your 5 top most suggestions to improve the working environment and help you conduct assessments effectively
19	What support do you require as an assessor to be effective at work?
20	List out key areas of training that you require to become an effective assessor
21	Have you been provided opportunities to acquire knowledge and skills needed to carry out assessments effectively?
22	List the training you attended on assessment
23	How long have you worked for the organization?
24	Give brief details of any qualification you have.
25	Any other comments

Thank you for your time

Signature:	
Date:	

You are requested to fill in the formats and send the questionnaire to your trainer email address:

4. Validation of TNA Instruments

Piloting the questionnaire

A pilot study, also called a "feasibility" study, is a pivotal process and allows for the checking of suitability, validity, and practicality of any research tool (Neuman, 2006). It is the testing, refining, and re-testing of survey instruments in the field to make them ready for your full survey. It is a vital step to ensure that you understand how your survey works in the field, that you are collecting accurate, appropriate data. Therefore, after finishing the first draft of the questionnaire and before administering it to the true sample, a pilot study is conducted. The questionnaire is to be first piloted at least by four trainers and assessors those are in practice of CBT&A.

The first draft of the questionnaires can be given to a small sample (10) participants to check the clarity of the statements and their comprehension. The respondents are to be also asked to provide any comments and/or any suggestions to improve the questionnaire. The responses resulted in a number of comments, and most of these are to be taken into consideration before finalising the questionnaires. According to the views of the participants, minor changes are to be made to the wording of some of the questions to make them more understandable. The feedback helped in enhancing the questionnaire at various points.

Piloting a questionnaire, which refers to the process of testing a questionnaire on a small sample of respondents before administering it to the target population, offers several benefits. Here is a list of advantages:

- Identifies flaws and ambiguities
- Tests question relevance
- Assesses respondent comprehension
- Evaluates question sequencing
- Estimates completion time
- Tests response formats
- Assesses measurement reliability and validity
- Improves overall quality
- Enhances respondent engagement
- Increases survey response rates
- Improving questionnaire readability
- Refining questionnaire
- Enhancing response rate

In summary, piloting a questionnaire is a valuable step in the research process that allows researchers to refine and improve the questionnaire design, enhance data quality, and ensure a positive respondent experience.

Validate TNA instruments

Validation is the process of evaluating the quality of a survey or questionnaire, and ensuring that it measures what it is supposed to measure. The goal of validation is to ensure that the survey or questionnaire is accurate, reliable and suitable of a measurement instrument or tool which effectively measures what it is intended to measure. It involves assessing the validity and reliability of the instrument to ensure trustworthy and meaningful data collection.

Validation is often used to discover weak points in the questionnaire design in terms of validity and reliability, and the following stages are carried out to achieve this:

1. In relation to the first stage of the pilot study, in order to receive helpful and constructive feedback regarding the questionnaire, draft copies of the questionnaires are to handed over to Senior trainers and assessors and colleagues having (PhD) who have an adequate understanding and knowledge on developing research questions.

2. The critical discussion is to be held with all: Senior trainers and assessors and colleagues. The feedback received provided several useful suggestions and insights that helped in enhancing the questionnaire at various points and some changes are to be made to the wording of individual questions and the layout of the questionnaire, which needs to be taken into consideration in the final copies.

3. The questionnaires are edited first in English. The accuracy editing has to be checked and approved by the authority.

4. The final draft of questionnaires are prepared and printed with an appropriate covering letter explaining the aim and the important of study, encouraging participations to cooperate by providing accurate data, urging the return of the completed questionnaires, and assuring them of the confidentiality of the information. The questionnaires were subsequently widely distributed, and the typical response time to the questionnaires will be approximately week to complete.

5. Corporate training departments through departmental directors distributed questionnaires. The researcher has to personally oversee the distribution and become able to introduce the questionnaire and explain any uncertainty about questions, and a phone number to be provided for contacting in case of further queries.

6. Questionnaire reliability: Reliability of a measure is an indication of the stability and consistency of the instrument. Reliability refers to the extent to which a measuring procedure provides the same results on repeated trials.

Sample Check list for validation of developed TNA Instrument

Validation area	Validation Panel	Comments
Research question and study design		
Was a questionnaire the most appropriate method?	YES □ NO □	
Validity and reliability		
Have claims for validity been made, and are they justified? (Is there evidence that the instrument measures what it sets out to measure?)	YES □ NO □	
Have claims for reliability been made, and are they justified? (Is there evidence that the questionnaire provides stable responses over time and between researchers?)	YES □ NO □	
Format		
Are example questions provided?	YES □ NO □	
Did the questions make sense, and could the participants in the sample understand them? Were any questions ambiguous or overly complicated?	YES □ NO □	
The TNA tool is written in simple language and it explains the TNA requirements to the trainee clearly.	YES □ NO □	
There are clear links between the TNA questions/ activities and the objective.	YES □ NO □	
The TNA tool assesses the trainee’s ability to meet competency at the NVTQ level 2 specified in the of UoC.	YES □ NO □	
Time allowed for TNA is adequate.	YES □ NO □	
Piloting		
Was the questionnaire adequately piloted in terms of the method	YES □ NO □	
Are details given about the piloting undertaken	YES □ NO □	
Distribution, administration and response		
Was the method of distribution and administration reported	YES □ NO □	
Were the response rates reported, including details of participants who were unsuitable for the research or refused to take part?	YES □ NO □	

Coding and analysis		
What sort of analysis was carried out and was this appropriate? (e.g. correct statistical tests for quantitative answers, qualitative analysis for open ended questions)	YES ◻ NO ◻	
VALIDATION PANEL RECOMMENDATIONS		

The information has been modified as per recommendations YES ☐ NO ☐

☐ **Validation pending:** Please review feedback and make revisions.

☐ **Validation complete:** Please submit final edited version to team leader

TNA TOOLS VALIDATION CONFIRMATION

Lead Validator

Name:		Signature:	
Position:		Date:	

Validators

Name:		Signature:	
Position:		Date:	

Name:		Signature:	
Position:		Date:	

Self-Check Sheet 2.1

1. List down 5 most popular data collection method.

2. Where observation is appropriate for collecting TNA data from respondents?

3. Why piloting is important before finalizing the TNA Questionnaire?

4. Why TNA instruments are validated?

5. What are the key feathers of FGD?

Answer Key 2.1

1. List down 5 most popular data collection method.
   Answer: 5 most popular data collection method are:
   - Questionnaires
   - Individuals Interviews
   - Focus Groups Discussion (FGD)
   - Direct Observation/On the job observation Examining work
   - Key Informant Interviews (KII)
   - Competitor analysis
   - Customer Feedback/Input from the working group
   - Assessments

2. Where observation is appropriate for collecting TNA data from respondents?
   Answer: Observation is appropriate for collecting TNA data from respondents where:
   - Can be technical, functional or behavioral.
   - Can yield qualitative or quantitative feedback.
   - May be unstructured
   - Generate real-life data

3. Why piloting is important before finalizing the TNA Questionnaire?
   Answer: Piloting is important before finalizing the TNA Questionnaire to checking of suitability, validity, and practicality of TNA Questionnaire. It is a testing tool to identify problems before implementing the full survey.

4. Why TNA instruments are validated?
   Answer: TNA help us to identify knowledge and technical skills gaps, who needs to be trained, training to be focused on the right areas, to make efficient and cost-effective training plan and Provides insight into new training opportunities.

5. What are the key features of FGD?
   Answer: Focus groups typically have these features:
   - Four to ten participants meeting for up to two hours
   - A facilitator or facilitators to guide discussion using open-ended questions
   - An emphasis on the group talking among itself rather than to the facilitator
   - Discussion is recorded and then transcribed for analysis by researchers

Task Sheet 2.1

TASK SHEET 2.1
Title: Develop a TNA Questionnaire
Performance Objective: At the end of this task, the trainee should be able to: 1. Identify TNA tools to use 2. Develop a TNA tools
A. Supplies Documents ▪ Sample format of a TNA Questionnaire ▪ Copy of existing Course Accreditation Document or competency standard (related to your qualification) **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: • Identify the list of objectives that you would want to pursue in accordance with the TNA abstract and your respondent's profile. • Draft questions to ask to get the relevant data for each of the TNA objective • Identify the TNA tools to use for each of the questions and TNA objectives and draft the tool • Customize the sample TNA Questionnaire format as per your requirement • Arrange the questions chronologically • Check carefully the content of the questionnaire.

Specification Sheet 2.1

A. Supplies Documents

- Sample format of a TNA Questionnaire
- Copy of existing Course Accreditation Document or competency standard (related to your qualification)

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Learning Outcome 3: Administer training needs analysis

Assessment Criteria:

1. Orientation regarding TNA is conducted.
2. Instruments are disseminated to the identified respondents.
3. Filled up TNA instruments are gathered in accordance with selected procedures appropriate method

Content:

1. Orientation regarding TNA
2. Dissemination of TNA instrument
3. Method of filling up TNA instrument

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 3: Administer training needs analysis

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Conducting Training Needs Analysis.	1. Instructor will provide the learning materials "**Conducting Training Needs Analysis**"
2. Read the Information sheet/s	2. Information Sheet No:3-1 Administer training needs analysis
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 3-1 Administer training needs analysis Answer key No. 3-1 Administer training needs analysis
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:3-1 Administer training needs analysis Specification Sheet: 3-1 Administer training needs analysis

Information Sheet 3.1: Administer training needs analysis

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Conduct orientation regarding TNA
2. Disseminate instruments to the identified respondents.
3. Gather filled up TNA instruments in accordance with selected procedures appropriate method

1. Conduct orientation regarding TNA

Conducting an orientation session regarding a Training Needs Analysis (TNA) is crucial to ensure that participants understand the purpose, process, and importance of the TNA. Here's a step-by-step guide on how to conduct an orientation session for TNA:

Define the Objectives: Clarify the objectives of the orientation session. Determine what participants should know and understand about the TNA process by the end of the session. This may include explaining the purpose of the TNA, its benefits, and their role in the process.

Prepare Materials: Create a presentation or handout that provides an overview of the TNA process. Include key points, **visuals**, and examples to make the information more engaging and understandable. Prepare any necessary worksheets or activities to facilitate participants' understanding.

Introduce the TNA: Begin the session by introducing the concept of a TNA and its significance. Explain how a TNA **helps** identify training needs, bridge skill gaps, and improve performance within the organization. Emphasize the importance of their participation and input.

Explain the Process: Provide a step-by-step overview of the TNA process, including the various stages involved. **Explain** how data will be collected, analyzed, and used to inform training decisions. Break down the process into clear and manageable steps, highlighting the role of participants at each stage.

Discuss Participant Expectations: Communicate the expectations for participants' involvement in the TNA process. **Explain** how their input will be collected, whether through questionnaires, interviews, or focus groups. Emphasize the importance of honest and accurate responses to ensure effective analysis and decision-making.

Address Privacy and Confidentiality: Discuss any privacy and confidentiality considerations related to the TNA. **Assure** participants that their responses will be treated with confidentiality and anonymity, if applicable. Address any concerns they may have regarding the confidentiality of their feedback.

Answer Questions: Allow participants to ask questions throughout the orientation session. Encourage them to seek clarification on any aspect of the TNA process, their role, or the expected outcomes. Be **prepared** to provide clear and concise responses to ensure everyone understands the information.

Provide Resources: Share additional resources, such as guidelines, templates, or reference materials, to support **participants** in completing their part in the TNA process. This can include sample questionnaires, interview guides, or instructions on using online survey tools.

Engage in Discussion: Encourage participants to share their thoughts, insights, and concerns related to the TNA process. **Facilitate** a discussion where participants can provide feedback, ask questions, and share their experiences or suggestions for improvement.

Recap and Next Steps: Summarize the key points discussed during the orientation session. Highlight any action items or **deadlines** for participants, such as completing questionnaires or participating in interviews. Provide clear instructions on what they need to do next and whom to contact for assistance.

Follow-Up and Support: Offer ongoing support and guidance to participants as they engage in the TNA process. Be **available** to answer questions, address concerns, and provide any necessary assistance throughout the data collection phase.

By conducting a comprehensive orientation session, you can ensure that participants have a clear understanding of the TNA process, their role in it, and the importance of their contributions. This will help foster engagement and maximize the effectiveness of the TNA.

Administer TNA Instrument

You can administer the questionnaire online or on paper, depending on your preferences and the needs of the participants. Be sure to provide clear instructions and explain the purpose of the questionnaire.

1. **Introduction**
   - It allows the facilitator to greet and welcome the respondents
   - It provides the description about the facilitator
   - It allows the facilitator to set the mind of the respondents about what will happen during the administration of the questionnaire
   - It allows the facilitator to determine whether the target number of respondent is attained.
2. **TNA Overview**
   - It gives the respondents idea about the background of the activity and reasons for conducting it.

3. **Administration of the TNA questionnaire**
   - This pertains to the actual administration of the TNA questionnaire, which covers the distribution of the questionnaire and providing the respondents of the instructions on how to answer the questionnaire Forms.

   There are several methods you can use to administer a Training Needs Analysis (TNA) questionnaire, depending on your organization's preferences and available resources. Here are some common methods:
   - Online Surveys
   - Email Attachments
   - Printed Copies
   - Learning Management Systems (LMS)
   - Face-to-Face Interviews
   - Focus Groups

   Choose the method that best suits your organization's needs, considering factors like participant availability, technology infrastructure, resources, and the level of detail required for data analysis. It may also be helpful to combine multiple methods if it aligns with your goals and resources.

4. **Retrieval of the accomplishment of TNA Questionnaire**
   - It is described as the final phase of the administration of TNA questionnaire
   - This will require the facilitator to ensure completion of the accomplished forms.

2. Dissemination of TNA Instruments to the respondents

A cover letter is attached along with the questionnaires to introduce the subject of the TNA and the facilitator conducting TNA to the respondents. It also informs the respondents that the purpose of the survey is to collect data about the topic under investigation and also make it clear that the responses would be used only for research purposes. In order to encourage honest responses, participating respondents are not asked to reveal their names. The letter also assured that all the information collected will remain strictly confidential and that it will be used for no other purpose.

SAMPLE COVER LETTERS FOR QUESTIONNAIRE

Dear Participant,

Thank you for agreeing to participate in this research conducted by Md. Anisuzzaman, certified trainer and assessor, [add your organization Name]. The purpose of this research is to identify the required skill in the freelancing marketplace and identify the current skills of graphics design graduates to access freelancing marketplace.

If you decide to participate, you will be answered some questions to complete this research. The research should take not more than 30 minutes and I hope to recruit 10 participants.

Your feedback will be kept private and confidential and will only be used to help us improve the content and delivery of training, not other purpose. We may publicise the general findings of the feedback. Both positive and negative comments are welcome.

If you do not want to give your personal information. Do that. If so, the research will not collect any identifiable information and no one will be able to connect your responses to you. Your anonymity is further protected by not asking you to sign and return a consent form. Your completion of the research will serve as your consent. Please keep this cover letter for future reference.

If you have any questions about this study, you may call me at 01714422225.

Please return the research after complete. Thank you for your participation.

Sample of cover letter

All the questionnaires are developed in English as all the selected respondents possess good understanding in English. It is rerecommended in the case of foreign trainers, assessors, trainees and other respondents the facilitator should provide translated questionnaire in foreign language contexts and administer questionnaires in the original language of participants.

Required number or sets of questionnaires may be distributed to the respondents. The Facilitator will disseminate twenty sets of questionnaires to the respondents. Ten sets of

questionnaires are to be delivered to the respondents by hand and ten sets of questionnaires are to be delivered through email. The Facilitator (the person conducting TNA) will request the respondents in good way to ensure commitments in filling out the questionnaires and returning them on specified time (one week).

3. Gather filled up TNA instruments in accordance with selected procedures appropriate method

Collecting filled-up Training Needs Analysis (TNA) instruments can be done in a few different ways, depending on the format of the instrument and the preferences of the individuals who completed it. Here are some options for collecting TNA instruments:

Online surveys: If the TNA instrument was completed online, it can be collected by accessing the survey website and downloading the data. Some survey tools, such as Google Forms or SurveyMonkey, allow for the data to be exported into a spreadsheet or other format for analysis.

Paper surveys/Printed copy surveys. If the TNA instrument was completed on paper, it can be collected by physically collecting the surveys from the participants or by having them submit them via email or fax. Once the surveys are collected, they should be processed and analyzed.

Electronic data collection: Some TNA instruments are designed to be completed electronically and can be collected automatically by the software or system used to administer the survey. This can save time and effort compared to manual data collection.

The following table illustrates characteristics the advantages and disadvantages of each method that can affect both the kind and quality of the information obtained.

Methods		**Advantages**	**Disadvantages**
Questionnaire	• May be in the form surveys or polls of a random or stratified sample or an entire population. Can use a variety of question formats: • Open-ended, projective, forced- • choice, priority ranking.	• Can reach a large number of people in a short time. • Are inexpensive. • Give opportunity of response without fear of embarrassment. • Yield data easily summarized and reported.	• Make little provision for free response. • Require substantial time for development of effective survey or questionnaire. • Do not effectively get at causes of problems or possible solutions.
Observations	• Can be technical, functional or behavioral. • Can yield qualitative or quantitative feedback. • May be unstructured.	• Minimize interruption of routine work flow or group activity. • Generate real-life data.	• Requires a highly skilled observer with process and content knowledge. • Allow data collection only in the work setting. • May cause “spied on” feeling.
Focus Groups	• Can be formal or informal. • Widely used method. • Can be focused on a specific problem, goal, task or theme.	• Allow interaction between viewpoints. • Enhance “buy-in”; focus on consensus. • Help group members become better listeners,	• Are time-consuming for both consultants and group members. • Can produce data that is difficult to quantify

		analyzers, problem solvers.	
Interviews	• Can be formal or casual, structured or unstructured. • May be used with representative sample or whole group. • Can be done in person, by phone, at the work site, or away from it.	• Uncover attitudes, causes of problems, and possible solution. • Gather feedback; yield of data is rich. • Allow for spontaneous feedback.	• Are usually time-consuming. Can be difficult to analyses and quantify results. • Need a skillful interviewer who can generate data without making interviewee self-conscious or suspicious.
Performance Appraisal	• May be conducted informally or systematically. • Conducted by manager; • Appraisal developed by HR. • Should be conducted on a regular basis and separately from merit discussions.	• Indicate strengths and weaknesses in skills, and identify training and development needs. • Can also point out candidates for merit raises or promotions.	• Can be costly develop thesystem, implement the appraisals, and process the results. • May enable managers to manipulate ratings to justify a pay rise. • May invalidate the appraisal because of supervisor bias. • May be prohibited for union employees
Assessment Centres	• For management • development. • Require participants to complete a battery of exercises to determine areas of strength that need development. • Assess potential by having people work in simulated management situations.	• Can provide early • identification of people with potential for advancement. More accurate than “intuition.” • Reduce bias and increase objectivity in selection process.	• Selecting people to be included in the high-potential process difficult with no hard criteria available. • Are time-consuming and costly to administer. • May be used to diagnose development needs rather than high potential.

Advisory Committee	• Secure information from • people who are in a position to know the training needs of a particular group. • Supply data gathered from consultants by using techniques such as interviews, group discussions, and	• Are simple and inexpensive. • Permit input and interaction of a number of individuals with personal views of the group's needs. • Establish and strengthen lines of communication.	• Carry biased organizational • perspective. • May not represent the • complete picture because the information is from a group that is not representative of the target audience.
Tests	Can be functionally oriented to test a board, staff or committee member's understanding. Can be administered in a monitored setting or "take home"	Can be helpful in determining deficiencies in terms of knowledge, skills, or attitudes. Easily quantifiable and comparable.	Must be constructed for the audience and validity can be questionable. Do not indicate if measured knowledge and skills are actually being used on the job.

Regardless of the method used to collect the TNA instruments, it is important to ensure that the data is collected and analyzed in a secure and confidential manner. It may also be helpful to provide clear instructions to participants about how to submit their surveys and to communicate the purpose and importance of the TNA process.

Overall, collecting filled-up TNA instruments involves selecting a method for data collection and ensuring that the data is collected and analyzed in a secure and confidential manner. By providing clear instructions and communicating the purpose of the TNA process, you can help to ensure that the data is accurate and useful for designing training programs that meet the needs of the participants.

4. Collecting details of the required skills and knowledge

Stage-2 (a): Collecting details of the required skills and knowledge for X Occupation (reference page-15)

To find out exactly what competencies are needed to perform job/tasks you can:

- read relevant documents;
- talk to resource people;
- observe competent workers;

Successful TNA requires collection of data that is sufficient in terms of relevance. Weaknesses of the data also need to be considered when TNA outcomes are based on the findings. Training needs data can be collected and confirmed through a number of different methods. These methods can target the different levels of company performance. The methods are ranked below for their relevance in gathering data at different levels of performance within the company. It is possible to mix methods to achieve improved results.

Stage-2 (b): Collecting details of the current competencies of the client group (reference page-15)

Once it is found out what competencies are required, and who your client group is, the next step is to work out what relevant skills and knowledge the members of the group currently have. If clients can prove that they are already competent in some of the requirements this can influence the training program, for example:

- You may not have to include all the competencies in the training program.
- These people would not have to do everything in the program.
- You could build peer-training into your program.
- You can depend on having knowledgeable group discussion leaders.
- These people may want to set up a contract of learning with you.

One can easily find out the client group's current skills and knowledge relevant to your selected vocational area of need, by using the following techniques. One should always remember to respect the person's privacy and only use documents that your clients are happy for you to see.

- Read the person's employment records:
  - current CV;
  - performance appraisal;
  - job description from their last job;
  - references

- Observe the person performing the skills or applying the knowledge:
  - in the workplace;
  - in a simulated situation;

- Ask the person to:
  - write out their own skills audit;
  - answer a questionnaire

- Interview the person:
  - preferably in person;
  - by telephone

- Seek feedback from the person's:
  - supervisor;
  - co-workers

The result is more reliable if you carry out as many of these methods as possible. methods for confirming training needs

Self-Check Sheet 3.1

1. Mention steps to be followed for administration of TNA instruments with short description?

2. Why cover letter is attached with the questionnaires?

Answer Key 3.1

1. Mention steps to be followed for administration of TNA instruments with short description?

   Answer: Steps to be followed for administration of TNA instruments are:

   i. **Introduction**
      - It allows the facilitator to greet and welcome the respondents
      - It provides the description about the facilitator
      - It allows the facilitator to set the mind of the respondents about what will happen during the administration of the questionnaire
      - It allows the facilitator to determine whether the target number of respondent is attained.

   ii. **TNA Overview**

      It gives the respondents idea about the background of the activity and reasons for conducting it.

   iii. **Administration of the TNA questionnaire**

      This pertains to the actual administration of the TNA questionnaire, which covers the distribution of the questionnaire and providing the respondents of the instructions on how to answer the questionnaire Forms.

      There are several methods you can use to administer a Training Needs Analysis (TNA) questionnaire, depending on your organization's preferences and available resources. Here are some common methods:
      - Online Surveys
      - Email Attachments
      - Printed Copies
      - Learning Management Systems (LMS)
      - Face-to-Face Interviews
      - Focus Groups

      Choose the method that best suits your organization's needs, considering factors like participant availability, technology infrastructure, resources, and the level of detail required for data analysis. It may also be helpful to combine multiple methods if it aligns with your goals and resources.

   iv. **Retrieval of the accomplishment of TNA Questionnaire**
      - It is described as the final phase of the administration of TNA questionnaire
      - This will require the facilitator to ensure completion of the accomplished forms.

2. Why cover letter is attached with the questionnaires?

   Answer: A cover letter is attached along with the questionnaires to introduce the subject of the TNA and the facilitator conducting TNA to the respondents. It also informs the respondents that the purpose of the survey is to collect data about the topic under investigation and also make it clear that the responses would be used only for research purposes

Task Sheet 3.1

<table>
<tr><td>TASK SHEET 3.1</td></tr>
<tr><td>Title: Prepare a cover letter for dissemination of TNA Questionnaires</td></tr>
<tr><td>Performance Objective: At the end of this task, the trainee should be able to:
Prepare a cover letter for disseminating TNA Questionnaires to the selected respondence</td></tr>
<tr><td>D. Supplies Documents
▪ Sample format of a TNA Questionnaire
▪ Copy of existing Course Accreditation Document or competency standard (related to your qualification)

E. Tools and Material required:
▪ Notebook
▪ Handbook
▪ Office Stationeries

F. Equipment:
▪ Laptop/Computer</td></tr>
<tr><td>Steps/Procedures:
▪ Prepare the cover letter
▪ Attach TNA Questionnaires
▪ Disseminate TNA Questionnaires
▪ Collect the filled in questionnaire.</td></tr>
<tr><td>Assessment Method:
Written report submitted following the required tasks</td></tr>
</table>

Specification Sheet 3.1

A. Supplies Documents

- Sample format of a TNA Questionnaire
- Copy of existing Course Accreditation Document or competency standard (related to your qualification)

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Learning Outcome 4: Analyze TNA results (Analyze gathered data)

Assessment Criteria:

1. Information is analyzed using reliable and valid data analysis methods.
2. Skills requirements and skills gaps are determined that can be addressed through training or other intervention.
3. Conclusions on training needs are prepared and supported by evidence and consistent with research objectives.

Content:

1. Data analysis
    a. Data analysis
    b. Importance of Data Analysis
    c. Types of gathered data
2. Data analysis methods
    a. Quantitative data analysis methods
    b. Qualitative data analysis methods
3. Skills requirements and skills gaps
4. Conclusions on training needs

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 4: Analyze TNA results

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Conducting Training Needs Analysis.	1. Instructor will provide the learning materials "**Conducting Training Needs Analysis"**
2. Read the Information sheet/s	2. Information Sheet No:4-1 Analyze tna results
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 4-1 Analyze tna results Answer key No. 4-1 Analyze tna results
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:4-1 Analyze tna results Specification Sheet: 4-1 Analyze tna results

Information Sheet 4.1: Analyze TNA results

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Analyze information using reliable and valid data analysis methods.
2. Determined skills requirements and skills gaps that can be addressed through training or other intervention.
3. Prepare conclusions on training needs and supported by evidence and consistent with research objectives.

1. Data Analysis

a. Data Analysis: The act of studying or examining something in detail, in order to discover or understand more about it, or your opinion and judgment after doing this.

Analysis of data is a process of inspecting, cleaning and transforming data with the goal of highlighting useful information, suggesting conclusions and supporting decision making.

b. Important of Data Analysis

The importance of data analysis collected for Training Needs Analysis (TNA) can be as follows:

Identify skill gaps: Data analysis helps identify gaps between existing employee skills and required skills for their roles.

Targeted training: Data analysis informs the design of tailored training programs to address identified skill gaps.

Prioritize resources: Data analysis helps prioritize training resources based on identified needs and strategic goals.

Assess training effectiveness: Data analysis evaluates the impact of training programs on employee performance.

Inform evaluation metrics: Data analysis guides the selection of appropriate metrics to measure training success.

Track progress: Data analysis monitors training participation, completion rates, and performance metrics.

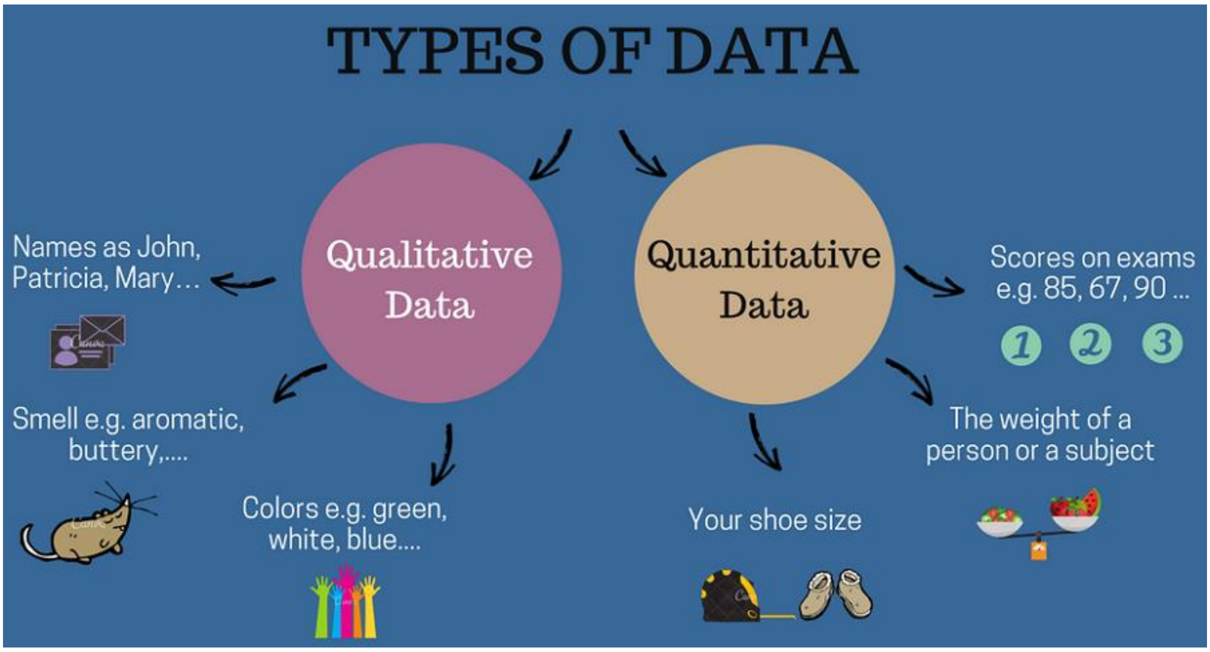
Support decision-making: Data analysis enables data-driven decisions for training strategies and resource allocation.

Overall, data analysis in TNA ensures effective training, optimizes resources, and aligns training initiatives with organizational goals.

c. Types of gathered data:

There are two primary types of data that can be collected:

1. **Quantitative data**
2. **Qualitative data**



QUANTITATIVE DATA

Quantitative data seems to be simpler to define and identify.

Quantitative data is data that can be expressed as a number or can be quantified. In other words, quantitative data can be measured by numerical variables.

Quantitative data are easily amenable to statistical manipulation and can be represented with a wide variety of statistical types of graphs and chards such as line, graph, bar graph, scatter plot, box and whisker plot and etc.

Key characteristics of quantitative data:

- It can be quantified and verified.
- Data can be counted.
- Data type: number and statistics.
- It answers questions such as "how many, "how much" and "how often".

Examples of quantitative data:

- Scores on tests and exams e.g. 85, 67, 90 and etc.
- The weight of a person or a subject.
- The number of hours of study.
- Your shoe size.
- The square feet of an apartment.
- The temperature in a room.
- The volume of a gas and etc.

QUALITATIVE DATA

As you might guess qualitative data is information that can't be expressed as a number and can't be measured.

Qualitative data consist of words, pictures, observations, and symbols, not numbers. It is about qualities.

Qualitative data is also called categorical data. The reason is that the information can be sorted by category, not by number. Qualitative data is analyzed to look for common themes.

Key characteristics of qualitative data:

- It cannot be quantified and verified.
- Data cannot be counted.
- Data type: words, objects, pictures, observations, and symbols.
- It answers questions such as "how this has happened" or and "why this has happened".

Examples of qualitative data:

- Your socioeconomic status
- Colors e.g. the color of the sea
- The Smell e.g. aromatic, buttery, camphoric and etc.
- Your favorite holiday destination such as Hawaii, New Zealand and etc.
- Names as Anisuzzaman, Tuheen,…..
- Sounds like bang and blare.
- Ethnicity such as American Indian, Asian, etc.

Differences between qualitative and quantitative data

Qualitative Data	**Quantitative Data**
Quantitative data is numbers-based, countable, or measurable	Qualitative data is interpretation-based, descriptive, and relating to language.
Quantitative data tells us how many, how much, or how often in calculations.	Qualitative data can help us to understand why, how, or what happened behind certain behaviors.
Quantitative data is fixed and universa	Qualitative data is subjective and unique.
Quantitative research methods are measuring and counting.	Qualitative research methods are interviewing and observing.
Quantitative data is analyzed using statistical analysis.	Qualitative data is analyzed by grouping the data into categories and themes.

VS

Basis for Comparison	Qualitative Data	Quantitative Data
Definition	Qualitative data is information that can't be expressed as a number	Quantitative data is data that can be expressed as a number or can be quantified
Can data be counted?	NO	YES
Data type	Words, objects, pictures, observations, and symbols	Number and statistics
Questions that data answer	How and why this has happened?	"how many, "how much" and "how often"
Examples	• Names as John, Maria,… • Ethnicity such as American Indian, Asian, etc. • Colors e.g. green, white, blue	• Scores on tests and exams e.g. 85, 67, 90 and etc. • The weight of a person or a subject • Your shoe size
Purposes of data analysis	Understand, explain, and interpret social interactions and patterns	Test hypothesis, develop predictions for the future, check cause and effect
Types of data analysis	Patterns, characteristics, theme identification	Statistical relationship identification
Scope of the results	Less generalizable, particular findings. Do not drive conclusions and generalizations across a population	Generalizable findings. Draw conclusions and trends about a large population based on a sample taken from it
Popular methods of data analysis	• Content analysis • Thematic analysis • Discourse analysis • Grounded theory • Conversation analysis	• Linear regression models • Logistic regression • Analysis of Variance (ANOVA) • Statistical significance • Correlation analysis • Central tendency • Dispersion • Distribution

2. Data analysis methods

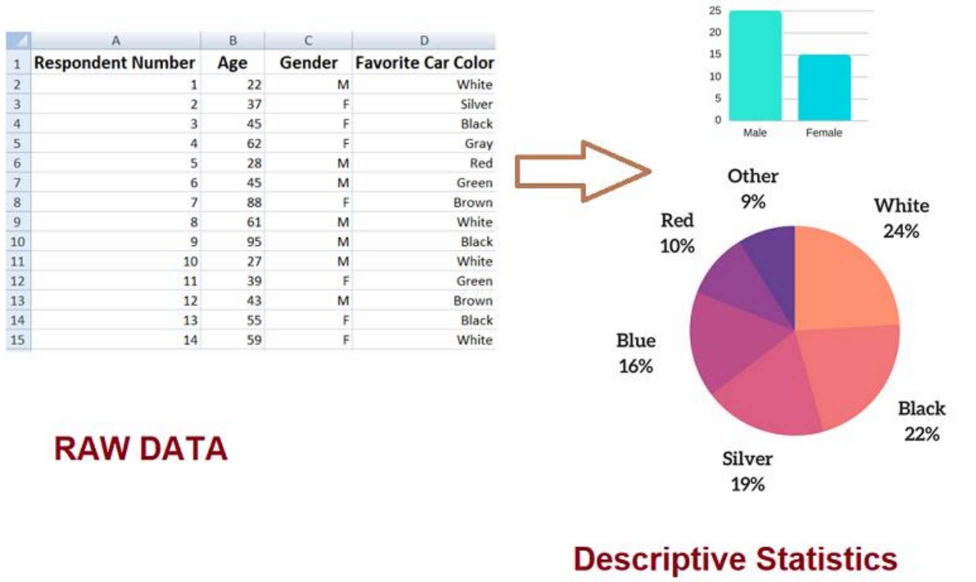
a. Quantitative data analysis

Quantitative data analysis methods refer to a set of techniques and approaches used to analyze numerical or measurable data in research.

Quantitative data analysis methods

Here are some common quantitative data analysis methods:

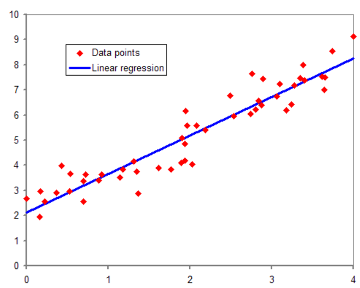
- **Descriptive Statistics:** Descriptive statistics summarize and describe the main features of the data, such as measures of central tendency (mean, median, mode) and measures of dispersion (standard deviation, range, variance).



	A	B	C	D
1	Respondent Number	Age	Gender	Favorite Car Color
2	1	22	M	White
3	2	37	F	Silver
4	3	45	F	Black
5	4	62	F	Gray
6	5	28	M	Red
7	6	45	M	Green
8	7	88	F	Brown
9	8	61	M	White
10	9	95	M	Black
11	10	27	M	White
12	11	39	F	Green
13	12	43	M	Brown
14	13	55	F	Black
15	14	59	F	White

- **Inferential Statistics:** Inferential statistics involve making inferences and generalizations about a population based on sample data. It includes techniques like hypothesis testing, t-tests, chi-square tests, analysis of variance (ANOVA), regression analysis, and correlation analysis.

- **Regression Analysis:** Regression analysis is used to identify and quantify the relationship between a dependent variable and one or more independent variables. It helps determine the strength and significance of the relationship and can be used for prediction and forecasting.



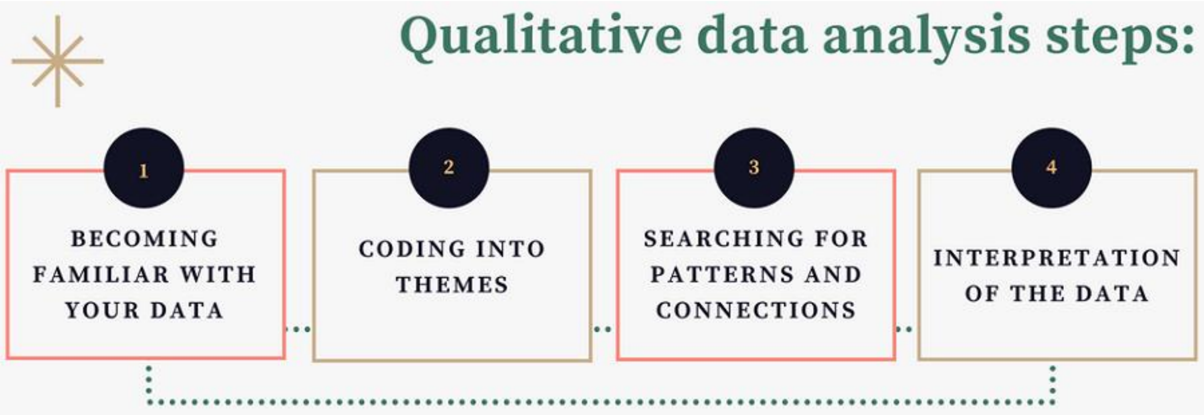
- **Correlation Analysis:** Correlation analysis examines the strength and direction of the relationship between two or more variables. It measures the degree of association using correlation coefficients such as Pearson's correlation coefficient.

- **Analysis of Variance (ANOVA):** ANOVA is used to compare means between two or more groups to determine if there are any statistically significant differences. It is often used when comparing means across multiple independent variables or groups.
- **Factor Analysis:** Factor analysis is a multivariate statistical technique used to uncover underlying dimensions (factors) that explain the correlations among a set of observed variables. It helps reduce the complexity of data and identify patterns.
- **Cluster Analysis:** Cluster analysis is used to identify groups or clusters within a dataset based on the similarity of observations. It helps classify data into meaningful groups, which can aid in understanding patterns and segmenting populations.
- **Time Series Analysis:** Time series analysis is employed when analyzing data collected over time. It examines patterns, trends, and seasonality within the data to forecast future values.
- **Survival Analysis:** Survival analysis is used to analyze data where the outcome of interest is the time until an event occurs. It is commonly used in medical research and studies involving time-to-event data.
- **Meta-analysis:** Meta-analysis involves the statistical synthesis of results from multiple studies to derive overall conclusions or effect sizes. It combines data from various sources to increase statistical power and provide a more comprehensive analysis.

These are just some of the quantitative data analysis methods used in research. The choice of method depends on the research question, data type, and research design. Researchers often employ a combination of these techniques to gain insights from their data.

b. QUALITATIVE DATA ANALYSIS

Qualitative data analysis (QDA) is the process of organizing, analyzing, and interpreting qualitative data—non-numeric, conceptual information and user feedback—to capture themes and patterns, answer research questions, and identify actions to take to improve your product or website.



Qualitative data analysis methods

Here are five methods of qualitative data analysis to help you make sense of the data you've collected through customer interviews, surveys, and feedback:

1. **Content analysis**
2. **Thematic analysis**
3. **Narrative analysis**
4. **Grounded theory analysis**
5. **Discourse analysis**

1. Content analysis

Content analysis is a research method that examines and quantifies the presence of certain words, subjects, and concepts in text, image, video, or audio messages. The method transforms qualitative input into quantitative data to help you make reliable conclusions about what customers think of your brand, and how you can improve their experience and opinion.

You can conduct content analysis manually or by using tools like Lexalytics to reveal patterns in communications, uncover differences in individual or group communication trends, and make connections between concepts.

2. Thematic analysis

Thematic analysis helps to identify, analyze, and interpret patterns in qualitative data, and can be done with tools like Dovetail and Thematic.

While content analysis and thematic analysis seem similar, they're different in concept:

Content analysis can be applied to both qualitative and quantitative data, and focuses on identifying frequencies and recurring words and subjects.

Thematic analysis can only be applied to qualitative data, and focuses on identifying patterns and 'themes'.

3. Narrative analysis

Narrative analysis is a method used to interpret research participants' stories—things like testimonials, case studies, interviews, and other text or visual data—with tools like Delve and AI-powered ATLAS.ti.

Some formats narrative analysis doesn't work for are heavily-structured interviews and written surveys, which don't give participants as much opportunity to tell their stories in their own words.

4. Grounded theory analysis

Grounded theory analysis is a method of conducting qualitative research to develop theories by examining real-world data. The technique involves the creation of hypotheses and theories through the collection and evaluation of qualitative data, and can be performed with tools like MAXQDA and Delve.

Unlike other qualitative data analysis methods, this technique develops theories from data, not the other way round.

5. Discourse analysis

Discourse analysis is the act of researching the underlying meaning of qualitative data. It involves the observation of texts, audio, and videos to study the relationships between the information and its context.

In contrast to content analysis, the method focuses on the contextual meaning of language: discourse analysis sheds light on what audiences think of a topic, and why they feel the way they do about it.

Stage-3: Identifying the gap between the required competencies and the client's groups current competencies. (reference page-15)

If a training need is a gap between current and required performance, the aim must be to use training as a mean of removing performance deficiencies. Priorities can be set by deciding where the closing of a performance gap will impact either:

- job performance
- personal career development needs
- management/ company preferences
- personal needs.

It could also have wider impact where training supports the introduction of change such as that initiated by:

- new technology
- revised processes
- new market/ customer demands
- cultural or structural change
- organisational redesign
- societal or legislative changes

Performance deficiencies, or deviations from standards of performance expected by the company and customers, may exist for a job or jobs across the company. Obviously where performance deficiencies exist for a number of individuals the impact of a single training 'solution' on performance can be very profound. Priorities may therefore simply follow the level of need/ impact a training solution may have for the:

- company
- major functional or occupational area (e.g. Finance Department or clerical work)
- job specific skills, (e.g. clerical or accountant)
- operational unit (e.g. Section, business unit, team, division, etc.,)
- an individual

All industries make training decisions based on the trade-off between the cost of training and the cost of not completing the training. In effect this can be expressed as the cost risk ratio. The aim is to maximize the impact of training in a cost-effective manner. Collecting, analyzing and contrasting data collected on training needs is critical to ensuring training of an individual does not occur in isolation from parallel training efforts that could be joined. Workplace training often resides with coaches and one-to-one delivery effort. However, it may be as cost effective to flag employees with the same training need and gain a 'multiplier effect' by train all the employee's as a 'class' or 'group'.

3. CONCLUSION ON THE TRAINING NEEDS:

Conclusion on Training Needs:
Conclusion is an idea or a concept extracted or deducted from the findings and results linked with the problems and sub problems investigated. Deductions are made from results and findings that suggest measures or actions to continue or improve a situation. These are of the possible statements possible meaning of a situation or condition as revealed by the findings

In preparing conclusions one must be reminded the following:

1. Answer the question "So what" – show your readers why this Training Needs Analysis is important. Show them that your paper is meaningful and useful.
2. Synthesise, do not summarise – do not simply repeat things that are in your paper. Show how the points made and the support and example fit together.
3. Redirect you readers – give your readers something to think about, perhaps a way to use the study in the "real" world. If the introduction went from general to specific, make the conclusion go from specific to general.
4. Create a new meaning – one does not have to give new information to create new meaning. By demonstrating ideas work together, one can create a new picture. Often, the sum of the paper is worth more than its parts.

STAGES 5(a)/5(B) IS TRAINING THE BEST OPTION? WHAT ARE THE ALTERNATIVES? (reference page-15)

Planning B TNA Response
Relevant training program

The fundamental aim in organising training is to ensure it delivers the identified needs of individuals and enterprises. The following 6 questions are posed as a means to ensure the organisation of training is focussed.

1. **What is the best location for the training?**
   - In the workplace
   - In the workplace but off-the-job in a training room
   - Off-the-job in an agreed location
   - Blended mode (electronic and face to face)
   - Electronic or distance-based learning
2. **What is the required level of competency?**
   - Basic Worker – can understand and perform basic work under supervision using basic tools and equipment
   - Basic-Skilled Worker – can perform all aspects of a particular skill area with limited supervision
   - Semi-Skilled Worker – can perform all the major work independently or with limited supervision
   - Skilled Worker – can demonstrate all the skills of a competent tradesperson

- Highly Skilled Worker/ Supervisor – can supervise basic workers and basic skill workers in performing basic work
- Middle Level Manager/ Sub Assistant Engineer – can take overall responsibility for completion of work. Apply past experience in solving problems, demonstrate competent performance, integrating all aspects of the required skills, knowledge and attitude, on a consistent basis across a range of conditions and variables.

3. Who can best provide this training?

- Registered Training Organizations (RTO)s
- Technical Teacher Training Colleges (TTTC)s
- Vocational Teacher Training Institutes (VTTI)s
- Technical School and Colleges (TSC)s
- Technical Training Centers (TTC)s
- Polytechnics Institutes
- Textile Vocational Institutes
- Other Government TVET providers
- NGOs & Private training institutes

4. How can the training be designed to best promote access?

- Trainees' easy access to the training program
- Resources are written in a simple and easy manner
- Duration of the program should be appropriate to cover the content
- Time of the program is convenient for the participants

5. Who should arrange or sponsor the training?

- An Individual
- Team
- Organization

6. Can the training timetable meet work commitments?

- Ensure adequate practice time at workplace
- Effective face-to-face training session
- Suitable timing of training to manage work commitments

ALTERNATIVE SOLUTIONS

A trainer’s investigation could show that some of potential client group can actually carry out the physical skill or knowledge requirements of the job tasks, but may not meet the standards that the industry or workplace expects. Examples of this could be if:

- they do not operate at the appropriate pace;
- their output shows too high a rate of inaccuracy;
- their concentration frequently drops away;
- their attention to safety requirements is low;
- their work attitude shows little commitment to the goals of the organisation;
- their interactions with other workers is constantly negative.

In the flow chart on Page 16, at step 6a we saw the following range of methods that organizations use in an attempt to encourage, motivate or coerce these workers to change:

- voluntary or recommended counseling sessions;
- the hire and fire approach (employ new people if the current ones aren't competent);
- learning by trial and error as they carry out their daily duties;
- ongoing monitoring of work output;
- transfer to other areas where these skills aren't needed;
- redesign the job so these competencies aren't needed;
- organizational development (change the organization rather than the person).

When training has been agreed to be the best option it may be necessary to include job/role environment skills in the program. This can draw attention to the skills used for 'getting on with people' and help reluctant workers who seem to have a gap in that area realise the important role these skills play.

STAGE 6b: DECIDING ON THE MOST APPROPRIATE TRAINING PROGRAM

When it is determined what training is needed and who needs it, there are three further questions to ask.

1. Does a training program already exist which could be used or modified to suit clients' needs?
2. Does the trainer have to design his own training program?
3. What form of training program is most appropriate for client group?

Training programs vary in length and intensity to suit the particular circumstances of each situation, such as the:

- degree of difficulty of the skills and information being learned;
- client's timetable, workload and other commitments;
- client's learning style and rate;
- trainer's timetable, workload and other commitments;

- trainer's skills and expertise;
- availability of resources for practice opportunities;

It is important to know which other CBT programs and courses are on the market. This will help trainer keep in touch with current trends in training methods and course content, when trainer is deciding whether to use or modify your existing programs.

Finding out about existing training programs

There are several places to look for training programs that might meet clients' needs, for instance:

- your own organization may be conducting programs similar to the one you need at your work location, at a branch office or the head office;
- relevant NSDA courses;
- professional associations such as the BGMEA, Institute of Diploma Engineers;
- commercial or private training companies or consultants;
- other organizations with training aims similar to the one;

Training programs are produced in a range of formats which can include any combination of the following materials and equipment:

- manuals or work books for the trainees to read and write in;
- resource packages, with booklets for reading only;
- videos, CDs or DVDs with or without handouts;
- Speaker/presenter with or without handouts;
- software packages with or without handouts;

To be a useful resource for your trainees, a training program needs to be efficient, effective and relevant.

When evaluating external training programmes it's a good idea to have a checklist of questions to ask about each one before you consider using it. The following questions give a well-rounded evaluation of any training program.

- Is it appropriate to your trainees' needs?
- Does it have a Bangladesh focus?
- Is it up-to-date?
- Is it accurate?
- Is it easy to use?
- Does it have wide ranging or narrow application?
- Does the cost reflect its actual value?
- Does it require an inappropriate amount of time and effort from trainer and trainees?

- Can you get help with it when you have a problem?
- Does it need special equipment or requirements, such as software?
- Is there a process whereby the producers regularly update or revise it?

Different modes of training

These different modes of training give you an outline of the aspects you will need to consider when planning your training program. Will your trainers be delivering training?

1. Off-the-Job in your organization’s training room?
2. Off-the-Job but located in the trainee's usual workplace?
3. Off-the-Job in a special demonstration area?
4. On-the-job?

Self-Check Sheet 4.1

1. What is data analysis?

2. What are the types of data in terms of research?

3. What are the Key characteristics of qualitative data?

4. List some common types of quantitative data analysis methods?

5. List 5 common types of qualitative data analysis methods?

6. What is skill gap analysis?

Answer Key 4.1

1. What is data analysis?

   Answer: The act of studying or examining something in detail, in order to discover or understand more about it, or your opinion and judgment after doing this.

   Analysis of data is a process of inspecting, cleaning and transforming data with the goal of highlighting useful information, suggesting conclusions and supporting decision making.

2. What are the types of data in terms of research?

   Answer: There are two primary types of data that can be collected:

   1. Quantitative data
   2. Qualitative data

3. What are the Key characteristics of qualitative data?

   Answer: There are two primary types of data that can be collected:

   - It cannot be quantified and verified.
   - Data cannot be counted.
   - Data type: words, objects, pictures, observations, and symbols.
   - It answers questions such as "how this has happened" or and "why this has happened".

4. List some common types of quantitative data analysis methods?

   Answer: Some common types of quantitative data analysis methods are:

   - Descriptive Statistics
   - Inferential Statistics
   - Regression Analysis
   - Correlation Analysis
   - Analysis of Variance (ANOVA)
   - Cluster Analysis

5. List 5 common types of qualitative data analysis methods?

   Answer: The 5 common types of qualitative data analysis methods are:

   1. Content analysis
   2. Thematic analysis
   3. Narrative analysis
   4. Grounded theory analysis
   5. Discourse analysis

6. What is skill gap analysis?

   Answer: A skills gap analysis is a tool used to determine the training and/or hiring requirements of an employee, group of the organization. The analysis helps in revealing the variances between the existing and the required skill levels, as well as identifying the best strategies to close the gap or reduce the variations.

Task Sheet 4.1:

TASK SHEET 4.1
Title: Conduct Training Need Analysis (TNA)
Performance Objective: At the end of this task, the trainee should be able to: 1. Collect details of the competency to be developed 2. Identify the skill gaps 3. Research existing available program/units of competency that maybe adapted 4. Prepare program by adapting clients, needs 5. Identify and finalize training method
A. Policy and documents required: ▪ Bangladesh National Qualifications Framework (BNQF) ▪ Competency Standard or “Training Package” **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries ▪ Interview questionnaire ▪ Observation checklist **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: 1. Collect details of the competency to be developed 2. Identify the skill gaps 3. Research existing available program/Unit of competencies that maybe adapted 4. Prepare program by adapting for clients’ needs 5. Identify and finalize training methods
Assessment Method: Written report submitted following the required tasks

Specification Sheet 4.1

A. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or "Training Package"

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries
- Interview questionnaire
- Observation checklist

C. Equipment:

- Laptop/Computer

Learning Outcome 5: Prepare report

Assessment Criteria:

1. Conclusions on training needs are disseminated to the clients.
2. Clients are provided with options for meeting identified training needs.
3. Report is prepared on training needs

Content:

1. Dissemination process of training need
2. Report preparing method of training need

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 5: Prepare report

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Conducting Training Needs Analysis.	1. Instructor will provide the learning materials "**Conducting Training Needs Analysis"**
2. Read the Information sheet/s	2. Information Sheet No:5-1 Prepare report
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 5-1 Administer training needs analysis Answer key No. 5-1 Administer training needs analysis
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No: 5-1 Administer training needs analysis Specification Sheet: 5-1 Administer training needs analysis

Information Sheet 5.1: Prepare report

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Disseminate conclusions on training needs to the clients.
2. Provide clients with options for meeting identified training needs.
3. Prepare report on training needs.

1. Conclusions on training needs

STAGE 7: CONSULTING WITH THE TRAINEES ABOUT THE TRAINING REQUIREMENTS (Reference page no. 15)

Gather and Record Information during consulting with the clients

When you have determined what information is required from the clients about their needs, you need to decide the best method for gathering and recording the information on the options of the client' needs.

You can gather information by:

- Meeting with staff individually or as a group
- Reading system specifications or other relevant material
- Reading existing training material and procedure manuals
- Observing staff performing their current roles

The information gathered should be recorded as evidence to support the recommendations you make in the TNA report.

Recommendation and the Appropriate Action:

Based on the information you have gathered you should be able to recommend:

- The proposed training strategy
- Training materials and the media to be used
- How the training materials will be developed and delivered
- The resources and roles required
- The cost involved to implement the strategy

2. Write the TNA Report:

Once the information has been gathered and an appropriate training strategy has been developed, the TNA report should be completed.

The TNA report contains your findings and a recommended solution.

There is no standard format or structure for writing a TNA document. The amount of information and level of detail in this document will vary according to the size, nature and complexity of the training need and the client's requirements of the report. Be sure that you could explain to trainees any aspect of their training program that they might want to know, such as:

Logistic Requirements

- times, dates and length of the program;
- any costs they will be expected to incur;
- what to bring to do the program;
- what resources they will be given;
- the size and makeup of the training group;
- how to get to the exact location of the training venue;
- arrangements for meals and refreshment breaks;
- the people involved in delivering the program;

Training Requirements

- competencies and/or areas of improvement
- an outline of the program's aim and learning outcomes;
- any arrangements for recognizing the trainees' prior learning;
- how much time allocated for face-to-face training and how much time for self-study at home is expected;
- a clear explanation of the assessment procedures;
- a brief description of the types of learning activities they will be doing;
- types of certificate offered
- arrangements regarding punctuality, being absent;
- a contact person and phone number for emergency use.

It is worthwhile spending some time going through these details with the trainees before the program starts. Once the information has been gathered and an appropriate training strategy has been developed, the TNA report should be completed. These way trainees know the guidelines and can make their decisions with a clear understanding of what lies ahead. The TNA report contains findings and recommended solution/s. The figure below is a sample format of TNA which trainers can easy use to do the training needs analysis at their institutional level. A Sample TNA Report Proforma is given in the next page:

TNA REPORT PRO-FORMA

1. **Title of the Report:** e.g., Analysis/Study on the performance of graphic design graduates
2. **Prepared by:** Name and credentials of the Facilitator/ the person preparing the report
3. **Business profile of the clients:**
   - Nature of Business
   - No. of staff
   - Issues to be addressed
4. **Overview of the assessment visits:**
   - Processes used to gather information
   - Opportunities
   - Challenges
5. **Training opt options for client considerations:**

Option	Trainee name/ Trainee group	Training area/ competencies	Training mode &/or methods	Cost of training	Certification offered
1.					
2.					
3.					
4.					

Add more rows according to the number

6. Recommendation
   - Recommended options
   - Justification for recommendation

Annex/ attachments:

1. **Profile and contact details of trainers/facilitator**
   - Qualification and relevant experience
   - Telephone/Mobile number(s)
2. **Profile and contact details of the RTO**
   - Telephone/Mobile number(s)
   - Website and email address

Self-Check Sheet 5.1

1. Write four main logistic requirements need to mention in TNA report?

2. Write six main training requirements need to mention in TNA report?

Answer Key 5.1

1. Write four main logistic requirements need to mention in TNA report?

   Answer: TNA report needs to include logistic requirements, such as:
   - times, dates and length of the program;
   - any costs they will be expected to incur;
   - what to bring to do the program;
   - what resources they will be given;
   - the size and makeup of the training group;
   - how to get to the exact location of the training venue;
   - arrangements for meals and refreshment breaks;
   - the people involved in delivering the program;

2. Write six main training requirements need to mention in TNA report?

   Answer: TNA report needs to include training requirements, such as:
   - competencies and/or areas of improvement
   - an outline of the program's aim and learning outcomes;
   - any arrangements for recognizing the trainees' prior learning;
   - how much time allocated for face-to-face training and how much time for self-study at home is expected;
   - a clear explanation of the assessment procedures;
   - a brief description of the types of learning activities they will be doing;
   - types of certificates offered
   - arrangements regarding punctuality, being absent;
   - a contact person and phone number for emergency use.

Task Sheet 5.1

TASK SHEET 5.1
Title: Prepare a Report on Training Need Analysis (TNA)
Performance Objective: At the end of this task, the trainee should be able to: 1. Provide options to the clients for meeting their needs 2. Training requirements 3. Logistics requirements and 4. preparation of report on training needs
A. Policy and documents required: ▪ Bangladesh National Qualifications Framework (BNQF) ▪ Competency Standard or "Training Package" **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries ▪ Interview questionnaire ▪ Checklists **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: ▪ Follow the report proforma ▪ Insert required data collected and option agreed by the clients ▪ Prepare program by adapting for clients' needs ▪ Identify and finalize training methods
Assessment Method: Written report submitted following the required tasks

Specification Sheet 5.1

A. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or “Training Package”

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries
- Interview questionnaire
- Checklists

C. Equipment:

- Laptop/Computer

Learning Outcome 6: Provide advice and recommendation

Assessment Criteria:

1. Clients are provided with clear advice and recommendations.
2. Feedback and comments are obtained with suitable and sufficient advice.
3. Recommendations are recorded and applied in future planning if required.
4. Final report is completed and presented to the client

Content:

1. Method of provide advice and recommendations to the clients
2. Collection of feedback and comments from clients
3. Use recommendations for future planning
4. Prepare final report

Resources Required/ Conditions:

The trainees must be provided with the following:

- Handouts or reference materials/books/ CBLMs on the above stated contents
- PCs/printers or laptop/printer with internet access
- Digital projector and Screen
- Bond paper
- Ball pens/pencils and other office supplies and materials
- Relevant learning materials
- Workplace or simulated environment

Methodologies

- Lecture/discussion
- Demonstration/application
- Presentation
- Blended delivery methods

Assessment Methods

- Written test
- Demonstration
- Observation with checklist
- Oral questioning
- Portfolio

Learning Experience 6: Provide advice and recommendation

In order to achieve the objectives stated in this learning guide, you must perform the learning steps below. Beside each step are the resources or special instructions you will use to accomplish the corresponding activity.

Learning Steps	Resources specific instructions
1. Student will ask the instructor about Conducting Training Needs Analysis.	1. Instructor will provide the learning materials "**Conducting Training Needs Analysis**"
2. Read the Information sheet/s	2. Information Sheet No:6-1 Provide advice and recommendation
3. Complete the Self Checks & Check answer sheets.	3. Self-Check/s Self-Check No: 6-1 Provide advice and recommendation Answer key No. 6-1 Provide advice and recommendation
4. Read the Job Sheet and Specification Sheet and perform job	4. Job- Sheet No:6-1 Provide advice and recommendation Specification Sheet: 6-1 Provide advice and recommendation

Information Sheet 6.1: Provide advice and recommendation

Learning Objectives:

After completion of this information sheet, the learners will be able to:

1. Clients are provided with clear advice and recommendations.
2. Feedback and comments are obtained with suitable and sufficient advice.
3. Recommendations are recorded and applied in future planning if required.
4. Final report is completed and presented to the client

1. Feedback and comments

When you have confirmed and determined the needs of the clients, you need to select the best options/methods and recommend for them and provide advice in other areas also. So that could be benefited from this study/ training needs analysis.

You can provide advice and get feedback from the clients by:

- Meeting with staff individually or as a group
- Reading system specifications or other relevant material
- Reading existing training material and procedure manuals
- Observing staff performing their current roles

The feedback gathered should be recorded as evidence to support the recommendations you make in the TNA report.

2. Recommendation:

Based on the information you have gathered you should be able to recommend:

- The proposed training strategy
- Training materials and the media to be used
- How the training materials will be developed and delivered
- The resources and roles required
- The cost involved to implement the strategy

3. Finalisation of the TNA Report:

Once the information has been gathered and an appropriate training strategy has been developed, the TNA report should be completed.

The TNA report contains your findings and a recommended solution.

As it is said that there is no standard format or structure for writing a TNA document. The amount of information and level of detail in this document will vary according to the size, nature and complexity of the training need and the client's requirements of the report.

A format of a TNA report is given here which may be useful for you to use as the final format of the TNA REPORT. This format is widely used for different studies as well (source: National TVET Training Academy, TESDA).

TRAINING NEEDS ANALYSIS (TNA) REPORT	
Part	**Description**
Title	This should be short and precise.
Background	This is a brief account of the rationale for the choice of the topic research.
Objective/s	It refers to the goals intended to be attained the study.
Methodology	It contains the design, activities, respondents and other detail regarding the conduct of the study.
Result	The selection that clearly convey the findings of the study.
Conclusion	It briefly summarizes the main issues arising from the report.
Recommendation	It advises the researchers/readers on how how to make decision based on conducted TNA

Self Check Sheet 6.1

1. What are the ways to get feedback from the clients and provide advice?

2. Write at least four recommendations to be included in the final TNA report based on the feedback obtained from clients?

3. When TNA report should be completed?

Answer Key 6.1

1. What are the ways to get feedback from the clients and provide advice?
   Answer:
   - The proposed training strategy
   - Training materials and the media to be used
   - How the training materials will be developed and delivered?
   - The resources and roles required
   - The cost involved to implement the strategy

2. Write at least four recommendations to be included in the final TNA report based on the feedback obtained from clients?
   - The proposed training strategy
   - Training materials and the media to be used
   - How the training materials will be developed and delivered?
   - The resources and roles required
   - The cost involved to implement the strategy

3. When TNA report should be completed?
   Answer: Once the information has been gathered and an appropriate training strategy has been developed, the TNA report should be completed.

Task Sheet 6.1:

TASK SHEET 6.1
Title: Develop a final TNA report format based on the context and issues you have chosen.
Performance Objective: At the end of this task, the trainee should be able to: 1. Develop a final TNA report format based on the context and issues 2. Prepare final report and present to the clients
A. Policy and documents required: ▪ Bangladesh National Qualifications Framework (BNQF) ▪ Competency Standard or "Training Package" ▪ Draft TNA report **B. Tools and Material required:** ▪ Notebook ▪ Handbook ▪ Office Stationeries **C. Equipment:** ▪ Laptop/Computer
Steps/Procedures: 1. Draw feedback and recommendation from the analysis/TNA report 2. Prepare final report following TNA Report format 3. Presentation the final report to the clients
Assessment Method: Final TNA written report submitted following the required tasks.

Specification Sheet 6.1

A. Policy and documents required:

- Bangladesh National Qualifications Framework (BNQF)
- Competency Standard or “Training Package”
- Draft TNA report

B. Tools and Material required:

- Notebook
- Handbook
- Office Stationeries

C. Equipment:

- Laptop/Computer

Review of Competency

Below is yourself assessment rating for module **"Conduct Training Needs Analysis"**

SL no	Assessment of performance Criteria	Yes	No
1.	Objectives and expectations are identified through discussion with clients.		
2.	Organizational requirements are identified.		
3.	TNA respondents / target group are selected based on objectives and requirements.		
4.	Resources are identified and verified according to organizational requirements		
5.	Reliable and appropriate methods for collecting information and data are selected.		
6.	Method for collecting information and data on current, emerging and future training needs is selected with concerned person/s		
7.	Research plan is developed and finalized with concerned person/s		
8.	TNA instruments are prepared according to prescribed format		
9.	TNA instruments are validated		
10.	Orientation regarding TNA is conducted.		
11.	Instruments are disseminated to the identified respondents.		
12.	Filled up TNA instruments are gathered in accordance with selected procedures appropriate method		
13.	Information is analyzed using reliable and valid data analysis methods.		
14.	Skills requirements and skills gaps are determined that can be addressed through training or other intervention.		
15.	Conclusions on training needs are prepared and supported by evidence and consistent with research objectives.		
16.	Conclusions on training needs are disseminated to the clients.		
17.	Clients are provided with options for meeting identified training needs.		
18.	Report is prepared on training needs		

19.	Clients are provided with clear advice and recommendations.		
20.	Feedback and comments are obtained with suitable and sufficient advice.		
21.	Recommendations are recorded and applied in future planning if required.		
22.	Final report is completed and presented to the client		

I now feel ready to undertake my formal competency assessment.

Signed:

Date:

REFERENCE:

1. ILO. (2012)- Conduct Training Need Analysis

Review Workshop of Competency Based Learning Material (CBLM)

The Competency Based Learning Material (CBLM) of Conduct Training Need Analysis (TNA) for National Skills Certificate in Competency Based Training and Assessment, Level-5 is reviewed by NSDA on 06-07 June 2023.

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