
UNIT 14 ASSESSING ABILITIES*

Structure

- 14.1 Introduction
- 14.2 Objectives
- 14.3 Difference between Ability and Skill
- 14.4 Types of Abilities
 - 14.4.1 Cognitive Abilities
 - 14.4.2 Non-Cognitive Abilities
- 14.5 Why to Assess Non-Cognitive Skills/Abilities?
- 14.6 Assessing Aptitude
- 14.7 Assessing Attitudes
- 14.8 Assessing Personality
 - 14.8.1 Purpose of Personality Assessment
 - 14.8.2 Tools for Assessing Personality
- 14.9 Assessing Social Skills
- 14.10 Let Us Sum Up
- 14.11 Unit-End Exercises
- 14.12 References and Suggested Readings
- 14.13 Answers to Check Your Progress

14.1 INTRODUCTION

Assessment is an integral part of teaching-learning process. It can be described as a pedagogical behavior in which knowing and understanding of learners is a constant feature. Having read about the basics of assessment in Unit 12, you might have understood the meaning of assessment. From Unit 13, you might have acquainted with various types of tools used in assessing students. The process of assessment is meaningful when the purpose, modes and effect of it is reflected on the learning outcomes of students. Educational institutions are considered as primary institutions to nurture cognitive and non-cognitive abilities among learners. Therefore, assessing social and personal development of students besides cognitive abilities is essential. Social and personal developments play a major role in fostering interaction among students and between students and teachers that help in shaping their behaviours, attitudes, and personality traits. You know that teachers spent a vast amount of time in assessing cognitive abilities. On the other hand, they may feel uneasiness in assessing non-cognitive abilities. This unit provides extensive information on how to assess different abilities. In this Unit, you will come to know the various cognitive and non-cognitive abilities included

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in each task. This Unit will also make you aware about the need to assess non-cognitive abilities. Our discussion then turned to a description of assessing different non-cognitive abilities such as aptitude, attitudes, personality traits, and social skills.

14.2 OBJECTIVES

After going through this Unit, you should be able to:

- define the term ability;
- explain the differences between ability and skill;
- classify the types of abilities;
- describe the need to assess non-cognitive skills;
- explain the why and how of assessing aptitude and attitudes;
- explore the methods and techniques to assess personality; and
- elaborate the need to assess social skills;

14.3 DIFFERENCE BETWEEN ABILITY AND SKILL

Read the following case:

Case 1

A teacher observed that children of Class 1 are collecting objects and putting them in different cardboard boxes during their free time. There are various boxes containing pencils, pens, sharpener, erasers, books etc. The different boxes are arranged in a way as if it resembles a shop exclusively for kids.

While going through the above case, the following questions are pertinent to ponder over:

What do we understand from the activity of children?

Why do they collect and arrange the objects similar to a shop?

What are the abilities possessed by children in performing this task?

The above case illustrates an example of how a teacher is able to identify children's interest in demonstrating a real shop experience in a contrived setting. We can assume that the teacher might teach about the term 'shop' in classroom. After understanding the settings of a shop, the children themselves try to optimize opportunities to demonstrate their learning. The abilities that children possess in performing the task are interest, positive attitude and ability to express through a demonstration. How do we perceive the activity of children in case 1? Is it the ability or skill of children? This question leads us to think about the terms 'ability' and 'skill'. Are these terms alike or have any differences? You may also sometimes face difficulty to differentiate these two terms precisely. Though they seem to be the same but in real sense they are different.

A **skill** is the learned ability to perform an action with determined results with good execution often within a given amount of time, energy, or both (<https://en.wikipedia.org/wiki/Skill>). **Ability**, on the other hand, is enduring attributes of an individual that influence his/her performance. Ability is the common make up of an individual that is inherited. Skills help an individual to perform a task at a higher standard. We may say that they are more goal-oriented. Conversely, abilities are more stable and enduring than skills. It is significant to note that abilities are core to bring out the skills of an individual. Moreover, one's physical attribute is directly linked to the abilities. Learning style describe your preference to learn and interact with information. By knowing your preferred learning style helps you to develop the skills to be an effective learner. The table 14.1 displays the difference between ability and skill.

Table 14.1: Difference between Ability and Skill

Ability	Skill
1. Abilities are inherited.	1. Skills are learned.
2. Abilities may not necessarily lead to higher level of performance.	2. Skills lead to higher level of performance.
3. Abilities are much stable and enduring.	3. Skills are not much stable and enduring.
4. Abilities cannot be acquired through training.	4. Skills can be acquired through training.
5. Abilities can be cognitive, perceptual and psychomotor.	5. Skills can be cognitive, perceptual and psychomotor.

Having understood the differences between ability and skill from the above table, you might be eager to know whether both ability and skill are necessary in performing a task. Let us try to understand the different abilities and skills needed in doing a task.

Read the following case:

Case 2

Mathew has taken admission for Class V in a new school. His school uses a spiral math curriculum, in which students must discover and explain the process they use to solve problems. He faces difficulty in using the basic whole number processes such as addition, subtraction, multiplication, and simple division. Moreover, he fails in doing fractions and decimals. Though his teacher and peers assist and guide him in solving the basic number problem, Mathew couldn't make any noticeable improvement.

After reading the above case, the following question you might have developed in your mind:

What are the abilities and skills Mathew lack in solving the basic number problem?

Some of us might have faced difficulty like Mathew in solving mathematical problems while we were at school. Let us analyze the various skills and abilities needed in solving mathematical problems. The table 14.2 classifies the various skills and abilities that Mathew should acquire in solving the basic number problem.

Table 14.2: Skills and Abilities needed in Solving Basic Number Problem

Skills	Abilities
1. Numeracy skills- ability to use, interpret and communicate mathematical information to solve real-world problems 2. Skill to recognize numerals 3. Skill to calculate problem 4. Skill to understand the relationship between numbers 5. Skill to interpret mathematical information	1. Number Facility: Ability to rapidly and accurately manipulate and deal with numbers, ability to count verbally. 2. Manage time (rapidity)-Ability to solve problems within the stipulated time. 3. Information Ordering — The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, pictures, mathematical operations)

From the table 14.2, you might have understood that ability is a part of skill. Without having the ability, one cannot attain the skills. We may conclude that skill is a composite of abilities, techniques and knowledge. From the table 14.1 you may notice that both abilities and skills can be cognitive, perceptual and psychomotor. Let us elaborate this statement on the basis of Case 2. For recognizing numerals and finding the relationship between numbers, Mathew uses his thinking power which comes under cognitive criterion. Next, he has to calculate the problem where the importance of psychomotor criterion is highlighted. After calculating, he has to interpret the mathematical information which denotes the perceptual criterion. If Mathew has the inherent ability to recognize numerals and interpret the information, this does not imply that he is going to become a skilled mathematician. For becoming a skilled mathematician, he needs training.

Let us discuss another illustration to differentiate the terms ability and skill. Suppose a teacher wants to measure the attending skill of a learner. Five abilities are included in attention. They are the following:

- i) ability to focus
- ii) ability to sustain focus
- iii) ability to alternate or coordinate attention
- iv) ability to discriminate

v) ability to divide attention to have multiple thoughts

Thus we have seen that ability to coordinate attention alone will not lead to a skill. When all the five abilities are combined together, the output is attending skill. Let us move on to another illustration.

We know that intelligence consists of many different skills and abilities. Intellectual abilities can be treated as groups of related skills such as memory or spatial ability organized into hypothetical constructs known as primary mental abilities. In turn, related groups of primary mental abilities can be clustered into broader skills called secondary mental abilities. Horn (1982) had suggested five primary mental abilities as listed below:

- Number: the basic skills, underlying our mathematical reasoning;
- Word fluency: how easily we produce verbal descriptions of things;
- Verbal meaning: our vocabulary ability;
- Inductive reasoning: our ability to extrapolate from particular facts to general concepts; and
- Spatial orientation: our ability to reason in the three-dimensional world.

Thus from the above illustrations, we have examine that all skills contain abilities. But ability alone is not a skill. Having understood the difference between ability and skill, let us now attempt to learn about the types of abilities.

Check Your Progress 1

Notes: (a) Write your answers in the space provided after each item.

(b) Compare your answers with those given at the end of the unit.

1) Differentiate between skill and ability.

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14.4 TYPES OF ABILITIES

We know that in the 21st century holistic development of a learner has become more significant than in the last century. What do we mean by holistic development? Holistic development means the development of intellectual, mental, physical, emotional, and social abilities in a learner so that s/he is able to face the demands of everyday life. These abilities are essential to succeed in their career too. A holistic approach to education facilitates the total development of a child by providing him/her the positive

learning environment where the learner develops self-concept, self-esteem, sense of worth and self-identity apart from academic achievement. Abilities can be classified into two i.e. cognitive abilities and non-cognitive abilities as shown in figure 14.1.



Fig. 14.1: Classification of Abilities

In the forthcoming sub-sections, we will explore the cognitive and non-cognitive abilities in detail.

14.4.1 Cognitive Abilities

You may agree with us that for performing any task cognitive and non-cognitive abilities are essential. What do we mean by cognitive abilities? Cognitive abilities are associated with an individual's knowledge and intelligence. It involves conscious intellectual effort, such as thinking, reasoning, or remembering. Or we may say that cognitive abilities are the abilities to think and process information, and to apply that information. The assessment of language competence should include evaluation of a student's ability to process, both in comprehension and in expression, language in a spoken and written format. From figure 14.2, you will understand the different types of **cognitive abilities** of an individual.

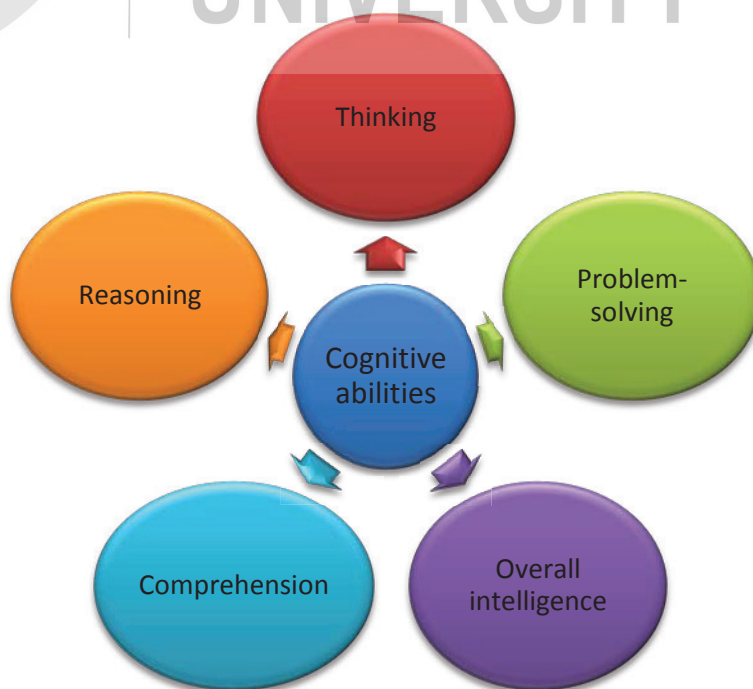


Fig.14.2: Different types of Cognitive Abilities

The 21st century learning skills consists of 4 C's such as critical thinking, creative thinking, communicating, and collaborating. These skills help students learn, and so they are importance to success in education and beyond. Let us try to have a deeper understanding about cognitive abilities with the illustration of reasoning which is a component of critical thinking (fig.14.3).

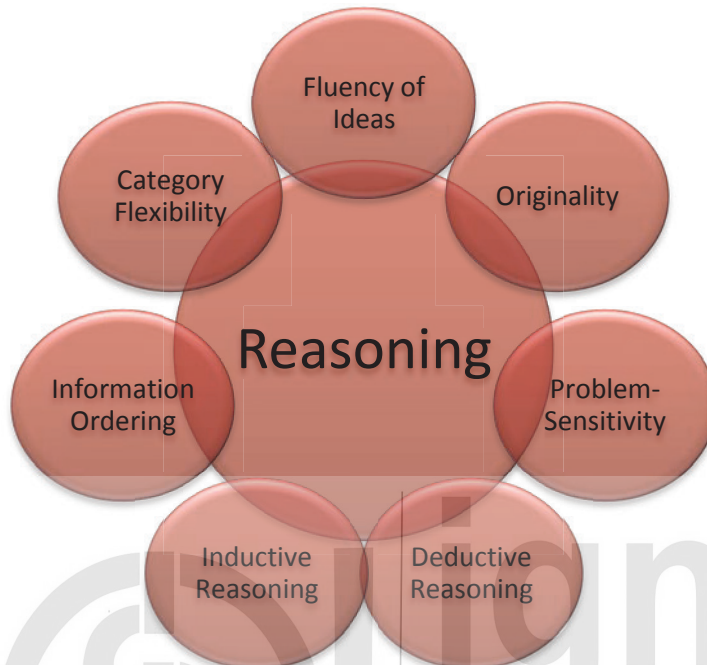


Fig.14.3: Cognitive Abilities in Reasoning

You know that reasoning is an ability that helps the manipulation of ideas in critical thinking. The sub-components are the following:

- *Fluency of Ideas* - *The ability to come up with multiple ideas.*
- *Originality* - *The ability to come up with novel idea.*
- *Problem Sensitivity* - *The ability to recognize a problem.*
- *Deductive Reasoning* - *The ability to apply general rules to specific problems.*
- *Inductive Reasoning* - *The ability to combine different information to generate conclusion.*
- *Information Ordering* - *The ability to arrange things or actions in a certain order based on rules.*
- *Category Flexibility* - *The ability to combine or group things in different manner.*

When you examine the components of reasoning, you might have noticed that information ordering and category flexibility come under both cognitive and non-cognitive abilities. Let us now turn our attention to **non-cognitive abilities**.

14.4.2 Non-Cognitive Abilities

You know very well that in the present examination system, we give more importance to cognitive abilities. Assessing non-cognitive abilities is equally important in a classroom that follows constructivist approach. It is an undeniable fact that each task contains both cognitive and non-cognitive abilities. Therefore, we cannot categorize cognitive and non-cognitive abilities in water-tight compartments. Defining non-cognitive ability is not an easy task. Non-cognitive abilities are associated with the personality, temperament, interest and attitudes that contribute to the competencies of an individual. They may also involve intellect but more indirectly. The affective and psychomotor domains come under the non-cognitive abilities. You are aware that non-cognitive factors include affective, personal, and social variables that predict the performance of an individual; for examples, self-identity, emotional intelligence, cooperativeness, sense of responsibility, and conscientiousness. You will get clear notion of this term with the help of the description of spatial ability as given below:

Spatial Abilities mean the abilities related to the manipulation and organization of spatial information. It has two categories such as spatial orientation and visualization.

Spatial Orientation is the ability to know your location in relation to the environment.

Visualization means the ability to imagine how something will appear when its parts are moved or rearranged.

To have more conceptual understanding about non-cognitive abilities, let us take the concept of 'Social and Emotional Skills.' It refers to one's abilities to regulate thoughts, emotions and behaviour. In this skill, the focus is upon how individuals manage their emotions, perceive themselves and interact with others, instead of their ability to process information. Social and emotional skills measure the ability of individuals to adjust with the environment and the way they achieve in their lives. The development of these skills is essential in every aspect of life, irrespective of individual and social levels. You may agree with us that all places are considered as learning places, so the relevance of this skill extends to wider communities and societies collectively. The ability of citizens to adapt, be resourceful, respect and adjust with others and to take responsibility personally and collectively is more and more becoming the totem of a learning society. Now let us analyze the categories of social and emotional skills-The Big Five Model which is arranged hierarchically and developed by Organization for Economic Co-operation and Development (OECD):

The broad categories of the Big Five are:

- *openness to experience (open-mindedness)*
- *conscientiousness (task performance)*
- *emotional stability (emotional regulation)*
- *extraversion (engaging with others)*
- *agreeableness (collaboration)*

Source: OECD, *Social and Emotional Skills- Well-being, Connectedness and Success*. Retrieved from

[https://www.oecd.org/education/school/UPDATED%20Social%20and%20Emotional%20Skills%20-%20Well-being,%20connectedness%20and%20success.pdf%20\(website\).pdf](https://www.oecd.org/education/school/UPDATED%20Social%20and%20Emotional%20Skills%20-%20Well-being,%20connectedness%20and%20success.pdf%20(website).pdf)

While analyzing each category, it is evident that they are reflected generally in non-cognitive abilities. Each of the categories encloses a cluster of mutually related social and emotional skills. For example, emotion regulation includes abilities such as stress resistance, optimism and emotional control.

In the light of above discussion, let us try to understand the need to assess non-cognitive skills.

Check Your Progress 2

Notes: (a) Write your answers in the space provided after each item.

(b) Compare your answers with those given at the end of the unit.

- 1) Give an example of a task where cognitive and non-cognitive abilities are involved.

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14.5 WHY TO ASSESS NON-COGNITIVE SKILLS/ABILITIES?

Levin (2012) refers to non-cognitive skills as “those that are generally viewed as attitudes, behaviors and values that contribute to adult competencies” (p. 4). Today’s classroom is challengeable and demanding a lot of skills to meet the diverse needs of learners. Therefore, learners need a balanced set of abilities such as cognitive, social and emotional. Various learning strategies in classroom demand learners to acquire social and emotional skills. Learners have to face multiple demands, practice inhibiting control (ability to control one’s thoughts, behavior and emotions), and effectively engage with others. Moreover, with the introduction of 21st

century skills, both cognitive and non-cognitive abilities are important for learners. We know that providing academic skills alone is not enough to achieve success in one's life. For well-being, connectedness and positive life outcomes, social and emotional skills such as mindfulness, empathy, tolerance, sociability, emotional stability, collaboration etc. are essential. In order to develop perseverance, attitudes, and to do better academically and better in work force, non-cognitive skills are essential. Skills and attitudes can be developed through learning experiences and opportunities created for learners in schools and colleges.

As discussed in section 14.4, the major objective of education is the all-round development of a child in all dimensions i.e. physical, socio-emotional, intellectual, moral, and spiritual. This holistic development is perceived as a comprehensive approach to learning that aims to develop multiple abilities of a learner. In order to ensure the occurrence of holistic development among learners, you have to adopt the approach of holistic assessment, which includes assessment of cognitive and non-cognitive abilities. Education is meant to teach two things-i) how to earn livelihood and ii) how to live. These remind us the concept of four pillars of learning mentioned in the 'Learning: The Treasure Within- Report to UNESCO of the International Commission on Education for the Twenty -First Century' (1996). The four pillars denote four skills that an individual must acquire. They are:

- Learning to know – learning skills
- Learning to do – performance skills
- Learning to live together – interpersonal skills
- Learning to be – personal development skills

The above mentioned four pillars of learning emphasized the need to acquire and assess both cognitive and non-cognitive abilities. That is why in higher education curriculum (CBCS), skill enhancement courses are included along with other compulsory subjects which provides the holistic development of learners.

Having understood the types of abilities and the need to assess non-cognitive skills let us now attempt to understand how to assess aptitudes, attitudes, personality and social skills in the forthcoming sections.

14.6 ASSESSING APTITUDE

Before the discussion on assessing aptitude in detail, let us glance through the various ways that are used to assess cognitive and non-cognitive abilities. You might have understood that the overall abilities are divided into abilities related to cognition (brain), psychomotor, affective and physical abilities. These abilities can be assessed through achievement tests, aptitude tests, intelligence tests, attitude scale and personality tests. Psychomotor abilities influence the capacity to manipulate and control objects. While assessing this

ability, the sub areas of psychomotor ability such as *manual dexterity* (ability to grasp, manipulate or assemble objects), *finger dexterity* (ability to coordinate movements of the fingers) and *wrist-finger speed* (ability to make movements of fingers, hands and wrists repeatedly) are also assessed. You are well familiar with achievement tests that assess cognitive abilities. Now let us turn our attention to the detail description on how to assess aptitude.

The term ‘aptitude’ means natural ability or skill. In aptitude test, we try to assess the innate and acquired skills of individuals. Aptitude tests are constructed to measure the cognitive skills, abilities, and knowledge that individuals have accumulated as the result of their overall life experiences. Hence these tests can be conceptualized as tests of developed cognitive abilities that can be ordered along a continuum in terms of assessed abilities are to specific learning experiences. Aptitude test is not meant to test knowledge rather it tests a particular skill.

Different Types of Aptitude Tests

You might have heard about different types of aptitude tests and sometimes you might have undertaken an aptitude test in your school days. From the table 14.3, you can understand the different types of aptitude tests and their purposes.

Table 14.3: Different Types of Aptitude Tests and their Purposes

Sl.No.	Types of Aptitude Tests	Purpose
1.	Abstract Reasoning Test	Assess the ability to think laterally and to make logical connections of various information
2.	Spatial Reasoning Test	Assess the ability to understand and visualize an object’s spatial distribution and movement
3.	Verbal Reasoning Test	Assess the ability to use words
4.	Logical and Critical Reasoning Test	Assess the ability to make logical inferences
5.	Visual Reasoning Test	Assess the ability to create mental image of an object to find solution and for drawing technological designs
6.	Problem-Solving Ability Test	Assess the ability to use available information to deal with a problem
7.	In-tray and E-tray Exercises	Standardized psychometric tests to assess an individual’s general ability to manage and respond to a series of different tasks, to negotiate conflicts and analyze different priorities

8.	Mechanical Reasoning Test	Assess the ability to deal with mechanical concepts
9.	Situational Judgement Test	Assess the ability to judge the most appropriate approach to solve problems related to situations
10.	Numerical Reasoning Test	Assess the ability to make correct inferences from numerical or statistical data

You will also study in detail about mental ability test incorporated in competitive examinations and different types of mental ability tests in sections 16.4.4 and 16.6 of Unit 16 of the Course, BESC-133: Curriculum, Teaching-Learning and Assessment. Now let us understand the thrust of National Policy on Education, 2020 with regard to aptitude test. The National Testing Agency (NTA) will offer a high-quality common aptitude test, as well as specialized common subject exams in the sciences, humanities, languages, arts, and vocational subjects, at least twice every year. These exams shall test conceptual understanding and the ability to apply knowledge and shall aim to eliminate the need for taking coaching for these exams. This will help university to admit students in various programmes based on their interests and talents. (NEP, 2020, section 4.42, p.19).

Check Your Progress 3

Notes: (a) Write your answers in the space provided after each item.

(b) Compare your answers with those given at the end of the unit.

1) Which test is used to assess the ability to make logical inferences?

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14.7 ASSESSING ATTITUDES

Attitudes are learned positive or negative reactions to a person, object, or idea. You know that there are affective components in learning process. The outcome of schooling is to develop positive attitudes toward self and society as well as to attain freedom of choice, equality of opportunity, free and open inquiry. In pursuit of being a lifelong learner, the development of positive attitudes may be more important than mastery of knowledge. Because of their importance, it is essential to assess learner’s attitudes toward the subject area

and their ability to perform well in examinations. Due to this importance, we know that along with scholastic areas, co-scholastic areas are also stressed in curriculum. How do we assess the component of attitude? This is possible through observation, questionnaires and interviews. In planning how to use these techniques properly in assessing attitudes, you should keep in mind the following procedures (Johnson, D.W. & Johnson R.T. (2002) :

- 1) **Determine the attitude you want to measure:** In this procedure you have to determine attitudes toward the subject, learning experiences, peer group, academic self-worth and so on.
- 2) **Preparation of a Questionnaire:** While preparing a questionnaire, you have to decide the types of questions, sequence of questions, forms of response and scoring procedure.
- 3) **Select the standardized attitude measures:** The selection of standardized attitude measure depends on your instructional goals and expertise in using the results to improve instruction.
- 4) **Administer the questionnaire in the beginning and at the end of an instructional unit:**
When you administer the same questionnaire in the beginning and at the end of an instructional year for a few years, you can assess the attitudes and can build norms based on the response of learners.
- 5) **Analyze and organize the data to make instructional decisions:** You can analyze the data to get feedback and can present the results in graphic forms.
- 6) **Provide timely feedback to learners:** Timely feedback to learners motivates them to change their attitudes.
- 7) **Use the data to modify the teaching strategies:** You can change your instructional methods and curriculum to inculcate positive attitudes toward teaching-learning process.

For example, suppose you want to assess learners' attitude toward the classroom life, you may include the following criteria in your questionnaire:

- *Positive goal interdependence*
- *Teacher academic support*
- *Teacher personal support*
- *Peer support*
- *Learning Environment*
- *Academic self-esteem*
- *Teaching strategies*
- *Classroom climate*
- *Fair assessment*

- *Classroom cohesion*
- *Alienation*

Based on the above criteria, you may construct a questionnaire either in open-ended form /closed- ended form /semantic differential form. In open-ended questionnaire, there is chance to give free responses of respondents. Closed-ended questionnaire require the respondent to indicate the alternative answer closest to his or her internal response. A semantic-differential questionnaire consists of a series of rating scales of bipolar adjective pairs describing a concept. For example,

Effort

Worthless	1 2 3 4 5 6 7	Valuable
Unproductive	1 2 3 4 5 6 7	Productive

The teacher then added the response to obtain an overall indication of attitudes toward the concept. Each concept is listed separately accompanied by the same sets of adjectives.

Activity 1

Prepare an open-ended questionnaire to assess learning environment in your class. The questionnaire should contain 10-15 items. Apply it in your class and prepare a report.

14.8 ASSESSING PERSONALITY

We all engage in the assessment of personality while interacting with others. We may call some persons as *introverts* and others as *extroverts* which stated that you are making a judgement about personality. Each individual has different personality traits, states and interests. Your personality will influence relationships with your family, peers and contribute to your health and well being. Before proceeding into the details of how to assess personality, it is beneficial to clarify the term ‘personality’ in the context of assessment. Gray (1999) defines personality as ‘the relatively consistent patterns of thought, feeling, and behaviour that characterize each person as a unique individual.’ Personality assessment means the procedures adopted to identify the similarities and differences among individuals in their traits, types, states, attitudes, cognitive styles and personal features. Let us consider the difference among traits, types and states. Traits mean any distinguishable, relatively enduring way in which one individual varies from another (Guildford, 1959, p.6). The term ‘distinguishable’ denotes the behaviours that are linked with different traits which differ from person to person. ‘Relatively enduring’ indicates the relative consistency of traits throughout the life-span but based on the context the evidence of traits may differ. Personality type refers to the psychological classification of different types of individuals. Or

we may say the traits denote characteristics whereas types are descriptions of individuals. Coming to personality state, it indicates the temporary condition that an individual experience for a short period of time. Now let us turn our attention towards the purpose of personality assessment.

14.8.1 Purpose of Personality Assessment

The purpose of personality assessment is always linked with the context in which it is used. The contexts may be clinical, educational, health care and organizational settings. In clinical settings, personality assessment is done to diagnose psychological disorders in persons. It also contributes to identify the attitudes of individuals towards themselves and others, their own strengths and weaknesses, their needs and concerns, and their coping styles which are used in treatment planning and outcome evaluation. In educational settings, the results of personality assessment are used to provide proper guidance and counseling to students and to provide educational services to students with special needs. In health care settings the results of personality assessment are used to find out the adaptation to chronic illness, mental illness and stress of individuals and to provide appropriate treatment for them.

14.8.2 Tools for Assessing Personality

The tools used to assess personality in educational settings are rating scales, self-report inventories and projective techniques. There are generally two types of personality assessment methods-i) objective methods and ii) projective methods. In this section, our focus is upon self-report inventories and projective techniques.

Self-Report Inventories (Objective Methods)

Self-report inventories are a kind of **objective** test used to assess personality. They mainly assess thoughts, feelings and psychological disorders of individuals. The items are framed in the format of multiple-choice which represent a range from 1 (strongly disagree) to 5 (strongly agree). They often are called Likert scales after their developer, Rensis Likert (1932). The self-report inventories have proven their usability in assessing internal disorders such as depression and anxiety that are not directly observed. They are well-suited to identify personality states as they ask individuals to describe their own subjective experiences, including emotional, motivational, interpersonal, and attitudinal characteristics. Hence, it is not possible to identify personality traits and behavioural dispositions. The most commonly used self-report inventory is the **Minnesota Multiphasic Personality Inventory (MMPI)**. It is a psychological test used to assess individuals who are having mental health issues. Some of the popular self-report inventories are displayed in the table 14.4.

Table 14.4: Popular Self- Report Inventories

Sl. No.	Name of Self-Report Inventory	Purpose
1.	Beck Anxiety Inventory (BAI)	Measure the severity of anxiety in children and adults
2.	Beck Depression Inventory (BDI)	Measure severity of depression among children
3.	Myers-Briggs Type Indicator (MBTI)	An introspective questionnaire indicating differing psychological preferences in how people perceive the world and make decisions
4.	Eysenck Personality Questionnaire (EPQ)	Assess the personality traits of an individual
5.	Revised NEO Personality Inventory (NEO PI-R)	Assess a person's five factors (five-factor model) of personality traits such as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism

Projective Techniques (Projective Methods)

Projective techniques include the presentation of ambiguous images or other ambiguous stimuli to assess an individual's unconscious thoughts, fears, desires, needs and conflicts. The core of this technique is that the examinees could interpret ambiguous stimuli in a manner that reveals unconscious aspects of their personality. The ambiguous stimuli may be pictures, words, inkblots or sounds. For example, Thematic Apperception Test use pictures as projective stimuli. In Word Association Test and Sentence Completion Test, words act as projective stimuli. Rorschach Inkblot Test used inkblots printed on cards as projective stimuli. In Auditory Inkblots, sounds are used as projective stimuli. It provides a deeper understanding of a person. The advantage of projective technique is that they are free of response sets unlike self-report inventories. This is because the examinee is not aware about the expected responses. Table 14.5 shows the commonly used projective techniques to assess personality.

Table 14.5: Common Projective Techniques

<i>Sl.No.</i>	<i>Name of Projective Technique</i>	<i>Purpose</i>
1.	<p>Projective Drawing Techniques</p> <p>a. Draw-A-Person Test (DAP)</p> <p>b. House-Tree-Person (H-T-P)</p> <p>c. Kinetic Family Drawing (KFD)</p>	<p>Reflect how children feel about themselves and also while interacting with their environment</p> <p>Reflect unconscious and conscious aspects of the self</p> <p>Provide children's view of their family and their interactions</p>
2.	<p>Apperception Tests</p> <p>a. Thematic Apperception Test (TAT)</p> <p>b. Children's Apperception Test (CAT)</p>	<p>Reflect an individual's perception of interpersonal relationships</p>
3.	Sentence Completion Test	Reflect attitudes, beliefs, motivations and other mental states
4.	Rorschach Inkblot Test	Reflect an individual's personality, emotional functioning and thinking patterns

Till now, we have discussed how to assess one's own feelings, attitudes, emotions and thoughts. We are interacting with others in our daily lives. Therefore, assessing social skills is an inevitable component which is discussed in the next section.

Check Your Progress 4

Notes: (a) Write your answers in the space provided after each item.

(b) Compare your answers with those given at the end of the unit.

1) Distinguish between self-report inventories and projective techniques.

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2) List some of the projective techniques used to assess personality.

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14.9 ASSESSING SOCIAL SKILLS

'From the standpoint of everyday life...there is one thing we do know; that man is here for the sake of other men—above all, for those upon whose smile and well-being, our own happiness depends, and also for the countless unknown souls with whose fate we are connected by a bond of sympathy. Many times a day I realize how much my own outer and inner life is built upon the labours of my fellow men, both living and dead, and how earnestly I must exert myself in order to give in return as much as I have received.'
– (Albert Einstein (scientist and philosopher))

Social skills are necessary to make connections among people. Any time learners are interacting with teachers, peers and engage in group work which demands the necessity of social skills. This skill involves abilities such as co-operation, connectedness, communication, and coordination. You know that an individual's success in life depends on social skills. Acquiring social skills lead to gain social competence. Social competence is the extent to which the consequences of a person's actions equate with his or her intentions. Individuals who are socially competent acquire a wide range of interpersonal skills. According to Johnson, Johnson, and Holubec (1998a) social skills can be classified as follows:

- 1) **Forming skills** : This includes the skills require to form a cooperative learning group where the individuals learn to work together with team spirit.
- 2) **Functioning skills** : This includes skills to manage group activities, share ideas, maintain working relationships in groups and encourage the participation of all group members.
- 3) **Formulating skills** : This means to have a deeper understanding about the material and to adopt reasoning strategies.
- 4) **Fermenting skills** : This include the skill to stimulate reconceptualization of the material being studied and enter into cognitive conflict to get more information.

Having understood the classification of social skills, let us attempt to learn the basic assumptions underlying the assessment of social skills of learners. According to Johnson, Johnson, and Holubec (1998a), the following are the **basic assumptions** that underlie the assessment of social skills:

- 1) **Social skills are learned:** Social skills are not inborn, they should be taught. While in group activity, learners will learn the interpersonal skills.
- 2) **Every cooperative lesson is a lesson in social skills:** Learners will learn both task work (subject matter) and teamwork (group skills) while they

are engaged in cooperative learning. If all the members contribute equally, the higher is the quality and quantity of their learning.

- 3) **Teach teamwork skills:** While in teamwork, learners should learn how to respect others' viewpoints, participate actively, stay on task, control one's behavior and motivate each other to contribute for the success of the task.
- 4) **Follow the rules of teamwork skills:** There are three teamwork skills such as:
 - i) **Be specific:** Define each social skill in operational terms
 - ii) **Start small:** Begin with one or two skills
 - iii) **Emphasize overlearning:** Keep emphasizing the practice of each skill until the learners incorporate them in their behavioural pattern habitually.

The best technique which can be used to assess social skills among learners is observation. It can be either direct observation or indirect observation. Here is an example to observe social skills among learners.

Sl.No.	Descriptors	Score out of 5
1.	I like to work in a group than individually	
2.	I try to understand the viewpoints of others.	
3.	I keep away from others' personal space	
4.	I adapt my behavior according to the situation	
5.	I follow the rules that framed in group activity	
6.	I admit the mistakes done by me in a group	
7.	I maintain self-control when others teased me	
8.	I listen to others without any interruption	
9.	I expressed my ideas openly and frankly	
10.	I control my tune when enter into disputes with others	
	Total	
	Average Grade	

You can also develop such observation schedule which will help you to assess the social skills of your classmates in an effective manner.

Activity 2

Prepare an observation schedule for assessing social skills among your friends. The schedule should consist of 10-15 descriptive indicators. Apply it in your class and prepare a report.

14.10 LET US SUM UP

In this Unit, we began our discussion by explaining the term ability as an enduring attributes of an individual that influence his/her performance. Then we have identified the various abilities needed to perform different tasks. We have clarified the difference between a skill and ability by providing sufficient examples. Then we attempted to distinguish the cognitive and non-cognitive abilities with the help of illustrations. We came to the conclusion that we cannot categorize cognitive and non-cognitive abilities into water-tight compartments. Then we turn our attention to the need of assessing non-cognitive skills/abilities. A holistic approach to education facilitates the total development of a child where we have to assess both cognitive and non-cognitive abilities. By the end, we have delineated the procedures of how to assess aptitude, attitudes, personality and social skills.

14.11 UNIT-END EXERCISES

- 1) Identify a topic in your subject area that could be the focus for a Cooperative Learning. Categorize the cognitive and non-cognitive abilities needed to do the task.
- 2) How do we assess cognitive and non-cognitive abilities by administering aptitude tests?
- 3) How do we assess personality?

14.12 REFERENCES AND SUGGESTED READINGS

- Barnett, W. Steven, and Clive R. Belfield. 2006. Early childhood development and social mobility. *The Future of Children*, vol. 16, no. 2, 73–98.
- Gray, P. (1999). *Psychology*. New York: Worth Publishers.
- Guilford, J. P. (1959). *Personality*. New York: McGraw Hill.
- Horn, J.L.(1982). The Aging of human abilities. In B.B. Wolman (Ed.), *Handbook of Developmental Psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Government of India.(2020). *National Education Policy 2020*. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.p
- Johnson, D. W., Johnson, R., & Holubec, E. (1998a). *Cooperation in the classroom*. Edina, MN: Interaction Book Company.
- Johnson, D.W. & Johnson, R.T. (2002). *Meaningful assessment- A manageable and cooperative process*. Boston: Allyn & Bacon.
- Kail, Robert V. & Cavanaugh, John C. (2013). *Human development-A life-span view*. Canada: Wadsworth, Cengage Learning.

- Levin, H. M. (2012). The utility and need for incorporating noncognitive skills into large-scale educational assessments. *The Role of International Large-Scale Assessments: Perspectives from Technology, Economy, and Educational Research*, 67-86.
- OECD (2015). *Skills for social progress: The power of social and emotional skills*, *OECD Skills Studies*. OECD Publishing. Retrieved from <http://dx.doi.org/10.1787/9789264226159-en>.
- UNESCO. (1996). *Learning: The Treasure Within- Report to UNESCO of the International Commission on Education for the Twenty -First Century*. France: UNESCO.

Website

[https://www.oecd.org/education/school/UPDATED%20Social%20and%20Emotional%20Skills%20-%20Well-being,%20connectedness%20and%20success.pdf%20\(website\).pdf](https://www.oecd.org/education/school/UPDATED%20Social%20and%20Emotional%20Skills%20-%20Well-being,%20connectedness%20and%20success.pdf%20(website).pdf)

14.13 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

Refer table 14.1

Check Your Progress 2

Give your own answer.

Check Your Progress 3

Logical and Critical Reasoning Test

Check Your Progress 4

- 1) Self-Report Inventories mainly assess thoughts, feelings and psychological disorders of individuals whereas projective techniques include the presentation of ambiguous images or other ambiguous stimuli to assess an individual's unconscious thoughts, fears, desires, needs and conflicts.
- 2) Apperception tests, Sentence completion test, Projective Drawing Techniques, Rorschach Inkblot Test.



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