

Details of Module and its structure

Module Detail	
Subject Name	Education
Course Name	Understanding the Learner
Course Code	EDU502
Module Name/Title	<i>Role of teacher in different learning environment settings based on cognitive abilities and affective domain and their implications for catering to individual variations in view of difference rather than deficient</i>
Module Code	UTL020
Pre-requisites	Growth and developmental knowledge of Learner and Learning processes
Learning Outcome	<p>After going through this lesson, the learners will be able to:</p> <ul style="list-style-type: none"> • Illustrate Role expectations of a Teacher in present context • Describe factors that influence Individual Differences • Suggest methods and strategies to meet out Individual Difference in a classroom • Differentiate between various learning environments • Analyse Cognitive, Affective and Psychomotor Domains with reference to learning needs
Keywords	Teacher’s Role, Individual Difference, Learning Environment, Learning Domains

1. Development Team

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1. Introduction

Education as a system is vital for any nation’s economic, political and social system to thrive and flourish. Education as a process is known to be tripolar with teacher, student and society at the three ends making their interface encompass the institution of education. John Dewey in his famous article ‘My Pedagogical Creed’ published in 1897 presented this three-dimensional nature of education stating, ‘All education proceeds by the participation of the individual in the social consciousness of the race(mankind).’ He further explained that the ‘true education’ comes through the stimulation of the child's powers by the demands of the social situations in which he finds himself’. Teacher known to be a ‘Guru’ or a ‘Guide’ who was playing a role of instructor or source of knowledge suddenly found change in the role and expectations that came to them in this fast-growing post-modern progressive world.

1.1 Teacher's Status vis-à-vis Teacher's Role

Ralph Linton (1936) defined the term 'status' as a person's status in a social situation. With every status comes expected behaviour. These expected behaviours from a person are the role they perform within the social relationships as an actor. The status of a Teacher comes with variety of role-set. Be it in capacity of a profession, as an art, as science, as a technique and so on comes with plethora of role expectations associated with it. Secord and Backman (1974) defined Social roles as both category and its associated expectations. Social role is set of social norms about how any person in that particular social role is expected to behave. These role expectations are mainly two types:

a) Anticipatory expectations: When a role performed by a specific category of status can be anticipated well in advance. Status of a Teacher have associated role expectations such as, they are expected to be on time, take their classes regularly, do evaluation work, be involved in all scholastic activities, maintain discipline, take active participation in student's overall development etc. These role expectations are understood beforehand as per the norms established by the society and performing them comes as part of status the society grants to their teachers.

b) Normative expectations: When the role expectations are related to the behaviour toward the role-partner within the relationship dynamics, those expectations are known to be normative. Teacher's status comes with the expectation of certain role and behaviour they display towards students, colleagues, administrations, parents, society etc.

The roles that teacher performs are determined by situational demands, personality of both teacher and the role-partner, be it student or parents etc., and the negotiations within the relationship dynamics that take place between the teacher and other counterparts. These roles that teachers perform also witnesses 'Role Conflict' from time to time when they find difficulty in executing these roles. This situation arises when there is ambiguity in situations, lack of clarity in role expectations, disagreement

between the role partners, conflicting expectations, personality factors, cultural factors, administrative policies etc. Negotiations can be a good way to resolve these role conflict. As Goode (1950) in Exchange Theory stated that any person cannot fulfil all expectations of the role partners and hence they try to negotiate their roles expectations depending upon:

- a) wanting to perform that role to feel internal satisfaction
- b) how much of reward and punishment they would be receiving within the negotiation, and
- c) their own individual priorities and point of view.

So, for a teacher to negotiate better in the conflicting role situations, be it teaching, evaluating, guiding, facilitating etc. at the same or different times would be doing it successfully when **a)** they are wanting to perform that particular role to their internal satisfaction, **b)** by assessing the reward at performance and punishment at non performance and weighing their importance in their lives, and **c)** prioritizing what needs to be performed first in order of significance and importance.

1.2 Teacher's changing role in present context

Teacher's role has witnessed a variety of phases and changes. They have been recognized as masters to guides to facilitators over a due course of time. The modern education system and institutionalized education comes with unique role expectations for teachers. So now a teacher is no more just teaching but a facilitating in process where students create their own knowledge. Teacher facilitates and creates learning environment where students create knowledge and collaborate in that process. With the overflow of information available at click of a button it is a necessary for teacher to enable students differentiate between information and knowledge. A teacher has to actively contribute in designing curriculum very regularly, keeping pace with knowledge generation and development around. A teacher has to generate intellectual resources for the class, be actively involved in evaluation process that would involve both summative and formative assessment methods and provide regular feedbacks. A teacher is expected to facilitate community linkages and extension activities along with their own

professional development. These role expectations increase the more we progress as a society and more complex our social relations become. So now the teacher not merely a guide and a facilitator but creator, resource generator, assessor and the list of role expectations would increase and remain dynamic with changing pace of time. These role expectations are to be performed counter parting the Student and the Society which are the other two ends of the tripolar process of education.

2. Dealing with Individual Differences

To understand the student, it is more importance to understand their uniqueness. And best way to deal students is to address and cater their different and varying needs. The label used to determine how individual organisms differs on basis of habits, psychological traits, intelligence, physical capabilities and behaviour is 'Individual difference'. Every student is unique and matters. Every individual has a role to play within their environment and their individuality is a welcome diversity within a classroom. It is challenge for teachers to successfully integrate that unique diversity within a shared learning experience. The smoother that transition takes place in the class, the more successful a teacher becomes. Let us examine these 'Individual Differences' with varying perspectives.

2.1 Understanding Abilities and Needs

The recognition of skills, potential and proficiencies of students are as much needed as the recognition of needs and requirements. These needs and abilities within the student can be a) Intrapersonal: difference within a person, and b) Intraindividual: difference between two individuals. It is important for a teacher to understand these varying differences which reflect in:

- a) Physical development:** Physical structures like height, weight, colour of skin, fascial features etc. are the first and foremost most visible characteristics that makes us differentiate between two individuals.
- b) Mental development:** As the physical features differentiate between individuals the structure of mental development also varies

substantially not only in different age groups but also within the same age group. E.g. there is varying level of intelligence found within the same class of same age group. Only some students are with high IQ and only some have a low IQ within a class, whereas most of the class would normally distributed.

- c) Personality factors:** There is difference in personality factors also found between students. Some have high level of extraversion some are introverts. Cattle (1945) says that some students reflect Cardinal traits because of which they become famous and most of students only display Central traits.
- d) Emotional abilities:** As the maturation effect is different in every individual so is the emotional development. Anger, fear, joy, jealousy etc. are found at varying levels between individuals and also, present in some and absent in some. Some students display empathy more than the others. For a disciplinary action by a teacher feeling invoked in one student would differ from feelings raised in another.
- e) Social development:** The social development of students also varies. Some students have better leadership abilities than the other. Some students are better at community service while some might perceive it as obligation. Social connectivity varies between individuals.
- f) Difference in sensory motor abilities:** The motor control and sensory motor coordination of individuals also varies from person to person. The reaction time of answering and responding varies between the students. This ends up influencing their achievements, self-concept etc.
- g) Difference in achievements:** Many researches indicate difference in educational achievements of students with same IQ. Skinner attributed this difference dependent upon interest, motivation and practice of a student.
- h) Difference in interest and aptitudes:** These differences are very evident among the students. Some display interest in literature while some in science or social sciences. Some students have keen interest in dramatics and some in sports. The same can be said for aptitude as

some students display good mechanical aptitude some good clerical aptitude while some may have better linguistic aptitude than others while few may display a high level of aptitude and potential overall.

- i) Gender difference:** It is evident that girls develop at faster pace than boys. Whereas, boys have a much muscular development than girls. Boys develop heavy voice whereas, girls grow with a softer tone. These basic physiological difference in growth among students underline the individual differentiation majorly.
- j) Language development:** Children always display a variety of linguistic ability. Some can read better than write and listen. Some are better at expressing in writing than speaking and listening. This individual difference is known to exist within a same household between two children, within a classroom between two students of the same age group and also same intelligence or creativity.

2.2 Understanding nature of Individual Difference

To understand nature of these 'Individual Differences' it is important to understand it's characteristics. BF Skinner (1962) schemed the main characteristics of these individual differences as:

- a) Variability:** By variability it is meant the variation in traits. An individuals' personality is dynamic organization of group of traits. Any organization of traits in one individual is unique and does not replicate.
- b) Normality:** Normality being a statistical concept is crucial to understand individual difference because no trait is found to be occurring in extreme performance. E.g. in a classroom only, some students would be highly creative and some very less creative whereas most of the class would lie around midrange for their creativity.
- c) Different rate of growth:** The physiological growth and maturation of any individual is different. Within the same age group, the physical development differs along with maturity.
- d) Different rate of learning:** The capacity to learn also differs within the same age group.

e) **Inter relationship of traits:** As we understood that there is variation in organization of traits within every individual and these unique organizations end up influencing other traits as well. E.g. a student's interest in reading would end up influencing his/her aptitude and achievements also. An achievement by a student can boost up their self-efficacy and self-confidence.

f) **Influence by hereditary and environment:** Genetic and environmental factors play a very important role in deciding as those traits are 'acquired'.

Here, it is important to note that the factors that influence these individual differences are environmental, genetic, race, nationality, culture, age, maturation effect, gender, economic condition and level of education.

2.3 Making the differences work

When so much variation and differences among the students within a class exists and with a good strength in a class, it can be a challenge to be met by any teacher. A good way around meeting this challenge would be to:

- Know the students well and for that the best strategy would be the standard **tools used to identify individual difference** like intelligence test, personality test, achievement test, test of emotions, interest test, aptitude test, test of creativity etc.
- **Grouping and classification** of students on basis of their needs or abilities so that those needs can be satisfied and met. Special tutorials for weak students, special classes for high performers, drama and debate societies, channel for students with creative artistic abilities etc. are a good strategy for the purpose. Grouping and classification is with regards with the special needs and not to exclude others so the classes would always be best when they are all inclusive
- The **curriculum** should be designed so that there is ample flexibility for students to choose and also that curriculum should cater to their needs and aspirations.
- The variation in **teaching methods** creates interest for the class among students, it unburdens the student with cognitive load, helps

them remember what they studied and much more benefits that make the learning experience pleasant and hence the variation in teaching method should always be a priority for a teacher while planning classroom transactions.

- **New approaches** like Blended learning and Flipped Learning are proved to be successful in achieving learning aims for the whole group with varying individual differences and are successful techniques to be included to achieve better learning outcomes.
- **Homework and Assignments** that cater to individual learning needs and give students a chance to explore and create on their own would enable the teacher to address the individual needs successfully.

3. Diverse Learning Environment

The tripolar process of Education is not complete without discussing the third dimension that is the Society. In a learning process let us concentrate on the learning environment for the purpose and assess its changing scenario. From Gurukuls to modern classrooms, from naturalistic setting of open spaces to unlimited space of virtual web the learning environment has seen growth imagined in a science fiction novel. The traditional classroom environment was a self-contained boundary within which learning took place. Now a classroom is the location from where students access the world where boundaries are not demarcated. The learning environment now makes the student more empowered and vulnerable at the same time. The new and upcoming technologies e.g. speech to text typing, editing and creating, e-readers, incorporating Moodle and MOOCs within a classroom, asynchronous learning etc. are empowering students as they are most capable in catering to different learning needs. And on the other hand, plagiarism, hacking, cyber-bullying etc. are just few of the many problems that learning environment is facing. Teachers role becomes even more challenging and demanding when addressing these issues become part of their role expectations along with the plethora of roles that were already being performed by the them.

The new technologies have made the learning environment boundless in comparison to its confounding nature in the past when learning happened within boundaries of institutions or classroom.

4. Coping with various domains of learning

Benjamin Bloom in 1956 gave 'Taxonomy of learning domains' to promote higher thinking skills in teaching-learning and identified three domains of learning or educational activities: Cognitive (Mental Skills), Affective (Emotional Skills) and Psychomotor (Physical Skill). These are also referred as KSA as in Knowledge (Cognitive), Skill (Psychomotor) and Attitudes (Affective). This taxonomy offers goals of learning process and it is important to understand expectations that come from a teacher to address these goals.

4.1 Cognitive Affective and Psychomotor Domain

a) Cognitive Domain: When learning takes place as thinking(mental) process the domain of learning is considered to be cognitive. It consists of six levels mainly knowledge, comprehension(understanding), application, analysis, evaluating, and creating(synthesis). The functions and behaviour related to these domains are must for a teacher to know as a well-planned class is always a successful class. Meeting out individual needs becomes easier when the functioning of mental faculties while learning process is understood and well-directed by the teacher. The thinking process also ranges from individual to individual and falls anywhere between basic thinking skills to higher thinking skills. A teacher has to know that thinking is a skill, and can be developed by practicing. Merely recall organize and interpreting type cognitive functions are not enough to involve the whole class in the learning process. When students get involved in critical and creative thinking process it makes learning more effective for the group. Students have to be made to practice - divergent and convergent thinking, dialectic reasoning, different assumptions and bias from knowledge, develop curiosity and flexibility, evaluate consequences, finding new solutions and make learning a reflective process only then cognitive abilities are well

addressed by the teacher. The functions associated with various levels of this domains are:

- Knowledge: where students try to recognize and recall what they have learned.
- Comprehension: here students tries to organize, interpret and translate the gathered information in
- Application: here the students try to apply acquired knowledge to new situations and solve problems
- Analysis: Here students tries to breakdown the knowledge in pieces and tries to analyse them in parts, make inferences based on comparing and contrasting the facts
- Evaluating: students appraise, assess and critique, defend their judgements based on criteria or evidences
- Creating: here the student originates, designs, combine and integrate the concepts, principles and theories in a plan and solutions that is new to them

b) Affective/Conative Domain: The learning that relates to attitudes, behaviour and values are processed through affective domain. This domain consists of five levels: receiving, responding, valuing, organization and characterization. The affective skills also range from basic functions with egocentric view to more highly developed attitudes and abilities identifying and articulating other's values also. When teacher makes sure the journey of learning ranges within these emotions encouraging and giving space for intelligent emotions, they make sure the affective learning is at a much higher evolved platform. The functions related to affective domains according to ascending levels are:

- Receiving: this behaviour is related to a student's awareness and willingness to give attention to selected topic.
- Responding: It is the active participation on part of the learner. Compliance, willingness and motivation of responding would describe the student's engrossment in the topic.
- Valuing: Here the students display valuing when they internalize and display the values in overt behaviour.

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- Organization: When internalized values are organized on basis of priority resolving any conflicting situation leading to a unique set of values among every student.
 - Characterization: When internalized set of values decides the behaviour to be predictable and consistent then we can say that characterization of the student's learning have taken place.

c) Psychomotor/Kinaesthetic Domain:

It includes involvement of motor moments, motor skills and physical moments within the learning process. Including psychomotor activities is always considered good practice. Levels in this domain are: observe, model, recognize, correct, apply and coach and they range from basic motor skills to more sophisticated critical understanding of the practice and achieving level of intelligent actions which are beneficial for others as well. The actions related to various levels of this domain are:

- Observe: When students transfer the sensory inputs into actions like to observe, touch, listen, smell etc.
- Model: When the simple action gets to replicate into basic skill or task like follow, imitate, model, re-enact, reproduce, try attempt etc.
- Recognize Standards: This level is when the students try to check the minimum standards and criterions to complete the task which makes the task correct with good quality. E.g. check, detect, discriminate, detect, notice select etc.
- Correct: When students utilize the evaluated standards for improving their own standards and make necessary corrections in their performances this level is achieved.
- Apply: In this level the learned skills get to be practiced in real life situations. Behaviour associated with this level are to build, design, originate, compose, create, construct etc.
- Coach: At this level the students develop ability to instruct or help others with their skills and performances. The behaviour associated to this level is to demonstrate, exhibit, train, instruct, teach etc.

When the teacher successfully incorporates these behaviours within the learning situations the diverse individual needs and differences are catered thoroughly.

5. Summary

In this module we tried to understand the changing expectations in 'Role' of a teacher, and how important it is to meet those expectations with changing time and present learning environment which is technologically advanced. Understanding towards these diversities within the classroom in terms of needs and abilities and also types of differences that may exist were discussed. It was discoursed in detail how these differences can be dealt with successfully. A detailed discussion about desirable understanding of cognitive, affective and psychomotor domains ranging from basic skills to more complex skills that students need to demonstrate was done, so that teachers are aware of the minimum expectations that their profession have with them.

Quadrant-III**Learn More / Web Resources / Supplementary Materials****Books, articles, research papers, journals, case studies etc.:**

- Anderson, L. W. and Krathwohl, D. R., et al (Eds.) (2001) A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. Allyn & Bacon. Boston, MA (Pearson Education Group)
- Becker, H. S. (1960). Notes on the concept of commitment. American Journal of Sociology, 66, 32–40.
- Billingsley, B. S. (2004). Promoting teacher quality and retention in special education. Journal of Learning Disabilities, 37(5), 370–376.
- Bloom, B.S. and Krathwohl, D. R. (1956) Taxonomy of Educational Objectives: The Classification of Educational Goals, by a committee of college and university examiners. Handbook I: Cognitive Domain. NY, NY: Longmans.
- Fresko, B., Kfir, D., & Nasser, F. (1997). Predicting teacher commitment. Teaching and Teacher Education, 13(4), 429–438.
- Harrow, A. (1972) A Taxonomy of Psychomotor Domain: A Guide for Developing Behavioral Objectives. New York: David McKay.
- Krathwohl, D.R., Bloom, B.S., Masia, B.B. (1964). Taxonomy of Educational Objectives, the Classification of Educational Goals. Handbook II: Affective Domain. New York: David McKay Co., Inc. Simpson E.J. (1972). The Classification of Educational Objectives in the Psychomotor Domain. Washington, DC: Gryphon House.
- Razak N.A., Darmawan I.G.N., Keeves J.P. (2009) Teacher Commitment. In: Saha L.J., Dworkin A.G. (eds) International Handbook of Research on Teachers and Teaching. Springer International Handbooks of Education, vol 21. Springer, Boston, MA.

Links to web sites giving additional readings, Wikipedia, blogs, open source content etc.:

- https://en.wikipedia.org/wiki/Bloom%27s_taxonomy
- https://www2.palomar.edu/anthro/status/stat_2.htm
- <http://www.sociologyguide.com/basic-concepts/Status-and-Role.php>
- <http://www.sociologydiscussion.com/society/status-and-role-of-a-person-in-society/2415>
- <http://hrmars.com/admin/pics/1658.pdf>

Creative Commons link to media used in the PPT

https://commons.wikimedia.org/wiki/File:John_Dewey_in_1902.jpg

<https://pipelineperformancegroup.com/july-2015-managing-fatigue-article-individual-differences>

<https://www.txstudentcivics.org/diversity.html>
<https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>
https://en.wikipedia.org/wiki/Robert_Plutchik#/media/File:Plutchik-wheel.svg
<http://www.speedofcreativity.org/search/learning+revolution/feed/rss>
2
<https://pxhere.com/en/photo/1431453>

Glossary:

- Assumption: Thing accepted to be true without evidence
- Beneficial: Something that results into an advantage
- Boundless: Without limit
- Convergent: Generating a single correct idea based on various facts
- Dialectic: Investigating or enquiring the truth of opinions
- Discourse: Written or spoken discussion
- Expectation: A strong belief of something happening
- Plethora: Large or excessive amount

Quadrant-IV**Self-Assessment**

Multiple Choice Questions:

Q1) Roles defined by 'Anticipatory Expectations' can be:

- A) Expected well in advance
- B) Are undefined
- C) Are not coming from status society confers
- D) Are unplanned

Correct Answer: A

Q2) Roles defined by 'Normative Expectations' can be

- A) Always static
- B) Cannot change according to situations
- C) Understood by behavior towards role partner
- D) Understood in isolation

Correct Answer: C

Q3) A teacher's role is defined by:

- A) Personality of a Teacher
- B) Negotiations within the relationship
- C) Situational demands
- D) All of the above

Correct Answer: D

Q4) How an individual organism differs on basis of habits, psychological traits, intelligence, physical capabilities and behaviour is known as:

- A) Differential Abilities
- B) Individual Differences
- C) Uniqueness
- D) None of the above

Correct Answer: B

Q5) Variability would mean:

- A) Variation in individual traits
- B) Dynamic and unique organization
- C) Non-replication of traits
- D) All of the above

Correct Answer: D

Q6) Which of the following is NOT to be considered while assessing 'Individual Difference' among students?

- A) Rate of growth
- B) Rate of learning
- C) Interrelationship of traits
- D) Dietary habits

Correct Answer: D

Q7) Tools used to identify individual differences among learners are:

- A) Various psychometric tests
- B) Medical examination
- C) Entrance tests
- D) Assignments

Correct Answer: A

Q8) MOOCs, Moodle etc. are example of:

- A) Synchronous learning
- B) Asynchronous learning
- C) Constructivist learning
- D) Creative learning

Correct Answer: B

Q9) Affective learning relates to

- A) Organization, interpretation and translation
- B) Observe, model and coach
- C) Skill development
- D) Valuing and characterization

Correct Answer: D

Q10) Analysis, evaluation and creation are:

- A) Lower order cognitive skills
- B) Middle order cognitive skills
- C) Higher order cognitive skills
- D) Higher order affective skills

Correct Answer: C