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COURSE: BES-123 Learning and Teaching

BLOCK 1: LEARNING: PERSPECTIVES AND APPROACHES

Unit 1: Understanding Learning

Unit 2: Approaches to Learning

Unit 3: Learning for Construction of Knowledge

Unit 4: Learning in Various Contexts

BLOCK 2: UNDERSTANDING THE LEARNER

Unit 5: Learner in Socio-cultural Context

Unit 6: Learner as an Individual-I

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BLOCK 3: TEACHING-LEARNING PROCESS

Unit 8: Understanding Teaching

Unit 9: Planning Teaching-Learning

Unit 10: Organizing Teaching-Learning

Unit 11: Teaching-Learning Resources

Unit 12: Managing Classroom Teaching-Learning

BLOCK 4: TEACHER AS A PROFESSIONAL

Unit 13: Teacher in Diverse Role

Unit 14: Teacher as Innovator and Action Researcher

Unit 15: Teacher as a Reflective Practitioner

Unit 16: Professional Development of Teachers

BLOCK 4 TEACHER AS A PROFESSIONAL

Introduction to the Block

We have discussed about basics of learning, learner and various dimensions of teaching-learning process in previous three blocks. But any discussion on teaching-learning is incomplete without considering teacher as its important counterpart. This last block of the course is focusing on various roles of a teacher. In present context, teacher is not merely the disseminator of knowledge, s/he is more than that. This block will help you to understand the role of teachers in different contexts. This block has four units.

Unit 13: Teacher in Diverse Role will talk about the place of a teacher as a human being. Unit will discuss how teacher's belief, behaviour and practices affect the teaching learning process. Discussion on role of the teacher as planner, manager, content provider, facilitator, leader, co-creator, etc. will help you to understand the role of teacher in diverse perspective. We have already discussed about behaviorist, cognitivist and constructivist perspective of learning, same is applied on teachers also.

In **Unit 14: Teacher as Innovator and Action Researcher**, discussion will start with innovation. What do we mean by innovation in teaching-learning process? and what different types of innovations a teacher can bring, will also be discussed in the unit. Unit will discuss role of a teacher in bringing innovation and supporting it with the help of action research. Unit will also discuss various forms of action research, role of teacher in doing action research and reporting it.

Unit 15: Teacher as a Reflective Practitioner is going to highlight the role of a teacher as reflective practitioner. Discussion on reflection and need for reflection among teachers will help you to realize the importance of reflection. Unit will also suggest strategies/methods for reflection, which you can practice to become a reflective practitioner.

Discussions in **Unit 16: Professional Development of Teachers** concentrate on need and facilities available for continuous professional development of teachers. Unit will critically analyze various schemes and programmes linked with continuous professional development and explains the ways and means for it. Unit will also discuss ICT mediated professional development opportunities available with teacher, which they can utilize to grow as a life-long learner.

UNIT 13 TEACHER IN DIVERSE ROLE*

Structure

- 13.1 Introduction
- 13.2 Objectives
- 13.3 Teacher as a Person
 - 13.3.1 Teacher in a Classroom
 - 13.3.2 Teacher as a Colleague
 - 13.3.3 Teacher in the Community
 - 13.3.4 Teacher as a Citizen
- 13.4 Teacher's Personal Characteristics
- 13.5 Teacher as a Transmitter of Knowledge
- 13.6 Teacher as a Planner
- 13.7 Teacher as a Facilitator
- 13.8 Teacher as a Co-creator
- 13.9 Teacher as a Leader
- 13.10 Teacher as a Manager
 - 13.10.1 Role of the Teacher in the Pre-teaching Phase
 - 13.10.2 Role of the Teacher in the Teaching Phase
 - 13.10.3 Role of the Teacher in the Post-teaching Phase
- 13.11 Teacher as a Counsellor
- 13.12 Let Us Sum Up
- 13.13 Unit End Exercises
- 13.14 Answers to Check Your Progress
- 13.15 Suggested Readings and References

13.1 INTRODUCTION

“What the teacher is, is more important than what he teaches.” - Karl A. Menninger

This very famous quote reflects the importance of being a teacher. Teacher is a pillar in the teaching learning process. In present context, a teacher is not merely a disseminator of knowledge, rather plays a variety of roles. Due to the paradigm shift in teaching-learning process, teacher's role has become more challenging due to increasing expectations. To match those expectations, teacher has to play diverse roles like a planner, facilitator, co-creator of knowledge, leader in classroom and outside classroom, manager, counsellor and apart from that, a true human being. Present unit will discuss various roles of a teacher and their importance in teaching-learning process. Unit will also discuss about teacher's personal attributes, like beliefs, behavior, and practices, etc. which affect the teaching learning process.

13.2 OBJECTIVES

After going through this unit, you will be able to:

- examine the teachers' role at various places;

* A few sections and subsections of this Unit have been taken from Unit 5 & 6 of ES-335, Teacher and School, SOE, IGNOU

- establish a link between teachers’ personal characteristics and teaching-learning;
- explain role of teacher as a transmitter of knowledge as well as a planner;
- examine the role of a teacher as a facilitator and co-creator of knowledge;
- understand the role of a teacher as manager; and
- reflect the importance of teacher as a counsellor.

13.3 TEACHER AS A PERSON

First, we have to understand the role of a teacher at various situations. We know that a teacher has to fulfill the expectations of the family, school, society as well as nation. In this section, we shall learn about the expectations from a teacher ranging from their role in classroom to their role as a citizen of the country.

13.3.1 Teacher in a Classroom

The main responsibility of a teacher in the classroom is to ensure that goals of education are attained. These can be specified as learning in terms of predetermined knowledge, skills, and attitudes in specific subjects. It is through these subjects that a teacher strives to achieve school goals as well as all-round development of learners, which is the broader goal of education. In order to achieve this, a teacher creates an artificial environment in the classroom for facilitating learning of learners. S/he provides instruction to the learners, motivates them for learning, helps them to rectify their mistakes, guides them in different situations and evaluates their performance. In other words, teacher uses content as a medium or tool not only to enable learners acquire knowledge, skills and attitudes but also to help them in the all-round development of their personality, which is what education stands for. We will discuss in detail the various roles of a teacher in the classroom in coming sections.

13.3.2 Teacher as a Colleague

When we think about the role of a teacher as a colleague, their role as a ‘team-player’ comes to our mind. There are many activities in the classroom as well as in school which a teacher can accomplish only with the help of colleagues.

Activity 1

Enlist few tasks or activities, where you need help of your colleagues to complete those activities/tasks. Also mention the expected role of your colleagues in that activity/task.

Above activity will help you to diagnose the importance of your colleagues in your success.

For being a good colleague, a teacher needs to have the following characteristics:

- First of all, you should be receptive to others ideas.
- You should know the areas where you need support from others and also the areas where you can support other teachers for the benefit of learners.
- Your humility and ability to reach out to other colleagues without any prejudice and bias is more important for forming good relationships but keep in mind that your over involvement in matters of your colleagues can cause problems for you. You are the best judge of the extent of your involvement.

The constant interaction and working closely helps teachers not only in understanding their learners and their problems better but also facilitate their personal growth as teachers. Indirectly, it also leads to the development of the attitude of “openness” among learners.

13.3.3 Teacher in the Community

Before asking, “what is the role of the teacher in the community?”, one should think, “What are the social expectations that the community has from a teacher?” A teacher has a very dynamic role in the community. The various aspects of this role include:

- i) One of the major roles is to promote the importance of education among parents particularly those in rural areas so that they enroll their children in schools.
- ii) Many of our rural folks need awareness programmes regarding vaccination, birth control measures, woman health during pregnancy and child birth, cleanliness in and outside home, contagious diseases, personal hygiene, etc. Teacher, being a responsible member of community, should either directly inform people or lead them to proper sources of information, like a doctor.
- iii) Community members especially, parents expect a teacher to be a role model for their children as they are themselves. They want a teacher to avoid any behavior which might be bad for children to imitate.
- iv) In a rural community where a majority of the adult population is likely to be illiterate, a teacher has to play the role of a guide, philosopher and a counselor. Generally, people would approach a teacher for seeking solution to their problems.

It is evident that the expectations of the community from a teacher, especially in a rural area are manifold. The teacher’s role, therefore, is multi-dimensional.

13.3.4 Teacher as a Citizen

As an educated person and a person who educates others, a teacher provides a model for future citizens. A teacher enables the functioning of democracy by participating in the democratic processes, acts as an unbiased objective critic of the society, is sensitive to events in the country like corruption, scandals, riots, exploitation etc. which hamper the growth and development of a nation and mobilizes resources to check anti-social and anti-national activities.

Over and above these, a teacher has to be a **Friend, Philosopher and Guide of learners**. S/he has to inspire learners to achieve this best and serve the nation.

Check Your Progress

Notes: a) Write your answers in the space given below.

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

1) In what type of activities of the community, can a teacher be of great help?

.....

.....

.....

.....

A teacher is expected to fit into all such roles. Whatever role a teacher is performing, his/her personal characteristics, beliefs, and behavior have a definite impact. Next section will help you to identify the personality attributes of the teacher, which should be known for you.

13.4 TEACHER’S PERSONAL CHARACTERISTICS

We have already seen that the present day teacher needs systematic training to be effective. S/he is increasingly expected to be a kind of omnibus at a time when all other professions are becoming more specialized in their operation. For example, some professions like those of lawyers, doctors and engineers have a distinct and limited role while a teacher is expected to indulge in diverse activities as part of his/her profession. A teacher is concerned not only with the intellectual development of learners but also with their moral, emotional, civic, aesthetic and even career development. Thus, a teacher’s task has become a challenging one.

An ideal teacher (of course, if such a one could exist) should have the character of a ‘Sanyasi’, the knowledge and skills of an expert, and the ability to apply them with the sensitivity and feeling of an artist.

All these shows that a teacher, to be effective, should develop several personal qualities and professional competencies. In this part of the unit, let us discuss some aspects of the issues concerning personal and professional development of teachers.

Personal Qualities

We have already discussed that to be effective and efficient, a teacher requires a number of personal as well as professional qualities. Let us have a look at some of the personal qualities that go towards the making of an effective teacher.

Values like honesty, truthfulness, loyalty, punctuality, cleanliness, dedication, affection, etc. are imbibed, often through observation of others’ behaviours rather than taught. This means that a teacher has to stand as a model for his pupil so as to provide a lasting and inspiring example if they are to have in them these qualities of personality and character.

Everyone expects a teacher to have a sound value system. If a teacher is lazy and lacks enthusiasm and the will to do hard-work, s/he cannot be expected to inculcate these values in pupils. Pupils are keen observers. They are intelligent enough to observe discrepancies between what a teacher preaches and how s/he actually behaves. If a teacher smokes, s/he has no right to advise their pupils to avoid smoking. Similarly, if s/he is dishonest and avoids his duties, s/he has no right to advise his/her pupils to be honest and sincere.

Activity 2

We have already noted that teachers, in general, need certain values or positive character traits to be effective. Since you as an individual have had several years of schooling in the past, you may be able to recollect some of your teachers who impressed you. Recall and write down in the space provided below some of these personal qualities and values they exhibited.

.....
.....

Your list of traits or values, among others, will probably include such qualities as affection, kindness, love, concern, understanding, sincerity, cooperation, dedication, humour, etc.

Affection

Affection, as you know, is one of the basic traits that a teacher needs to have. We do not expect every teacher to be as knowledgeable as Einstein nor do we expect him or her the dedication that we find in Florence Nightingale. However, each one of us expects a certain amount of affection in every teacher. In fact, there is no human being on earth who does not crave for affection from those around, especially from parents and teachers. Just as a mother pours forth her affection on her child, a teacher should show love and concern for his pupils. In the absence of affection we, as teachers, cannot make our pupils feel wanted and accepted. If they feel that they are unwanted and not accepted fully their minds would be clouded with sad thoughts which will prompt them to be indifferent to activities going on in the classroom. Non-participation leads to poor performance and poor performance to withdrawal from the system.

Empathy

Empathy is another great virtue that you as a teacher need to possess. This quality will enable you to feel concerned for your pupils' problems and the efforts they make to cope with them. This quality, would enable you to understand your pupils better both emotionally as well as intellectually. To see the world through a child's eye, you need a lot of emotional flexibility. Empathy will enable you to be judicious, impartial and objective. It will engender in you the requisite understanding to avoid stereotypes and prejudices and treat all pupils with equanimity, irrespective of the background from which they come. In addition, empathy will create in you a better awareness of the functioning of a child's mind which in turn would permit you to avoid the use of words that insult and actions that hurt.

Concern and Commitment

Genuine concern and commitment are other two general qualities that we expect in teachers. You should be dedicated and concerned about the development of your pupils as their parents generally are and then try to do all within your ability to see that they are given an opportunity for their growth and development. You should remember that improvement seldom occurs spontaneously. More often it is attained through deliberate effort. To reach a child's mind, you must capture their heart. Only when a child feels right, can s/he think right. Therefore, if you want to improve your relations with children, you need to keep away your habitual language of rejection and acquire a new language of acceptance. The way you talk to a child reveals how you feel about him/her. If spoken without thinking, your statements can affect his self-esteem and self-worth. If you are genuinely dedicated and concerned about the growth of your pupil, you will try to eradicate the inconsistencies in your talk that tells a child to distrust his/her perception, prevents him/her to discuss his feelings and creates doubt in him/her. As far as possible, you should avoid blaming and shaming, ordering and bossing, and ridiculing and belittling your pupils. Only with genuine concern and commitment to their welfare, you can achieve this.

Again, if you are genuinely interested in the well being of your pupils, you need to be authentic, genuine and sincere. You have no right to preach patience, when you are impatient. You do not have to demonstrate hypocrisy by acting nice, when you feel nasty. If you are enlightened, if you have proper awareness about yourself and

your pupils, you do not have to be afraid of your anger or impatience provided that you have learnt to express them without doing damage. What you need to master here is the art of expressing anger without being insulting. You should not offend either them or their family. You should not come out with gloomy warnings and predictions about their failure. It would be damaging to children to predict where they would end up. Therefore, as a teacher, you need to pick up the secret as to how to be authentic and genuine even when you feel differently.

Humour

An element of humour is a good trait in a teacher. When we combine elements in a way that is different, unexpected and incongruous, we wind up with humour. You, as a teacher, should develop the ability to play spontaneously with ideas, concepts and relationships. Similarly, you should have the ability to juggle elements into impossible juxtapositions and express the ridiculous. All these can bring in an atmosphere of humour in the classroom. A joke here or a witty utterance there can make your pupils feel happy and dispel the monotony. It can arouse laughter or a smile on their lips, which could make their mind lighter. Humour, thus, can turn out to be a good tool in the hands of an enlightened teacher. With it, s/he can make a classroom alive and create a relaxed atmosphere in it. However, care should be taken to see that humour is not at the expense of any individual student. Don't hurt children inadvertently. Avoid sarcasm. There is no place for disparaging remarks in teacher pupil communication. Bear in mind that a teacher's role is to heal, not to injure. You should shun any comments that hamper a child's self-esteem.

Other Characteristics

To be effective, a teacher needs a certain amount of personal values like cleanliness, punctuality, honesty etc. This does not mean that we expect teacher to be as pious and honest as Buddha or Mahavir. However, the presence of such values in a teacher would enable him/her to transmit them to his/her pupils, just like a lamp that lights another lamp into equal brightness. Hence, you need to have these traits so that you can inspire your pupils to be honest, punctual, truthful, etc. Mercy can be taught only mercifully. Aesthetics cannot be taught unaesthetically. Similarly, kindness, honesty, truthfulness, etc. are learnt from people who reflect these virtues in their interactions. You cannot teach virtues through lecturing just as swimming and peddling a bicycle cannot be taught through it. These are learnt through experiences. It takes a virtuous teacher to inspire his/her pupils to these values.

In this section of the unit, we have noted that several personal qualities like affection, empathy, concern, dedication, humour, etc. are needed in a teacher to be effective. We have also seen that most of these traits or qualities are not taught but developed. The truth being so, every teacher including those in the process of becoming teachers make a conscious effort to acquire more and more of these traits so that they would continue to be more efficient and effective.

Check Your Progress

Notes: a) Write your answers in the space given below.

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

2) Some of the personal qualities required in a teacher to be effective are:

i)

ii)

- | | |
|------|-------|
| iii) | iv) |
| v) | vi) |
| vii) | viii) |
| ix) | x) |

13.5 TEACHER AS A TRANSMITTER OF KNOWLEDGE

In order to understand the role of a teacher as a transmitter, we should examine his/her role in traditional educational setup, where followings are expected from a teacher:

- i) A teacher introduces a lesson.
- ii) A teacher explains a concept.
- iii) A teacher clarifies doubts of students with suitable illustration.
- iv) A teacher draws a diagram while explaining.
- v) A teacher asks questions to learners.

In all the above situations, a teacher is a participant in the teaching-learning process, a part of the stimuli provided to learners to bring about learning. The other inputs are the content that gets transacted across learners, mode of transaction used by a teacher and other audio-visual aids used by the teacher to promote effective learning.

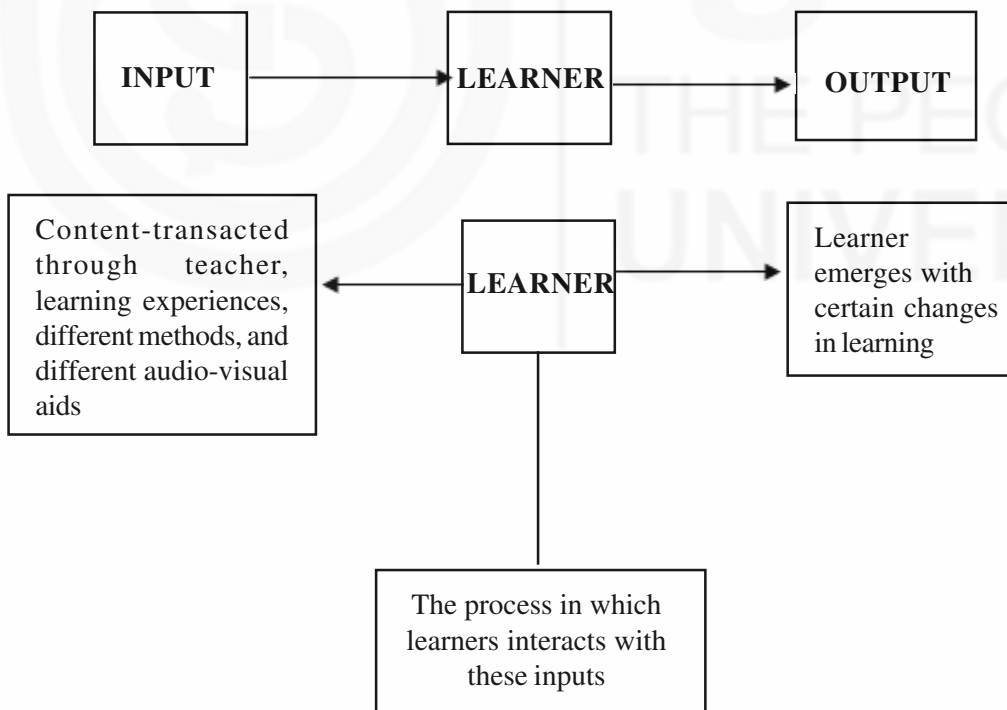


Fig. 13.1: Teaching – An Interactive Function

The Fig. 13.1 makes it clear that there is a face-to-face interaction between learners and the teacher. In fact, this is what is commonly understood as teaching – an interactive function.

Check Your Progress

Notes: a) Write your answers in the space given below.

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

3) What is the role played by a teacher when he/she takes his/her learners for a study tour?

.....
.....
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.....
.....

4) Explain the role of a teacher as an instructional input in 5-8 sentences.

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.....

13.6 TEACHER AS A PLANNER

Role of teacher as a planner is quite visible as compared to other roles. You will agree that a teacher plans many things for teaching learning. As a teacher, you must have planned many things for your learners, for your subject or for your school. In every such planning, you are working as a planner. Have you ever reflected on basic steps of planning, which you have done for teaching-learning, or assessment or any activity (curricular or co-curricular), event, etc.?

In this section, let us try to identify some core steps, which are involved in every kind of planning in teaching-learning process.

- **Objective:** Every planning has some objective. It may be explaining any concept, reflection on any practice, observation of any event or development of life skills, etc.
- **For whom:** Learner is the center of every planning in teaching-learning. Learners abilities, strengths, weakness, etc. are to be kept in mind while planning anything for them.
- **When:** Whether it is a lesson planning, assessment planning or any event planning, as a planner you should keep in mind the time. When will it take place?

- **Where:** The place of event i.e. the classroom or the school premises or outside of the school should be kept in mind, when you are planning the place and space.
- **How:** Appropriate strategy for execution is also an important component of planning. As a planner, you have to plan the method, media, process, sequence, etc. which will help to execute your plan in desired manner.
- **Outcome:** A good planner always have the plans about expected outcomes. However in constructivist perspective, learning is more important than outcomes. Being a teacher, you should also plan the desired learning, which helps in executing the plan in right track to facilitate learners.

For better understanding, the role of a teacher in planning, let us do the following exercise.

Activity 3

Compare planning of a lesson, a unit test and a debate competition to be organized by you. You have to write the activity/step you follow in planning of each of these in the following grid:

<i>Step</i>	<i>Lesson Plan</i>	<i>Unit Test</i>	<i>Debate Competition</i>
<i>Objective</i>			
<i>When</i>			
<i>Where</i>			
<i>How</i>			
<i>Outcome</i>			

13.7 TEACHER AS A FACILITATOR

To facilitate means to promote, to help forward, or to make easy. Therefore, in the context of instruction, a teacher's role would be to promote learning, to help learners to develop more and more by learning by providing them a conducive environment to interact within order to bring about learning and further development. In this role as a facilitator of learning, learner's role of interacting and moving forward is emphasized, and the teacher's role is in the background as a guide and a facilitator different from what we have already seen in section 13.5, i.e. as a transmitter of knowledge.

To explain further, when a teacher is part of the environment in which learners are learning, or is participating in the process of instruction, s/he is a transmitter of knowledge, but when s/he is providing certain guidance in order to bring about learning of students by way of their interaction with relevant instructional components, s/he is a facilitator of learning. Look at the following pair of situations.

- Teacher gives a lecture on importance of keeping the surroundings of our home clean.

- ii) Teacher shows paper cuttings/slides/video films exposing dirty surroundings and their negative impact on human life and initiates a discussion on learners observations-finally leading to importance of keeping the surroundings of home clean.

and

- i) Teacher lectures on the phenomenon of change of colour in a flower induced by difference in intensity of sunlight.
- ii) Teacher guides learners to do a project work on the phenomenon of colour change in a rose, induced by difference in intensity of sunlight. Teacher does not tell them about the change of colour, but instructs regarding what is to be observed in the plant in its natural settings at different times of the day and night and the way their observations have to be recorded. She later holds discussion on their observations, finally arriving at the phenomenon of influence of sunlight on the colour of the flower.

The roles of teachers are distinctly different in the two situations. In situation No. 1, of both pairs, learning is based on what the teacher explains, or it is a teacher-centered method, where learners role is minimum. In other words, teacher's role is that of an instructional input. But in situation No. 2, of both the pairs, learning is by means of learner's interaction with specially designed environment of visuals and discussion (as in the first case) or in natural situation – observation and recording followed by discussions (as in situation No. 2 of the second pair). The sequences organized are learner centered, where the focus is on what learners observe, understand, record or discuss, with teacher guiding at required stages, to FACILITATE learning involved in the process.

There are different methods of promoting learning. Some are learner-centered – like library work, project work, experimentation, home assignment, etc. where major focus is on how learners organize their steps of learning by interacting with different environmental components like printed matter, natural realities etc. In all such methods, teacher guides learners as to how to go about learning sequences, thus facilitating their learning. In other words in all learner- centered methods teacher is a facilitator and not a participant. Here are more examples:

- i) After a brief initiation into the philosophy of John Dewey, the teacher gives a list of references available in school library, and asks learners to write an essay on the topic.

As their work is in progress, learners meet the teacher and receive guidance to move forward in the task assigned to them.

- ii) Learners are asked to collect samples of leaf formation, preserve, draw them and discuss in the class, with teacher's guidance.
- iii) Learners are asked to sow seeds in a pot, and observe in different light situations, ranging from absence of light to full sunlight to artificial lighting, with reporting the development of different at stages and discussions with the teacher.

So far, we have seen the roles of a teacher as an instructional input, a manager, and a facilitator. There are many more roles which a teacher performs. These we will discuss in the next sections.

Check Your Progress

Notes: a) Write your answers in the space given below.

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

5) Explain the role of a teacher as a facilitator of learning as different from that of an instructional input.

.....

6) What is the role of the teacher when:

a) S/he guides learners during their project work?

.....

b) S/he corrects a write-up developed by a learner for a debating competition?

.....

13.8 TEACHER AS A CO-CREATOR

National Curriculum Framework-2005 visualized teachers as co-creator of knowledge. Sometimes teachers are referred as “knowledge partners of learners”. Let us analyze few characteristics of teacher and teaching learning process, where a teacher needs to be a co-creator of knowledge. Teachers are co-creator if they:

- motivate learners to frame their own question about various observations,
- ask learners to interpret a situation in their own way and identify the probable solution of a problem with scaffolding by teachers,
- encourage learners to work in group and also become active member of the group,
- keep learners active and motivate them to observe, react and reflect continuously,
- help learners in evolving new knowledge using their previous knowledge through discussions, debates, inquiry or experimentation.

Activity 4

Identify a topic/theme from the subject you are teaching at secondary level. How will you work as co-creator of knowledge for that topic? Devise a strategy and act on it. Record your observations during the process.

13.9 TEACHER AS A LEADER

When the notion of ‘Leader’ is suffixed with the teacher, it is often viewed as Leadership in Teachers’ Association. In teaching-learning, it is not so microscopic view. By definition, “*leadership is the ability to lead a group, motivate to complete the given task and share the responsibility and accountability of the task*”. When you apply this in the context of teacher, you can say, “*Teacher as a leader lead the learners in the class or group of teachers for better teaching-learning through assigning a task, motivating them to complete it and sharing responsibilities, success as well as failure.(.....)*” It means a teacher has to perform various leadership roles, which could be classified in two ways:

- a) leadership in the classroom
- b) leadership roles in school

When we talk about leadership in the classroom, it means a teacher has to lead the class either to complete a task or sometimes to develop and maintain positive and effective relationship among class. Whereas when we think of teachers’ leadership roles in school, we generally count his/her role in various school committees, responsibilities to organize various events, co-curricular activities as well as professional development activities for fellow teachers. In this role, it is expected from a teacher that his/her professional aim should be in sync with school’s vision and mission. Teacher should share various responsibilities in the school, or with the management for the success and betterment of the school.

Activity 5

You must have noticed few teachers in your school who are always ready to share school’s responsibilities or play a role of a catalyst in organizing various events. Indentify a teacher and observe his/her behavior before the event, during the event and after the event and enlist the qualities or characteristics of his personality, which are making him/her a leader.

Your list may have few of the following skills, which are common among teacher leaders.

Trust Building: A teacher-leader always believes in having trust in others as well as develops an environment where people can trust him/her. For leading a group, one needs to develop a rapport among those with whom the task is to be performed. This is an essential skill for a leader without which sharing of responsibilities is not possible.

Diagnosing Institutional Conditions: A good teacher-leader is also well aware of the institutional conditions. It includes working environment, freedom of work and willingness of management of the school/institution for experimentation. S/he diagnoses the situation before planning or suggesting for any event or activity as well as analyze scope for his/her role.

Dealing with Processes: You must have observed that while organizing any activity, the leader has to deal with certain processes. Sometimes, these may be internal like approval from discipline group or management committee or finance committee. Sometimes, there may be various processes involved with outside agencies or government bodies. A teacher-leader always identifies such processes and ready to deal with all such processes.

Work Management: Leadership involves mobilization of various persons associated with you, which may be your learners or colleagues. A good teacher-leader always know how to share work, how to motivate all for achieving a common target and how to build a team.

There may be other skills or characteristics in your list which you have identified. Elaborating more on those will help you to transform yourself as a teacher-leader in and outside of classroom.

Check Your Progress

Notes: a) Write your answer in the space given below.

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

7) Enlist the leadership roles of a teacher in school.

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13.10 TEACHER AS A MANAGER

A manager is basically at the helm of any organization. S/he has to take decisions, control the situation, be spontaneous and resourceful to change decisions for better functioning of the organization if situation demands, etc. We all are familiar with managers of a company, of a school or a college, etc. Let us apply our knowledge of managerial competencies in the case of instruction, and see how a teacher performs the role of a manager.

Teachers, like executives in other setting, are expected to provide leadership to students and to coordinate a variety of activities as they and learners work interdependently to accomplish academic and social goals of schooling. Teacher’s role as a manager is concerned with all the three phases of teaching namely, pre-teaching, teaching and post-teaching.

13.10.1 Role of the Teacher in the Pre-teaching Phase

Pre-teaching phase essentially comprises the activity of planning teaching-learning process. Planning is actually a simplification of a complex process. The following are the specific activities involved in the pre-teaching phase:

- i) Analyzing the content.

- ii) Deciding on the portion of the content to be selected for instruction.
- iii) Deciding on instructional objectives for the chosen content on the basis of the knowledge about:
 - a) Level of learners
 - b) Their socio-cultural context
 - c) Time available.
- iv) Examining different learning experiences that are suitable for achieving the set objectives.
- v) Deciding on the best alternative from a repertoire of learning experiences and deciding the best sequencing of these to bring about pre-specified learning. For example, a lecture followed by a discussion, followed by showing some visual aids and again followed by a discussion, etc.
- vi) Deciding the method of evaluating learning, (a written test, oral test, a performance test etc.) and the specific item of evaluation (question in case of oral and written tests, aspects to be observed and assessed in case of performance test).

In above activities, the teacher is not participating in the instructional process. S/he is an outsider and a decision maker, and a designer of the way. The process of instruction has to be organized. In all these situations, the teacher's role is strictly speaking that of manager, and not of an input, although management is an important input in effective implementation of different activities.

13.10.2 Role of the Teacher in the Teaching Phase

In the earlier section, we have seen how the teacher becomes a part of the teaching-learning process, and is identified as an instructional input. In the following paragraph, you will see how a teacher plays the role of a manager during the instructional/teaching-learning process. Examine the following situations:

- i) Sensing that learners are bored, a teacher decides to stop teaching
- ii) Realizing that a learner has not understood a point fully, a teacher decides to simplify the explanation with more examples.
- iii) In order to make a lesson more interesting, a teacher decides to narrate a related story.
- iv) As learners start making too much noise and can not be managed by a teacher, she decides to let them go out and play.
- v) As the prepared plan does not prove effective to make learners understand the point, a teacher decides to deviate from the plan and tries out another sequencing of learning experiences.

In all these situations, a teacher is part of the instructional system, but is NOT PARTICIPATING or is NOT AN INSTRUCTIONAL INPUT. S/he is, however, making quick decisions in between the process, with the objective of being effective. In other words, in order to bring about meaningful learning, a teacher, with his/her resourcefulness and spontaneity is deciding to change the mode of operation, to suit to the needs of learners. In these situations, a teacher is functioning as a designer/manager/decision maker. In fact he/she is at a transitional stage or shifting from the role of a participant/as instructional input to a different mode as a decision maker. This shift can be understood clearly from the Fig. 13.2.

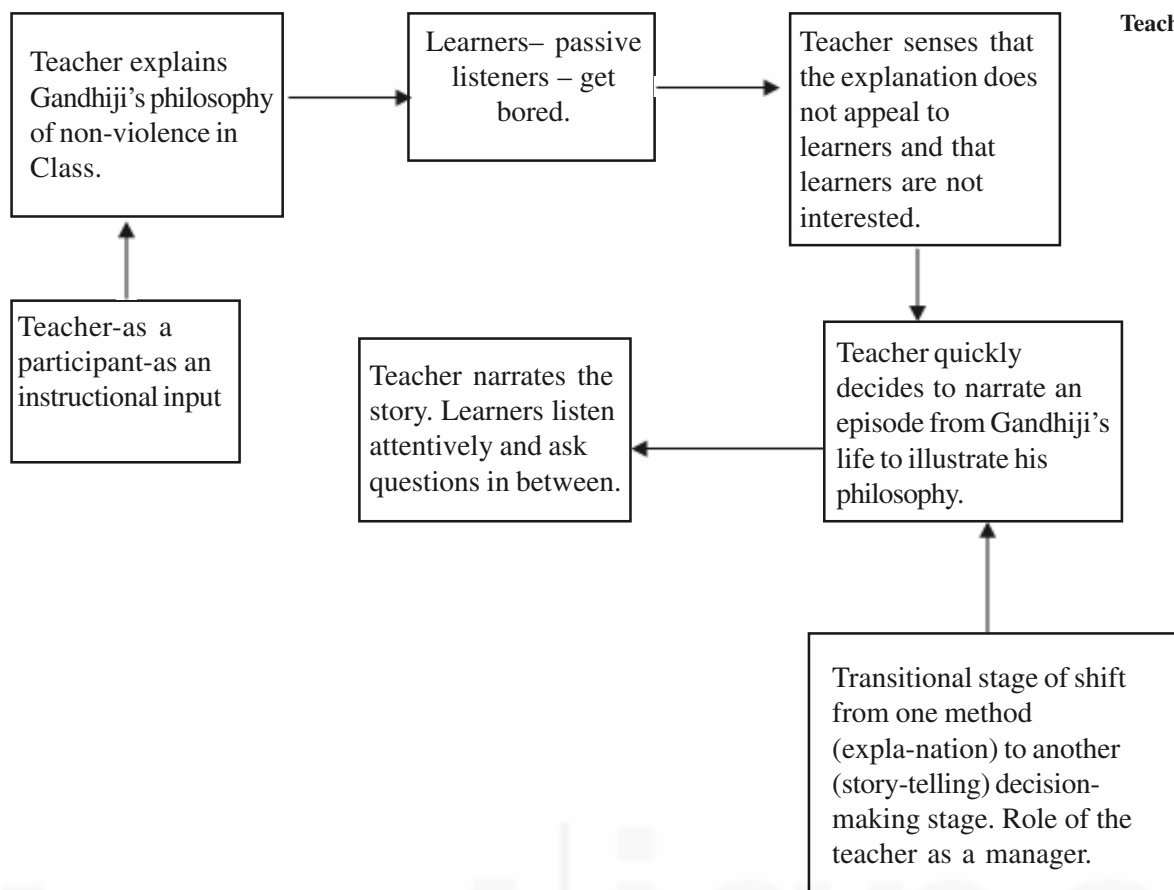


Fig.13.2: Teacher as a Disciplinarian

You all must be familiar with such comments people make: “she can manage the class very well” or “learners are well disciplined in his class”. In such situations it is obvious that a teacher is effectively managing learners with alternative solutions to problems as and when they emerge or enter in the class. These alternative solutions depends on many factors like, age group of learners, physical fitness of the group (if they are not interested in a class after a physically tiring PT period), general climate of the school (if annual day is approaching, or fun fair is due, and learners are in a fun-making mode) etc. An effective teacher would succeed in maintaining discipline and managing learners well without losing his/her control and at the same time the confidence of learners. A lot of knowledge of the psychology of child/ adolescent is required for the teacher for being an effective manager in such situations. A teacher has to be empathetic, tactful, patient and tolerant.

13.10.3 Role of the Teacher in the Post-teaching Phase

Post-teaching phase, as described in the introduction of this section, is the one that involves teacher’s activities such as analyzing results of evaluation to determine learners’ learning, especially their problems in understanding specific areas, to reflect on one’s own teaching and to decide on the necessary changes to be brought in the next instructional period. Examine the following activities of a teacher:

- i) Teacher analyses the written performance of learners (of class VII) and realizes that 80% (Class VII) have not been able to do single digit multiplication correctly.
- ii) Teacher goes through the plan of the lesson on multiplication and realizes that learner’s knowledge of addition was presumed, but not revised.
- iii) Realizing that multiplication is based on thorough mastery of addition the teacher decides to start all over again with addition.

In these three situations, the teacher is a designer in the post-teaching phase-designer of the next instructional system.

We can summarize by saying that in the post-teaching phase, a teacher analyses results, reflects on self and modifies the teaching-learning process, all with purpose of being an effective as a teacher.

In order to see the roles of a teacher as a manager at different stages the flow diagram (Fig. 13.3) would help:

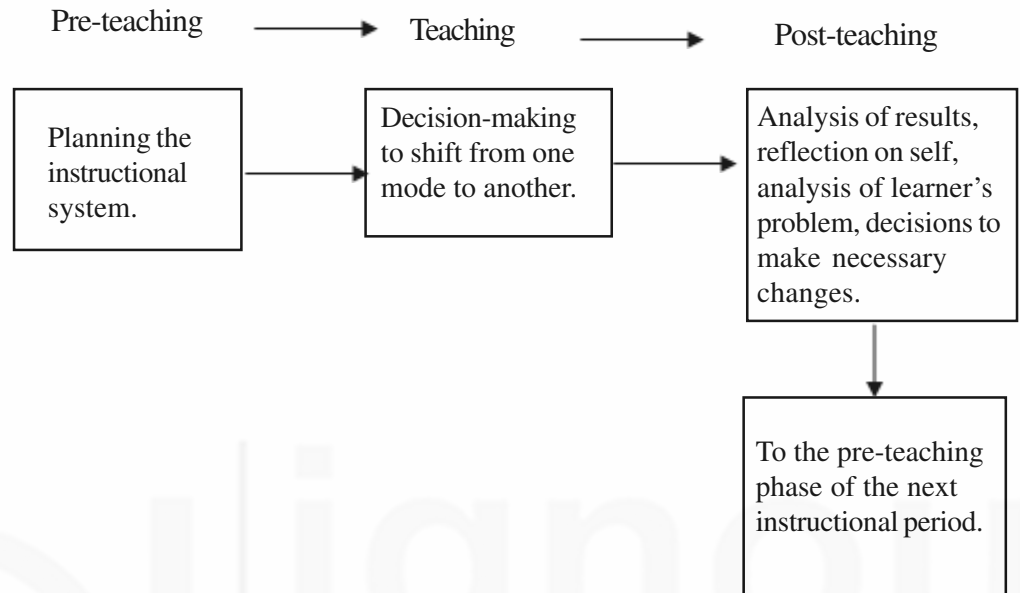


Fig. 13.3: Teacher as a Manager at Different Phases of Teaching

Check Your Progress

Notes: a) Write your answers in the space given below.

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

8) What is the role of a teacher:

a) When s/he draws a diagram on the blackboard to clarify a doubt.

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b) When s/he sets question papers.

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c) When s/he decides to repeat a lesson in a different way to make it more interesting to his/her learners.

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13.11 TEACHER AS A COUNSELLOR

The role of the teacher as a counsellor is quite different from other roles described so far. To counsel is to give advice, according to dictionary, although it is more than mere advising.

In the context of a school, the teacher is the counsellor and the learner either approached the teacher when s/he has a problem, which cannot be solved by self, or the teacher senses the problem and offers help to the learner to solve the problem.

Teacher, as a counsellor, addresses not only problems related to school, studies etc. but also those related to friends, family, health, etc.

The most important attribute of a teacher to be an effective counsellor is his/her **sensitivity in identifying learners with problems**. This is because, in a school set up, learners seldom approach teachers with their problems to get any help, as they are apprehensive about disclosing the intimate nature of their problems. It is only with serious effort that a sensitive teacher after identifying a learner with some problem can establish rapport with him/her and make him/her come out with the problem that he/she is confronted with. After having understood the nature of the problem, the role of the teacher is to **help a learner realize his/her potential** to solve it. Counselling works on the principle that every individual, if guided properly, can realize the strengths of self to solve problems of self. Hence, a teacher does not have always to give solutions. What he can do is to make clear the different paths to solving the problem and in the process makes a learner move forward in solving the problem. Examine the following situations:

- a) A sensitive teacher observes that a learner is inattentive and very sad in most classes. She calls the learner alone and opens a dialogue. After two or three sessions, problem comes out, the learner's grandmother to whom she was attached, has passed away and this had made a great difference in her life. The teacher empathizes with her and talks about life and death in a very objective way and then suggest the different ways that she (the learner) could engage herself while at home. The teacher also helps her to think about the hard reality of absence of someone dear and to come out of the it, though it is very painful. With many such sessions, the learner emerges as a reconciled person, overcoming her sadness, and starts to be attentive and alert in the class.
- b) A student Sheela, who according to the teacher is a bright and hard working, is not doing well in tests. The teacher senses that there is some problem and opens an intimate dialogue with her. After spending some time the teacher understands the problem of Sheela becoming over anxious about tests, doesn't sleep well before tests commence, therefore is unable to do well in tests. The teacher starts with importance of mental health for doing well in general, and in tests especially, indicating how sufficient hours of sleep are indispensable for performance. Then she goes on to indicate the different ways of relaxing during days of test, which is essential for doing well in tests. Apart from all these, the teacher boosts Sheela's morale by pointing out her inherent capabilities by using which she can emerge as a very successful person.

It is apparent that in the above situations there are certain attributes in the teacher, which make him or her an effective counsellor.

They are:

- being a keen observant
- being sensitive
- being empathetic (being able to see the problem from the learner's perspective)
- being objective

And apart from all these, being loving and friendly to win the confidence of learners so that they would open up is also an attribute in a teacher.

13.12 LET US SUM UP

Unit discussed about teacher as a person, where the focus was on place of teacher in classroom, community, his/her role as a colleague as well as a citizen of the country. Teacher is a friend, philosopher and guide of learners, this has been established. Teachers' personal qualities like affection, empathy, concern for learners and profession as well as commitment are very important for his/her success as a teacher. Unit explained role of teacher as a transmitter of knowledge as well as a planner. Constructivism has proposed role of teacher as a facilitator and co-creator of knowledge; these dimensions were also discussed in the unit. As a leader, teacher requires trust building, diagnosing institutional conditions, dealing with processes and work management skills. Teacher's role as a manager in every phase i.e. pre-teaching, during-teaching and post-teaching phase is very important. Unit has highlighted that teachers also have to play a role of counsellor to resolve many day-to-day problems of their learners.

13.13 UNIT END EXERCISES

- 1) How the role of teacher as a community member affects his/her teaching-learning? Explain.
- 2) Organize a discussion at your school with parents and identify the personality characteristics of teachers which are affecting learners in the opinion of parents.
- 3) Discuss the role of a teacher as planner in planning for a field-trip for learners.
- 4) Do you think, constructivism has affected the role of teacher? Discuss in details.

13.14 ANSWERS TO CHECK YOUR PROGRESS

- 1) Enlist the activities as per your experience or based on discussion with colleagues.
- 2) Answer based on reading of section 13.4.
- 3) Teacher has to play role of planner, manager, facilitator and guide.
- 4) Explain in your own words.
- 5) Explain in your own words.
- 6) Explain in your own words.
- 7) A teacher has to play leadership roles for trust building among colleagues and management, in analyzing institutional condition and future predictions, in dealing with various processes official/social/constitutional, etc. and in managing the workforce and workload.
- 8) Answer questions based on reading of section 13.10.

13.15 SUGGESTED READINGS AND REFERENCES

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UNIT 14 TEACHER AS INNOVATOR AND ACTION RESEARCHER

Structure

- 14.1 Introduction
- 14.2 Objectives
- 14.3 Innovation: Need and Concept
 - 14.3.1 What is innovation?
 - 14.3.2 Types of Innovation
 - 14.3.3 Process of Innovation
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 - 14.4.1 What is Action Research?
 - 14.4.2 Approaches to Action Research
- 14.5 Pre-conditions for Taking Up Action Research
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- 14.7 Steps Involved in Action Research
- 14.8 Format for Documenting Your Action Research
- 14.9 Let Us Sum Up
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- 14.11 Answers to Check Your Progress
- 14.12 Suggested Readings and References

14.1 INTRODUCTION

The former president of India Dr. A.P.J. Abdul Kalam in his book 'Indomitable Spirit' fondly remembers his first teacher, Sri Siv Subramania Iyer because of the novel methods he used for teaching and specifically the way he taught how birds fly. Sri Iyer had taught this on the seashore of Rameshwaram, through demonstrations of flying birds. This changed the life of a small boy of a village significantly. Dr. Kalam writes, "*For me, it was not merely an understanding of how a bird flies. The lesson of the bird's flight created a special feeling in me and I thought to myself that my future course of study would have to be with reference to flying and flight systems. Sri Iyer's teaching and the event I witnessed helped me to decide my future career*" (Indomitable Spirit, p26). Sri Iyer sowed the seeds of a future scientist in a small child, who later became popular as the "Missile man of India". He did this by adopting an innovative strategy of teaching that led to a big change in the life of his pupil.

What is innovation? Is it necessary that something new has to be created, for it to be considered as an innovation? You know that teachers need to function as change agents, innovators and researchers. Are these roles related? These questions are important in the emerging educational scenario where teachers are expected to be the facilitators of learning and situate the teaching learning process in the social context and real life experiences of learners. You will find the answers to these questions as you read this unit. In this unit we will focus on the role of a teacher as an innovator as well as an action researcher.

14.2 OBJECTIVES

After going through this unit, you will be able to:

- explain the concept of innovation and its need in education;
 - elaborate the role of teacher as an action researcher;
 - explain the steps involved in action research; and
 - design and carryout an action research to facilitate learners.
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14.3 INNOVATION: NEED AND CONCEPT*

Change is the law of nature. Throughout the course of human evolution we find that old order makes room for a new one. Old culture, thoughts, ideas and technologies are replaced by new ones. Systems and organizations that do not change or do not feel the need to change stagnate, decay and ultimately perish. Periodic alternations take place in the goals, structure and the processes of a system. This is also true for educational systems.

While some changes are unplanned, brought about unconsciously and may occur over a long period of time, some changes are planned and brought about consciously.

Such changes may happen over a shorter time span. The latter type of change is built around the theories and approaches put forward by thinkers, planners, administrators and practitioners. These are based on the felt need for change, required for the betterment of a system. The felt need may arise because of socio-economic and political conditions or because of changes in theories and paradigms of learning.

You have been witnessing such a change in the paradigm of teaching-learning in school education since the implementation of NCF, 2005 and the RTE Act, 2009 which uphold the constructivist approach and child centered teaching learning process.

Change is often brought about through the process of innovation. The National Policy of Education (NPE, 1986) recognized the need for innovation and experimentation by teachers and recommended that *teachers should have the freedom to innovate, devise appropriate methods of communication and activities relevant to the needs of and capabilities of and concerns of the community*. At the individual level the motivation to find new solutions to the older problems or new ways to teaching the content may lead to innovations. Again, one can take a leaf from other nations, societies, institutions and organizations and adopt/ adapt successfully tried out practices as per the requirements of one's own conditions and circumstances (Sabharwal & Pandey, 1998). Such innovations, where solutions are imported from outside the system are introduced deliberately and not accidentally.

One of the preconditions to promote innovation is the *dissatisfaction with the present condition*. This dissatisfaction may be due to stagnation or ineffective functioning of the existing educational structures and methods. Uncertainties faced, as well as a desire to fulfill one's own aspirations, and others' expectations can lead individuals to innovate and experiment. In addition, the population of learners keeps on changing every year and learners come from various socio- cultural backgrounds, with differences in prior experiences and exposures. Sustained efforts and creative strategies are needed by teachers to deal with them effectively. Such efforts lead to innovation and research by teachers. It is pertinent to note that some innovations

* Section 14.3 'Innovation: Need and Concept' has been adapted from Unit 7 of BES-053, CPPDPT Programme, SOE, IGNOU

influence the system in such a way that they get accepted and absorbed in the system, while others, not so well accepted by the system wither away over a period of time.

14.3.1 What is Innovation?

There are numerous definitions of innovation and the term has been differently used, interpreted and understood by different thinkers and researchers. The word '*innovation*' is derived from the Latin word '*novus*' which means new, novice, novelty or renovation. New refers to things which have come into existence only recently, are freshly made, and were not in existence or experienced previously. In simple words, it changes the unfamiliar to familiar, and grafts 'new' on the 'old'. The Dictionary of Education, (1977) defines innovation as *promotion of new ideas or practices*. Innovation therefore means a new idea or further development of an existing product, process or method that is applied in a specific context with the intention to create a value added product (Kirkland & Sutch, 2009).

Innovation involves either radical changes, or incremental adaptation of well-known practices. Pedagogical practices have to be innovative because you can facilitate active learning only when you are able to sustain the motivation and interest of students in activities by introducing innovative practices.

Kostoff (2003) suggests that innovation reflects the metamorphosis from present practice to some new, hopefully better practice. Innovation, therefore, involves deliberate application of information, imagination and initiative in deriving greater or different value from resources and encompasses all processes by which the ideas are generated. Most of the literature in education however, defines innovation as the implementation of not only new ideas but also of improved ideas, knowledge and practices (Mitchell 2003).

None the less, newness is a relative and context specific term. What is new for one person or a context may not be new for another. So what should be treated as innovative? An innovation is not something new to the education system as a whole but if it is perceived new in a particular context; it is considered innovation for only that context. According to Rogers, as cited in Kirkland and Dan (2005, p. 11)

'If the idea seems new to the individual, it is an innovation'. The extent to which something is new according to a given social context, it is crucial in identifying innovation. So the concept of 'smart class' may be innovative for one social context whereas it may not be considered as an innovation in a very advanced society where advanced technologies are already in use.

The National Council of Educational Research and Training (NCERT) organized a national seminar on 'Innovations in Education' in 1977, where some of the significant innovations were discussed and included in a report published for wider dissemination.

According to this report an innovation should be:

- new to the system or environment as perceived by an individual;
- better than what is already in existence;
- a deliberate, planned and not haphazard effort;
- contextual to local system or environment or conditions;
- instrumental in bringing change in the behavior, learning or attitude of an individual or group of individuals;
- conducive for making unfamiliar as familiar;
- suitable for achieving results of the predetermined goals;

- be positive in nature; and
- something, which results in the improvement of a system.

14.3.2 Types of Innovation

Innovations have generally been classified into four types that are as follows:

Product innovation, which involves development of new products such as new models of cars, television, fridge, food items, educational kits such as science and mathematics kits, for instance those developed by the NCERT, educational toys and so on. A number of school teachers have also been experimenting and producing innovative educational materials.

Process innovation: It involves development and implementation of new and improved delivery mechanisms/ methods that may include significant changes in techniques, equipment, software etc. During your pre- service teacher training programme you must have read about micro teaching, models of teaching, programmed instructions and the like which are popular examples of process innovation that have been widely accepted throughout the world.

During the last few decades a number of innovative methods of integrating technology in education have been developed and used. The Indira Gandhi Open University (IGNOU) and the NCERT have successfully used teleconferencing and video conferencing techniques for pre-service and in-service teacher education programmes. These are all examples of process innovation. Few years back you were using chalk and talk as the only method of teaching. However, today Information and Communication Technology (ICT) plays a major role in teaching learning process and this has been possible due to process innovation in the field of education. Therefore, while computer is an example of product innovation, computer assisted teaching learning is an instance of process innovation.

KVS teachers making a difference

Ms. Harminder Kaur Suri has applied ICT for teaching science. She has been able to create a joyous and participatory learning environment which raises the level of performance of children. A website on 'Flying Jewels', is a collection of information on butterflies which is a documentation of the work undertaken by her learners and showcases her achievements.

Realizing the limitation of the conventional classroom and the need to enhance its scope, Ms. Lata Ramchandran, has experimented by bringing in a variety of resources. She has been creating visual directories, collecting and organizing students' collections and training them to take up systematic study in small groups and share their learning with others. She herself has been using ICT and has also been encouraging her learners to use a variety of ICT tools and has thus been able to inspire her students to undertake tasks well beyond their class level.

Ms. Jainus Jacob has integrated a variety of exploratory techniques to develop in her learners a keen interest in the natural environment. Her learners' exploration of birds is a good example of how young children can work beyond the level and confines of a conventional classroom. She has helped learners make presentations, search and download relevant information, shoot pictures and host a website as a part of their routine learning.

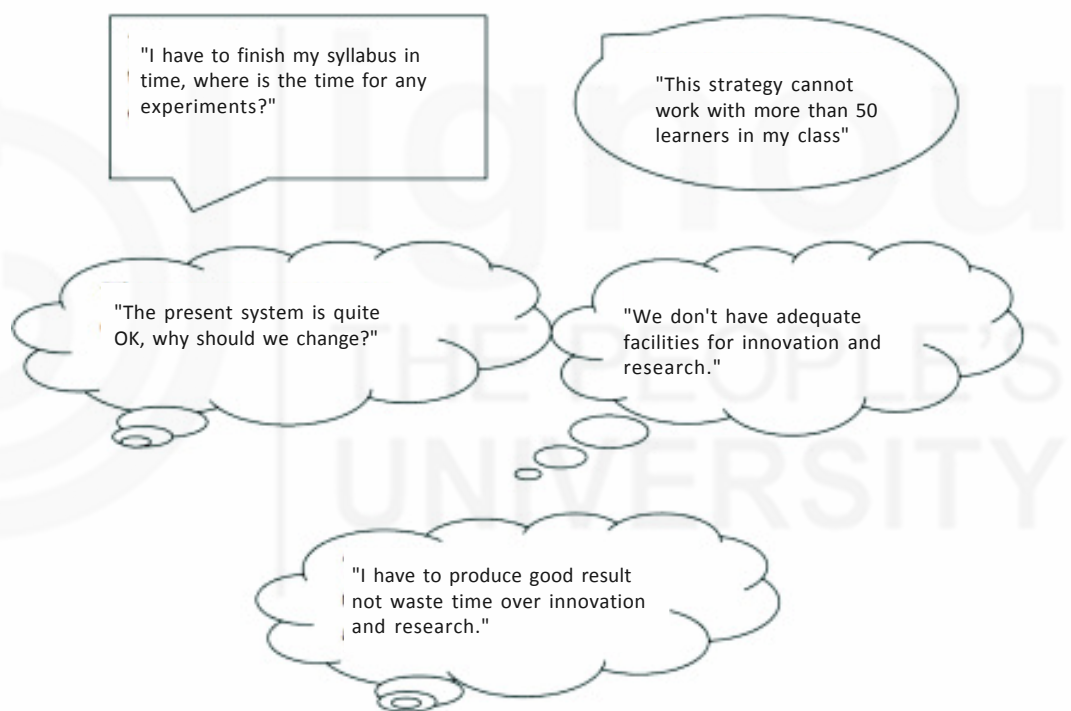
Source: National ICT award for school teachers (2010-2011), MHRD

Paradigm innovation involves changes resulting from major shift in thinking. For instance, the shift from behaviourist to constructivist approach to learning has brought changes in the teaching learning process in schools over the years. You are observing such a paradigm shift since the implementation of NCF 2005. Open book examination system, making board examination optional in Class X, are examples of paradigm innovation.

The fourth type of innovation relates to **positioning innovation** which suggests that the product was originally innovated for a different purpose but later on repositioned for another purpose. A very popular example of positioning innovations is medicinal drink called 'Lucozade' which was originally used to be a medical drink but was repositioned as a sports drink.

Increasingly it is being recognized that to promote greater flexibility and creativity in teaching and learning, for contextualizing learning and to ensure more personalized and participatory teaching learning process, there is need for teachers to be innovative.

But are teachers willing to experiment and innovate? Let us read some general reactions of teachers whenever there is any discussion on the need for teacher to be innovator, change agent or researcher.



These common reactions of teachers are indicative of their resistance to change the traditional practices and try new or innovative methods. But are all the teachers like this? If Sri Iyer had not taken the initiative to explain how birds fly through his innovative strategy of teaching, the impact it made on A.P.J. Abdul Kalam may not have been there. There are many teachers like Sri Iyer who go beyond the textbooks and the four walls of classroom to make teaching learning effective for children.

Some examples of your colleagues involved in carrying out innovation have been mentioned. It is therefore clear that innovation does not always necessitate investing considerable amount of money and using expensive gadgets to produce a new object or method. Instead with little imagination and creativity you may develop a

Teaching Learning Material (TLM), or a teaching strategy that can make your classroom process interesting and effective. Some examples of teachers of rural Gujrat who worked imaginatively and innovatively to facilitate learning are as follows:

Shankarbhai Sendhav works as a teacher in the Krushi Adarsh Anupam Prathmikshala, Tuwad of Sami, Patan, Gujarat. Over the years Shankarbhai has been involved in various experiments to improve academic performance. For instance, to improve the reading and writing skills of children, he has grouped the letters of the alphabet according to their shapes. He introduced another experiment to retain children in school. This experiment had two objectives; one was to achieve retention and the other to give children knowledge of real life and practical learning along with subject knowledge. He started a movement called 'Garden Library' and appointed five learners of Class 7 as implementers. These learners would place some children's books in the garden under some tree. When the teacher was not there or during the recess, the children would go there and sit and read these books. Taking children who had never been outside their village on a visit to Nal Sarover, a bird sanctuary was yet another initiative that helped create in children a fondness for schooling.

Swinging library

The school where Prajapati worked was a single teacher school. Hence, keeping learners engaged when he was occupied with administrative work or during recess hours was a problem. He formed a 'swinging library'. He took a long wire and strung it up. On that wire he hung some story books with the help of clips. The learners of the higher classes had to take the books during the recess and the children of the lower classes would sit with them. The older learners would read out the story and the others would listen. The books had to be replaced after this. The books were changed every third or fourth day. With this experiment, children's reading skills improved. Also, the learners started singing songs and telling stories during prayer time. There was no complaint related to mischief during the recess hours. Thus the children became familiar with Panchtantra, Ramayan and Mahabharat and began to tell these stories to their parents.

Learners' Store of Mathematics Learning

In order to teach math through practice, Karshandbhai started a learner store, "Vidyarthi Grahak Vastu Bhandar" in the school. The children looked after purchases, sales and all accounts, using the arithmetic they learned in the class. In order to keep them alert, a coordinator was appointed. The activity was reviewed every month. The outcome was that the learners developed the habit of keeping accounts. The children discussed the financial management of the store and all of them participated actively in the process. The success of this activity made them think of starting a savings scheme. The school then formed a cooperative savings bank.

Source: Chand, et al., (2011). *Learning from innovative primary school teachers of Gujarat. A casebook for teacher development.* Ahmedabad. Retrieved from <http://teindia.nic.in>

Check Your Progress

Note: a) Write your answer in the space given below.

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

- 1) What are major types of innovations? Suggest two examples for each based on your school experiences.

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14.3.3 Process of Innovation

Generally an innovation is the result of the use of various possible approaches to satisfy the identified needs and interests. An important step in the process of innovation is tryout and evaluation. Equally important is the approach of modifying the response in the light of the feedback received. This process goes on with improved practices and is shown in the following diagram (Figure 14.1).

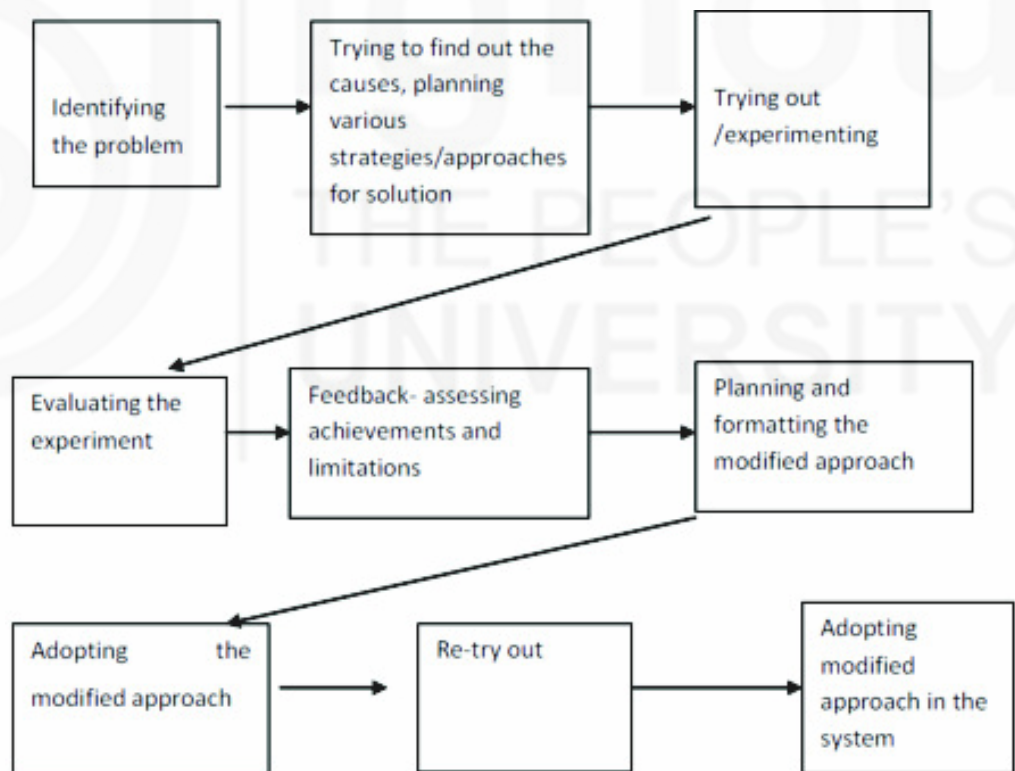


Fig. 14.1: The Process of Innovation

It is clear from the diagram given above that innovation is a carefully planned activity and research is integral to innovation. The cycle of innovation starts when you either face some problem for which you seek its unique solution or when you want to do something new. In all the examples given above you will observe that teachers were interested in making their classroom processes more effective. Once the problem is

identified the teacher frames various alternative approaches or strategies to resolve the problem. In the process s/he reflects on the pros and cons of various alternatives from different perspectives in terms of time, suitability of the alternative chosen for the problem at hand, age and class of learners, finances if any involved in it and so on. S/he then applies the most suitable alternative to seek solution for the problem.

But the process of innovation does not end here, because, based on the experience of the tryout of the strategy, it is further refined/ changed or modified and the finished product is adopted by the teacher or the system as the case may be. In the whole process the teacher is continuously engaged in reflection in action, as well as in reflection for action and research. The research is however, not as sophisticated as fundamental research but is action oriented and is known as Action Research or classroom research.

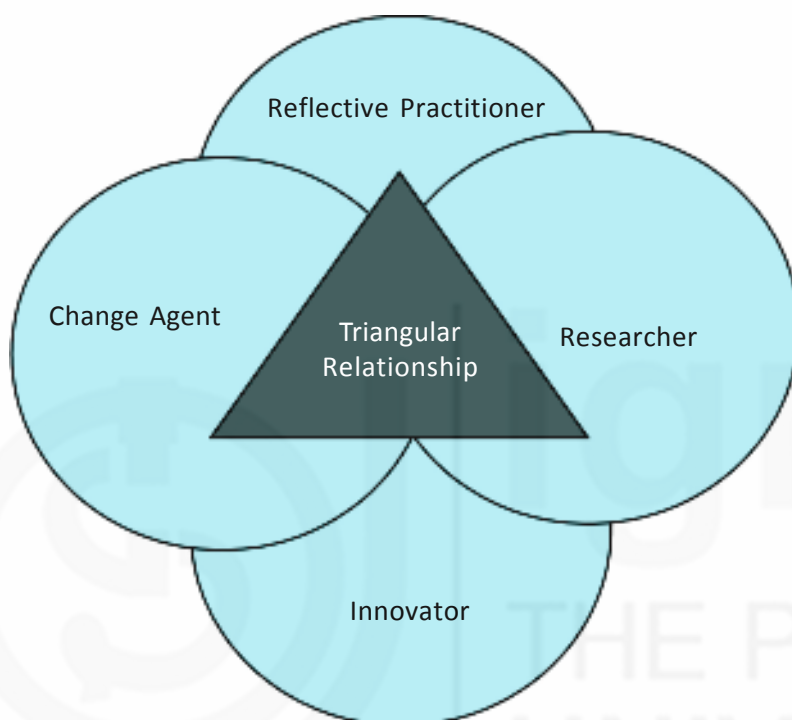


Fig. 14.2: Teacher as Innovator and Researcher

You may take note of the triangular relationship (depicted in Figure 14.2) that exists among three roles of a teacher- reflective practitioner, change agent, innovator and researcher.

An effective teacher continuously reflects on content, context and procedures of classroom processes, and is an innovator, who develops new strategies, techniques and materials for teaching or changes existing ones whenever better ones are found or when the existing strategies no longer provide substantive learning experiences. Such a teacher is not dependent only on traditional chalk and talk method but uses a combination of relevant strategies such as question-answer, discussion, collaborative group works, role play, visual media, experiences of children, field trips and the like to sustain children's interest in learning. Classroom teachers who conduct such research are "reflective practitioners" who make exemplary contributions to instructional improvement (Suter, 2006). However, while research is integral to innovation, all researches do not lead to innovation.

Activities

- 1) List few topics/areas in which you feel need of innovation. Suggest few innovations in those areas and discuss with your colleagues about those. Prepare a report of discussion for feasibility of innovations suggested by you.
- 2) There is discrimination against girls not only at home but also in school. As a teacher develop an action plan for the removal of discrimination against girls in your class.
- 3) Identify an instance of process innovation brought about by your colleague. What difference did it make to students' achievement?

Check Your Progress

Note: a) Write your answer in the space given below.

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

- 2) Reflect on the need and importance of innovation in secondary education.

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14.4 TEACHER AS AN ACTION RESEARCHER*

Teachers often see research as an additional task hampering their day to day teaching work. As teachers we are often comfortable with external researchers who undertake different school related issues and their findings for improving our school system of education. Do we ask ourselves that were these issues of our concern? Finally the findings that are shared with the school, are they appropriate for our school? Do we find it easy to relate these findings with our school and classrooms? We must realize that when school based research is viewed as separate from teaching, teachers do not conceive of themselves as researchers. Teachers must become leaders of their schools by being able to identify their problems and looking for solutions for school improvement through their own research. As teachers how can we discuss our experiences; how we can identify a rich variety of concerns and questions of a contextual nature that require to be explored. Educational problems and issues are best identified and investigated where the action is taking place, i.e. at the classroom and school. Teachers taking up their own research after identification of their problems will make them better researchers to address school and classroom based challenges. This type of research taken up by educational practitioners has higher chances of making the classrooms and schools more vibrant learning centres. This is because it is 'my school', 'my classroom', 'my challenges' and the research undertaken is 'my research' and the solution reached is 'my solution'. This is action research and as teachers, to us, it is "*My Research*".

* Content of Action Research has been adopted from Handbook on Action Research originally written for DEP-SSA, IGNOU

14.4.1 What is Action Research?

Action research is a process through which teachers discover and learn through systematic investigation. As teachers we must understand that action research is a part of classroom teaching. It helps to further build on the understanding that teaching is influenced by personal knowledge, trial and error, reflection on practice and conversations or dialogues with colleagues, students and other stake holders within the school system.

Action research would be an ideal exercise for the professional development of teachers that promotes three basic academic activities:

- i) **‘collaborative inquiry’** meaning school teachers and administrators investigating together in collaboration on school education related issues,
- ii) **‘reflection’** that means a continuous thought process by teachers on understanding their various activities and how they perform in the classrooms, reflecting on their classroom practices and
- iii) **‘dialogue’** where teachers discuss issues with other teacher colleagues and administrators within the school system and generate a dialogue on school based issues.

Action research is thus a process that allows collaborative action, reflection on activities taken up in the school and generating discussion on key issues of concern that require to be addressed. It prompts us to evaluate our own instructional practices in the classrooms.

We must make it a point to identify how these practices impact on the comprehending skills of the children. We can further continue to monitor student learning through such continuous school and classroom based research. Such simple research and their findings can be used to reach certain solutions for the existing school/classroom based problems. Solutions to one problem may not be the end of all problems within the school system. There could be further problems that come up in the process that are to be addressed.

Action research is thus a continuous and reflective process where, we teachers reach at various decisions in favour of our schools and classrooms. Analysis of findings based on various school/classroom based data help to reach such decisions.

Check Your Progress

Note: a) Write your answer in the space given below.

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

3) Action research is ‘My Research’. Comment.

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14.4.2 Approaches to Action Research

Within the action research process, as teachers we may choose to focus our study on one learner, a small group of learners, a class, several classes, or a whole school. The focus and level of participation among school colleagues depends on the level of support, needs, and interests of the teachers' and school.

We must have knowledge on what are the various approaches to action research. Emily Calhoun (1993), described three approaches to action research: *individual teacher action research, collaborative action research, and school-wide action research*. Even though the environments are different, the process of action research remains the same in all the three approaches. This process uses classroom and school based data to identify problems, develop a plan of action, collect and analyze data, use and share the findings, and make instructional decisions to improve student learning continuously.

Individual teacher action research focuses on studying a problem or issue within a single classroom. In this kind of approach to research as teachers we engage in individual research that may or may not have support from our colleagues and our administration. They may or may not be willing to brainstorm, and discuss the topic of action research. Although just one teacher may become directly involved in action research, support from knowledgeable educators at the school or district level is important for the research to be successful. For example, inability of the learners to read, to understand certain concepts in mathematics, to comprehend what they read, and some other issues that are specific to a particular school or classroom.

Collaborative action research focuses on studying a problem or issue within one or more classrooms. This approach involves more collaboration and asks for teachers and administrators to work together in studying a particular problem in many different ways. For example co-teachers in one classroom studying a specific group of learners (e.g. gender), a team of teachers focusing on a grade level issue (e.g. transition rates), a teacher and district educational personnel studying a particular instructional practice, a group of teachers in the same school studying the same instructional concern, etc.

This collaborative action research approach promotes a joint effort involving more than one teacher in a specific area of study. Opportunities for sharing and dialogue are more likely to occur as the issues being researched are a common concern.

School-wide action research is taken up as a school reform initiative. Every faculty member of the school is involved in studying a specific issue identified from school based data. This approach requires adequate support from the administrators and teachers, and the results can lead to school-wide change. Successful school-wide action research is directly related to initiatives contained within the school improvement plan. This can be of a more vast nature encompassing various issues related to school improvement. It could also consider issues not directly related to the school but has strong impact of related school improvement indicators.

Please refer to the following chart for examples on lead research questions in tune with the approaches discussed above;

Approaches	Level of Focus	Level of Participation	Example of Research Question
Individual	Single classroom	Individual teacher	<ol style="list-style-type: none"> 1. What happens to learner's understanding of specific arithmetical concepts when I incorporate exploratory exercises into the teaching of arithmetic in my classroom? 2. How can I improve time management skills to use my class time more effectively? 3. What happens to learner behaviour in classroom when I start my class with a brief mind-relaxing activity? 4. How can I improve my organization of cooperative group learning to increase involvement of each student? 5. How can I increase my instruction in writing to increase learner's interest?
Collaborative	One or more classrooms	Head teacher, Co-Teachers, School administrators / Teachers within a district, etc.	<ol style="list-style-type: none"> 1. How can school completion rate at primary and elementary level be increased? 2. How can implementing "Peer Tutoring" be an effective method to reach out to each learner in large classrooms? 3. How can we construct and use learner feedback to improve child learning? 4. How can we improve our ability to adapt instruction to the needs of learners with learning disabilities? 5. How can we effectively implement a more positive behaviour management plan?
School-Wide	School-Improvement	Whole faculty	<ol style="list-style-type: none"> 1. How can we teach our learners to organize, analyze, and interpret what they read? 2. How can loud model reading improve learners' abilities to organize, analyze, comprehend and interpret what they read? 3. How can implementing a school-wide positive behavior support programme improve learners' safety and increase appropriate learner behaviors within the school? 4. How can learners' participation be ensured in the school assembly? Will this have impact on school participation? 5. How can exercises of a role play be used to reduce gender stereotype among children in the schools?

Activity 4

Identify specific school based issues relating to individual, collaborative and school wide approaches of action research.

14.5 PRE CONDITIONS FOR TAKING UP ACTION RESEARCH

Any research will call for objectivity and taking care that ongoing activities within the unit of study (the school in our case) do not get hampered. One needs to take care that its functioning does not come to stand still. We also need to ensure that in our efforts for finding solutions to the existing problems we do not further add to the existing problems. Therefore as we take up these action research projects we must strictly maintain certain ethics. The following sections will discuss about certain pre-conditions for taking up action research that we must follow sincerely.

Qualities for Undertaking an Action Research: There are certain qualities that we must cultivate within ourselves as teachers when we take up action research.

Though it is regarded as small research, this effort has the ability to provide solutions for existing school and classroom based problems. We must cultivate the art of identifying local resources, and make use of these resources to find solution for the identified problems. This will help in making way for developing and monitoring changes in the existing teacher learner activities and instructional practices. As mentioned above there are certain qualities that practitioners of action research must possess. These include;

- i) a deep understanding of the system of education,
- ii) an in-depth vision and insight into the school and classroom based activities and practices,
- iii) quest for new knowledge, through seeking solution to existing concerns,
- iv) a desire for improved performance in schools and classrooms,
- v) self-reflective activity, that include self-criticism and self-analysis, and
- vi) willingness to effect changes through constant identification of issues that require strengthening.

These are the basic qualities of practitioner of action research and simultaneously have the capacity to offer other colleagues a better understanding of what happens within our schools. These qualities of an action researcher help to set up a decision-making cluster that guides the various levels of school planning exercises, keeping the school context in mind. This approach then helps to have in place meaningful and effective school improvement plan that accelerates the school improvement efforts.

Resource Support for Action Research: Identification of local resource for action research is very important to complete a research project successfully. It is primarily the responsibility of a school administrator to create the need for action research and establish a desirable environment for conducting school and classroom based action research. The administrator can in the process smartly identify potential leaders within the school system. They could be in the form of a school inspector, a school principal, a senior teacher or even a new teacher who has the vision to bring positive change in the school system. As school principal and administrators play a major

role in identifying such leaders, they can carve out way for new vision and bring about change in the existing system. The role of the experienced school staff can be vital as they have the ability to meaningfully extend support to every new initiative. In case these teachers and staff are not in a position to take up action research independently they can provide inputs from their past experience. At some point of time during their experience as teachers or assistants or even general staff they have made some improvisations or the other. They have taken up such initiatives through trial and error methods, their efforts and findings may not have seen proper documentation but the outcomes still remain with a few of them. All these information could be gathered and not only form a good basis but also guide in designing further strategies for school improvement. Therefore all experiences must be gathered and put to use. All small information has something to reveal and throw some light on designing new strategies. In the process everyone feels they are contributors and own whatever change is being introduced. Such ownership is crucial for the new practices to be sustained and further dissemination and up-scaling.

Teacher's Preparedness for Action Research: As teachers we must realize that our primary role in the schools is to impart quality teaching learning and we must not compromise on this time. We must therefore ensure that in the process of taking up action research we do not reduce the time assigned for quality teaching learning. There is need for teachers to prepare themselves to take up this task. Let us look into some of the conditions that we need to keep in mind before taking up any action research. These conditions may be put down as follows;

- Teacher's primary role is to teach and any additional effort to undertake an action research must not interfere with or disrupt our commitment;
- The method of data collection must be a regular teacher activity so that action research can become synonymous with teacher's role in the classroom;
- Teachers must remain committed to the identified research problem under study;
- The methodology selected must be simple and reliable, which helps us to formulate a hypotheses (specific questions to an issue or problem) confidently and also answer such hypotheses;
- We must keep in mind certain ethical procedures when carrying out any type of research and take necessary help from resource persons in the school or cluster, we must not let our previous views to take over or influence our current research processes; and
- Findings from our research should find sustainability when all members of a school community build and share a common vision. Therefore we need to make efforts to generate consensus on school and classroom based issues that we are trying to research.

It is important to keep in mind certain ethics prior to conducting any kind of research.

The above mentioned pre-conditions are very crucial and teachers, administrators and any other school staff interested in taking up action research must internalize these preconditions. This will help in ensuring that there is a systematic and objective inquiry, which is not influenced by preconceived ideas or experiences.

In the above paragraphs you have understood pre-requisites required to take up action research and qualities that an action researcher must possess to complete any such initiative.

Check Your Progress

Note: a) Write your answer in the space given below.

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

4) What are the basic qualities for the practitioners of action research?

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14.6 QUALITY ISSUES IN ACTION RESEARCH

It is always advisable that before taking up any action research it is important to understand the complete school situation. To work out a situation analysis the following questions could be of use to the teachers.

School based issues: Take stalk of school and classroom data, what are the gaps that need to be filled to ensure students learn and are higher achievers in school?

For example- Does the existing school physical and human resource infrastructure measure up to the quality infrastructure standards? What are the gaps? How can these be addressed? Who will you approach to solve the problem? Can you document all the processes you are following to ensure this?

Do you think you are able to identify gaps in school functioning? Can you identify these issues and formulate a research proposal for yourself? Under the given conditions what kind of support, motivation and incentive do you think could be extended to the teachers to take up action research?

Learner achievement issues: What is it that we need to know, in order to ensure that our learners achieve their learning goals? What are the specific learning difficulties among children? How will we know that learners are achieving their academic and behavioural goals? For example-Why are children not learning in the classrooms? What instructional practices do not have positive results on learning? Is there a way to change the current practices? What does the learner related individual classroom data reflect about learning? Are the teacher's instructional practices yielding desired results? Is the organization of children in the classroom leading to poor achievement among learners? Are there any home based issues that require to be taken up by teachers? How is the child's nutrition level contributing to low achievement levels?, etc.

Classroom environment issues: How does the classroom environment influence child learning? Do the size of classroom and number of children in the classroom contribute to learning? Is there any impact of the number of teachers in the

classroom on classroom environment? For example -Is the classroom condition up to your satisfaction? Is there enough space for children to sit and do their class work? Do children feel comfortable and safe in these rooms? Is there enough light and ventilation in the rooms? Given the current classroom conditions what can teacher do to make teaching learning more effective? Why do some children not attend classes regularly? Do classrooms have proper blackboard that children can see properly and teacher can use to instruct properly? What kind of relationship do you have with your learners? Can you say that your classroom environment is friendly?

Teacher training issues: *Are the instructional practices in line with what were taught during your teacher trainings (pre-service or in-service)? Do these practices have any positive impact on learning? You could ask questions like, Have you as a teacher gone through any professional development training? Do your teacher training workshops have adequate activity sessions that takes care of your classroom situation? Are you able to improvise from the training programmes at the time of classroom transactions? Were you able to clarify your teaching-learning difficulties at the teacher training programmes? Do you think teacher training should include something more?, etc.*

Classroom transaction issues: *What instructional practices or techniques should we investigate and research? How are we going to learn about these instructional practices and ensure their impact on student learning? For example- How many children attend your class? Do you think you can reach out to each of them? Do your classroom transactions match with what you were taught at the time of your in-service training? What will you evaluate during classroom instructions that will increase your professional learning? Do you have resource support for this kind of development? How frequently do you make use of TLMs? How frequently do children use TLMs? Do you organize the class into groups to conduct certain specific activities? Can children learn better through peer activities? Can these be integrated with your classroom practices? Do you follow an academic calendar? Is secondary or seniorsecondary education curriculum is available in the school and referred by the teachers, etc.*

Community based issues: *How often have schools involved community members in developing a school development plan? How can community members involve themselves for improving schools? For example- As stakeholders can community contribute to school development in monetary terms? Can the community members be motivated to participate in assisting or volunteering with teachers in schools? What will motivate SMC members to participate actively in the school development plan? How active is the SMC in ensuring regular school attendance of children? Does the community participate in ensuring a child friendly school environment? How does the PTA/MTA add value to learner achievement? Can this be further strengthened?, etc.*

Combining quality issues: *How will you use the gathered information to make significant decisions regarding school improvement? Who will you discuss your findings with? What kind of evaluation will you do with all the data collected on school and classroom? Who will you work with to develop evaluation tools?*

What kind of inference can you draw using all data from various indicators?, etc.

The above questions will enlighten the teacher and education administrators on what to focus on or what school related issues could be of concern against the existing situation.

The above paragraphs have furnished us with information on how to focus on quality issues relating to elementary education prior to taking up action research. You have also learnt how to identify issues relating to your school and classroom for action research.

Activity 5

Enlist the school based indicators to work out a 'situation analysis' of your school.

14.7 STEPS INVOLVED IN ACTION RESEARCH

As your pre-research exercise, you have the school based situation analysis available with us. With the help of this unit, it will be more convenient for you to point out areas where the school requires strengthening. Once the pre-research stage is over, you can move on to actually identifying school or classroom related problems and working out their solutions. In this section of the unit, we will gather information on the various steps involved in initiating and completing an action research project.

14.7.1. Step One: Identifying the Problem - as the first step we need to identify an issue and begin to formulate questions for which we are looking for solutions. As the first step to action research, we will choose something that is important to us as a teacher: for example, we can look at some of our own teaching methods or at the way students learn. We can begin with a simple and manageable project that can be handled. We need to keep in mind that it is not possible to change everything at the same time. We only need to begin somewhere so that others start thinking on initiating their ideas to address the issue of their concern. Improvement can begin in small measures, taking one problem at a time and finding a solution for it.

We can also start off with a question, like "Why do the learners not respond to my mathematics class?" Think about how you can undertake such a problem.

You may ask yourself whether all the learners are not responding or a few? For example "What happens when I am teaching a particular concept?" Identify this concept that is bothering you and your learners are not responding on. The concept in question will be related to which grade learners are we referring to? We have to understand whether it is the learners who fail to respond in the entire school or only a part of it? Thus we need to define how big or small the problem is i.e. an understanding on the magnitude of the problem. The solution we look for will be based on this understanding.

14.7.2. Step Two: Reference Work - once the problem has been identified it will call for some reference work. This will be the second step of the action research.

We require finding out more about our problem and the various ways in which it has been addressed in the past. For example we must find out the 'mathematics concept' to which the learners have not been responding. We need to know how learners' have responded to the same concept in other schools and classrooms. We need to find out if there is an inherent problem in transacting such concept. We need to read, discuss, and think over it and try to identify what will work in our context.

There is a need to involve more school teachers in the project and talk to them about our concerns and find out their opinion on the issue. We can take their

suggestions and further go on to refer to books and journals, and also find out if there are some other studies available on our topic of concern. We must explore with as much as we can, as this will provide us with greater clarity on our initiative. As we move on with our reference work we must not lose focus. We must try and bring in local resource persons who can provide inputs on where to limit ourselves. We may have to revisit our question and make changes wherever required maintaining alignment with our major issue of concern. If the need arises, we can change our direction and work on something more relevant and manageable. Action research provides a lot of flexibility and that allows us to be sure about what we are about to do.

14.7.3. Step Three: Initiating Action - After all the reference works, discussions and exchanging ideas it is likely that we will come up with newer ideas. On the basis of these new ideas we will make changes and try out what seems appropriate for our school or classroom. These ideas will generally be influenced by what we have gathered from others experiences and other studies. We must try out these ideas in the classroom. For example we try and teach the “mathematics concept” using a different TLM, or using a different method. Next we need to find out if children are engaging with this new form of teaching–learning. Have we been successful in making learners respond to the new form of teaching? Are the learners responding?

14.7.4. Step Four: Collection of Data - At this point we will face the challenge of how to measure the results? This is where we will make use of wide variety of data collection methods. Depending on the kind of research we need to carefully identify our data collection method. It could call for designing questionnaire schedules for interviews, work out an observation format, and develop formats for recording various focus group discussions or simple discussions and any other evaluation methods like a case study. We need to ensure that our research must be systematic and rigorous so that our work gains credibility.

14.7.5. Step Five: Evaluation and Analysis - once the project has taken off, at every step we have to evaluate and reflect on the responses we start receiving on the new ideas introduced in the classroom. We must gather all the data on some simple formats and analyse them. With concurrent evaluation and regular reflection we can find out if our intervention is feasible and is making the desired change or not? We can involve resource persons like BRC/CRC coordinators, school principals who have an understanding on our problem and their opinion will make some value addition to our effort. Their inputs can prove a different perspective that we have been over looking and is important for us to consider.

The more people we can take along with us will help us generate greater consensus on the research findings and easier for us to disseminate if established. Contribution from them on the final report will bring them together to take up further research.

14.7.6. Step Six: Drawing Findings – once we are ready with the findings that suggest solutions to the existing problems we need to implement this as part of our classroom practice. We need to ensure that the solution has helped to improve or amend our previous practice. We are now able to do things differently in the classroom. We need to question ourselves that have we learned from the project.

We need to keep in mind that action research is empowering – it allows us to change our ways of classroom transactions. We can continue to make changes all the time, and continue to grow as a professional.

We need to ask ourselves that have the questions to our concerns been answered. As we worked towards one concern did we come across other issues that require our attention? Did we expect what we actually found? How are we going to share our results with the others in the education system? We further need to consider whether these findings are useful to the others in our school/community? We need to present our findings to others – we can give a talk, make presentations at state level meetings on our initiative and how it has helped the students and teachers.

We have to convey that the changes happened because we altered the existing practice. We must observe if we have been able to evolve as higher level professionals, and have induced a different set of relationships within the school and classrooms, teacher to teacher and also teacher to students.

14.7.7. Step Seven: Document our Findings – Since action research is a cyclical process and continues from where it ends we cannot stop with drawing our conclusions. You must also share with our colleagues what you found through your research. We must therefore ensure that we have documented each step of our research. We can further prepare a full-fledged study report and send to district and the state level stakeholders to get their feedback. The report could be further circulated for dissemination and up-scaling wherever feasible. The specific requirements of the report will differ depending on what you’ve done; however, all of the reports have a few things in common. Format for reporting an action research is discussed in the next section.

Check Your Progress

Note: a) Write your answer in the space given below.

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

5) What is the process of identifying an action research problem?

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6) How will you draw findings from your action research and disseminate them?

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14.8 FORMAT FOR DOCUMENTING YOUR ACTION RESEARCH

After completing the research, documenting all the findings is a challenging task. It is expected that this document will be shared at different platforms. Therefore it must be systematically and clearly documented. Following is a format that we could follow to document the entire action research.

Introduction: this section of the report will include;

- An overview the research project that will include the research topic, the reasons for undertaking the research, a background to the area of research, and how do you think this will improve your classroom or school situation.
- Narrate how you identified your research question and how you involved other school administrators, teachers and staff in framing this question.

Objectives: Mention what were the objectives of your research

Research plan: While documenting the research plan we will include,

- Elaborate on the school context, here we can bring out certain findings from the situation analysis that helped in identifying our current area of inquiry.
- Description of what we wanted to do and why we identified it. How relevant was it to our school context and how will it make difference in augmenting the quality of our school.
- The research approach and model that have been used in the process of action research. How will this approach and model facilitate our research?

Sample and Methodology: Provide a simple note on the research sample (if any),

- Why this sample is of concern to you, how will focusing on this sample help in quality improvement of your school.
- Mention the types of data collection techniques that have been used to gather all the required information.
- The process used to take up the analysis and who are the persons involved at the time of analysis.

Findings:

- Your key findings
- Discussion of your findings in terms of the research question

Conclusion

- Draw conclusions on the findings.
- Reflect on how our findings will contribute to a change in educational practices for us, our colleagues and our school.
- Consider how your findings will influence the next cycle of action research.

In this section we have understood why it is important to have a systematic and articulate documentation of each step of our action research project. We have also understood the different heads under which we can document the entire action research project.

Activity 6

- a) Identify five topics which you find suitable for action research.
- b) Choose a topic for action research and give detailed account of the tasks to be done at each step in an action research proposal.

14.9 LET US SUM UP

We have observed that innovation and action research are two activities supposed to be executed by the teachers with common aim to improve the practice and situation of the practice. Both resulted in observed changes. More often innovation is brought through the process of action research. It is clear from our discussion that innovations are sometime subjective and action research is an objective process. Thus to make innovations valid, durable (long lasting) and goal achieving, it become essential that innovations should be supported by researches, especially action researches. After going through this unit it is clear to us the goal of innovation and action research process is similar. As teachers are required to improve their practices regularly so it is beyond any doubt that teachers by their professional requirement are constant action researchers and innovators.

This unit will help you to plan out your action research project. We have also tried to identify the different issues concerning quality improvement of schools and classrooms, and have tried to understand the feasibility of conducting action research on those issues. Findings emerging from the action research can be shared at different platforms with feasibility for replication wherever possible.

14.10 UNIT END EXERCISES

- 1) What is innovation? How do you find the teachers as innovators?
- 2) Define the term innovation and write its characteristics. What do you observe as innovative practices in education?
- 3) Why teacher should be action researcher? Write the characteristics of action research.
- 4) What is action research and explain different types of action research? Describe in detail the process of action research.

14.11 ANSWERS TO CHECK YOUR PROGRESS

- 1) Product, Process and Paradigm (Suggest examples based on your experiences).
- 2) Reflect based on your understanding after reading the section on innovation.
- 3) Action research is a continuous and reflective process where a teacher reaches at various decisions in favour of his/her schools and classrooms. An action researcher is primarily a teacher who solves his/her day-to-day teaching learning problems.
- 4) Following are the qualities required:
 - i) a deep understanding of the system of education,
 - ii) an in-depth vision and insight into the school and classroom based activities and practices,

- iii) quest for new knowledge, through seeking solution to existing concerns,
- iv) a desire for improved performance in schools and classrooms,
- v) self-reflective activity, that include self-criticism and self-analysis and
- vi) Willingness to effect changes through constant identification of issues that require strengthening.

5) & 6) Answer yourself after reading section 14.7

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UNIT 15 TEACHERS AS REFLECTIVE PRACTITIONER

Structure

- 15.1 Introduction
- 15.2 Objectives
- 15.3 Concept of Reflection
- 15.4 Different Perspectives on Reflection
 - 15.4.1 Dewey on Reflection
 - 15.4.2 Reflection as Three Level Progression
 - 15.4.3 Tri Layered Reflective Thinking Model
- 15.5 Approaches to Reflective Thinking
 - 15.5.1 Cognitive Approach
 - 15.5.2 Critical Pedagogy Approach
 - 15.5.3 Narrative Approach
- 15.6 Techniques of Promoting Reflection
 - 15.6.1 Teacher Narratives
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15.1 INTRODUCTION

An important aspect of becoming a teacher involves beginning to think like teacher, and be aware of their practices so that the knowledge developed through the experiences of teaching and learning may be utilized to improve future practice. Reflection is one of the crucial aspects of teaching -learning process that helps the teachers to analyse their own practices and improve upon them. In fact reflecting on different aspects of teaching is fairly instinctive for most of the teachers. We all try to evaluate our teaching, especially, when faced with a dilemma related to a particular session and try to work out on the changes required for the next session. Reflection is gradually becoming a basic necessity in teacher education programme throughout the world (Hatton & Smith, 1995). The year 1975 witnessed a visible shift towards the perception of teachers from decision makers to reflective professionals who construct meaning (Clark, 1986; Schon, 1983). Over the years that followed, reflection was considered as generic component of good teaching. So what is reflection and what are the methods that promote reflection among student teachers? In this unit, we will discuss the concept, approaches and methods of reflection and reflective techniques.

15.2 OBJECTIVES

After going through this unit, you will be able to:

- understand the concept of reflection;

- analyze different models of reflective thinking;
- identify the appropriate approach to reflective thinking; and
- apply various techniques for promoting reflection.

15.3 CONCEPT OF REFLECTION

Reflection is part of our day- to-day life. In scientific terms, reflection occurs when light changes direction as a result of bouncing off a surface. We see our image in the mirror as a result of this reflection. When this principle is applied to the thinking process, we reflect on a range of problems and situations every day. We don't follow any particular formula for this, and it just happens as feelings, thoughts, and emotions about something gradually surface. As a result of analysis of various aspects of a problem or situation we decide our course of action. *Reflection is thus a process in which an experience is recalled, considered and evaluated in relation to some broad purpose.* It is a response to past experience and includes examination of past experiences for evaluation and decision making in search of new meaning and interpretation.

The terms reflection and reflective thinking, however, include a wide range of concepts and strategies. Plato, Aristotle, Confucius, Solomon and Buddha followed reflective practices, but, Dewey can be said to be the originator of this term in the 20th century, though the term took very different shape later on due to unfolding of the mystery of this term by researchers and thinkers. The earliest work in the area of reflection undertaken by Dewey (1916) provided a foundation for many current theories.

Reflection is defined by Boud, Keough and Walker (1985) as “*those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations*” (p.19). Reid (1993) considered it as an active process of “*reviewing an experience of practice in order to describe, analyze, evaluate and so inform learning about practice.*” (p.3)

We may summarise that *reflection is a process whereby the learner recalls and analyses his/her own experiences to arrive at some informed decisions.* It is a process of thinking whereby we consciously think about something to clarify our understanding about it. It includes noting the relationship between things, and analyzing and synthesizing the relationships. In other sense reflection may be considered as a means of developing better understanding about oneself and for others. Reflection leads to the process of reflective thinking which may be defined as the act of thinking rationally or critically.

Check Your Progress

Note: a) Write your answer in the space given below.

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

1) What do you understand by the term ‘reflection’?

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15.4 DIFFERENT PERSPECTIVES ON REFLECTION

Let us now have some discussion on how reflection has been perceived and defined by various thinkers.

15.4.1 Dewey on Reflection

Dewey (1933) defined reflection as a specialized form of thinking which originates from the need to solve a problem and involves **‘the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it.’** He proposed five step model of problem solving which included posing questions, hypothesizing, reasoning, testing and suggesting solutions. He referred reflection as a process of critical inquiry that is systematic, rigorous, and disciplined way of thinking. According to Dewey the process of reflection for teachers begins when they experience any problem, or difficulty which cannot be immediately resolved. This motivates teachers to analyze their experiences and seek solutions. For Dewey reflective thinking is distinctively intellectual and is better way of thinking because it ‘emancipates us from being merely impulsive and following routine activity’. Reflective thinking provides foresight to direct our activities with ***end in view or purpose of which we are aware***. For Dewey reflection alone enables us to know ‘what we are about’ (p.14). Dewey emphasized critical reflectivity. According to him one can think reflectively only when one is willing to ‘endure suspense and undergo the trouble of searching’. To be critically reflective thinker one must be willing and able to sustain and protect the state of doubt which is the stimulus to thorough enquiry so as not to accept an idea or make positive assertion of a belief until justifying reasons have been found.(p.19)

According to Dewey, ‘one’s character or attitude is essential feature of a truly reflective person’ (p.20). The pre requisite attitudes that are to be cultivated among trainee teachers and teachers for promoting reflective thinking are open mindedness, whole- heartedness, and responsibility. The term ***Open mindedness*** suggests willingness of individual to give attention to alternative views and be rational. ***Responsibility*** implies the desire to actively search for truth and apply obtained information to problematic situations. ***Wholeheartedness*** implies sincerity, and conviction on what one believes. It ensures overcoming uncertainty, fear and critically evaluating oneself, children, schools and society. Dewey makes an important distinction between routine action and reflection. Reflection implies that something is believed in or disbelieved because of some evidence, proof or grounds for that belief. It is an active and deliberative cognitive process involving sequences of interconnected ideas which take into account underlying beliefs and knowledge. Reflective thinking addresses practical problems, allowing enough scope for doubts, reservations and confusions before possible solutions are reached.

Reflective thinking may, therefore, be summarized as making informed and logical decisions on educational matters and then assessing the consequences of those decisions. It is a process that involves more than rational and logical problem solving efforts. It also involves intuition, emotion and passion etc. It is performative since the act of reflection can result in some improvement in practice (Biggs, 1999). It may be expected that it leads to some action and change which is a presumptive feature of reflection. Reflective practice involves an objective analysis of the evidence on competing versions of events. Rodgers (2002. P 845) summarized Dewey’s four criteria of reflection as follows:

- Reflection is a meaning making process that moves the learner from one experience into the next with deeper understanding of its relationship and connections with other experiences and ideas.
- It is systematic, rigorous and disciplined way of thinking with its roots in scientific inquiry.
- It needs to happen in community, in interaction with others.
- Requires attitude that values personal and intellectual growth of oneself and others.

15.4.2 Reflection as Three Level Progression

Van Manen (1977) has described the concept of reflection as ‘a progression involving three different levels- *technical, practical and critical*’. The **technical level** concerns with the efficiency and effectiveness of the means used to achieve the objectives, which are not open to criticism or modification. In teaching learning situation, it relates to effective application of skills and technical knowledge in the classroom setting. Here reflection is confined to analyzing the effect of strategies used.

Practical reflection is concerned with the assessment of educational goals and how they are achieved by the learners. It allows for open examination of goals, means and assumptions upon which these are based. This stage, therefore, involves reflection about the assumptions underlying a specific classroom practice as well as the consequences of that practice on student learning.

Critical reflection concerns with the worth of the educational goals. It also relates to the assessment that how well these goals are achieved and who is being benefitted from the successful accomplishment of those goals. This stage entails questioning the moral and ethical dimensions of decisions made. At this level of reflection teachers make connections between situations they encounter and the broader social, political and economic forces that influence those events.

While the thought of Dewey is of immense importance in clarifying the process and procedure of reflective thinking, as well as the attitudes necessary for critically reflective individuals, Max Van Manen’s levels of reflection are crucial for focusing on the objects of reflection as a way to clarify the concept of critical reflection.

Donald Schon, in 1987, introduced the concept of ‘reflective practice’ to define reflective thinking. According to Schon reflective practice involves thoughtfully considering one’s own experiences in applying knowledge to practice while being coached by professionals in a discipline. Schon’s (1987) notion of reflection encompasses three different modes of reflection not necessarily developmental in nature. **These modes are reflection- on- action; reflection –in-action; and reflection for action.** According to Schon (1983, 1987) reflective practitioners reflect in and reflect on action.

Reflection-in-action, according to Schon (1983), involves looking into professional’s experiences, connecting with their feelings, and attending to relevant theories in use. It refers to the process of decision making by teachers whilst actively engaged in teaching. In other words, the teacher uses his/her accumulated experience and knowledge to seek alternatives in the classroom in response to the needs of learners. Instead of randomly using any approach. Schon has described three principal features of reflection-in-action: First, Reflection-in-action is a conscious effort. The teacher (professional) makes conscious attempts to experience the confusion in a situation

of learning which he/she finds uncertain or unique. Thereby he/she carries out experiments, the outcome of which facilitate generation of new understanding of phenomenon and a change in the teaching learning situation(Schon;1983.68). Second, reflection-in-action has a critical function, questioning the structure of knowledge-in-action. This promotes deeper understanding of the context and provides opportunity for critical thinking for teachers. Reflection-in-action focuses upon the identification and rapid solution of an immediately pressing problem.

In this context, Schon has used a number of terms such as tacit knowledge, knowledge –in–action; and reflection-in-action. ***Tacit knowledge***, according to Schon, is the knowledge that we have when we are doing something automatically and intuitively. This does not require thinking about or systematic analysis of features. For example, once a person has acquired the skill of driving and learnt the rules of road driving, driving becomes automatic and intuitive. He/she drives without thinking about it so this knowledge is ‘unspoken’ or ‘tacit’.

Knowledge-in-action is derived from the idea of tacit knowledge. It refers to the kinds of knowledge we can only reveal in the way we carry out tasks and approach problems. This tacit knowledge is derived from research, and also from the practitioner’s own reflections and experiences.

Reflection-in-action is, about challenging our assumptions (because Knowledge-in-action forms the basis of our assumptions). It focuses on identification and rapid solution of immediate problem. It is about thinking again in a new way about the problem we have encountered. Reflection-in-action in that sense has a critical function as it questions the structure of Knowledge-in-action, which promotes deeper understanding of the context and critical thinking.

Reflection- on- action occurs outside of the practice which is the subject of reflection. This is critical analysis and evaluation of the action and reflecting on what might have happened if a different course of action had taken place. Schon introduced the concept of reflection–on–action as a retrospective process whereby the student or teacher looks back at an incident and analyses what he/she can learn from it. Through this process the learner/ teacher may decide to modify an action or go ahead with the predetermined set of action. It, therefore, refers to both cognitive and meta cognitive thinking about the task once it has been accomplished. In teaching learning situation teacher may carefully review their action during the instructional process. It is more systematic process of deliberation enabling analysis, reconstruction and reframing in order to plan for further teaching and learning. Unlike Reflection-in-action it is not necessarily carried out in isolation from other professionals.

In Reflection-for-action context, actions are influenced by evidence based practice and structured through the use of a personal development plan. Reflection –on–action is reflection on one’s actions and thoughts after an action is completed; while reflection-in-action is a spontaneous reflection in the midst of action. Reflection-for-action, on the other hand is the desired outcome for the first two types of reflection. It ensures responsibility and accountability for the decisions that teacher makes.

Though Schon has tried to explain reflective thinking with the help of Reflection–in–action, Reflection–on–action, and Reflection–for–action, these are interrelated and not isolated concepts. Schon’s contributions are significant as they contributed to the understanding of reflection in the development of professional practice. He argued that professionals in their day- to- day practice face unique and complex situations

that cannot be resolved through the technical-rational model alone. Through the process of reflection in action and reflection on action, solutions of these complex situations can be obtained.

15.4.3 Tri-Layered Reflective Thinking Model

It is clear from the description of the concept of reflection that *it is a process of thinking whereby the individual makes informed choices*. There are differences among various scholars over the hierarchical nature of reflective thinking but some models of reflective thinking are widely accepted which have been mentioned in the previous section of this unit. Van Manen, Taggart and Wilson (1998) developed a pyramid model of reflection having three levels; these include technical, contextual and dialectic.

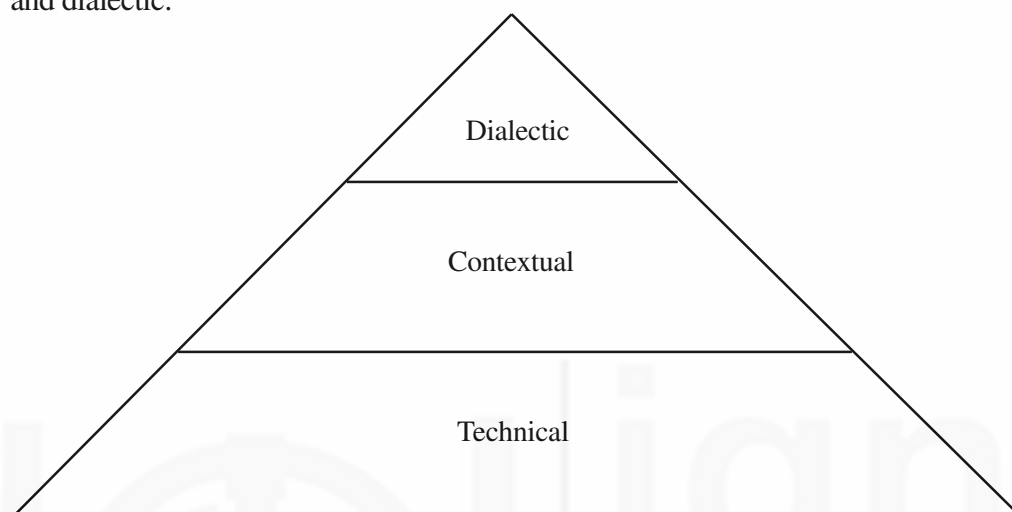


Fig. 15.1: Pyramid Model of Reflective Thinking

Technical Reflection

This is considered to be the first level of reflective thinking by Van Manen (1977). At this level, educational knowledge and basic curriculum principles are approached through 'how to' questions. This reflection includes:

- Simple description of observations.
- Focus on behavior, content, skills from past experiences or theories derived from readings or course work.
- Task oriented view of teaching competencies as meeting a set of objectives.
- Use of appropriate educational vocabulary.

Teachers can address curriculum, instruction, as well as diagnostic and control issues through this mode of thinking.

Contextual Reflection

This level involves reflection regarding underlying assumptions and predisposition in classroom practice. It deals with pedagogical issues and the non problematic level of technical reflection. Problems at this level motivate teachers to reflect on the contextual situation that may lead to understanding concepts, contexts, and theoretical bases for classroom practice. This stage includes:

- Reflection on the practices that affect learning.
- Reflection on the context of the problem.

- Reflection on relating theory to practice.
- Reflection on various alternatives.

The contextual reflection deals with the pedagogical issues and relationship between theory and practice. An outcome for practitioner reflecting at this level may be context understanding with theoretical bases for classroom practices, then implementing those practices and articulating their relevance to students' growth.

Dialectical Reflection

This type of reflection deals with questioning of ethical and moral issues related directly or indirectly to the teaching practice. At this stage the practitioner reflects on the worth of knowledge and social circumstances useful to students without any bias. It is the highest level of reflection that helps the practitioner to make informed choices and view events with open mindedness. The practitioner analyses knowledge system and theories in context and in relation to one another; critically examines underlying assumptions, norms and rules; practices introspection, open mindedness and intellectual responsibility (Dewey, 1933); and questions ethical and moral issues of teaching, instructional planning and implementation. All these are components of high level of reflection and found at dialectic level.

Dialectic reflection, therefore, includes:

- Systematically questioning practices.
- Suggest alternatives and competing theories.
- Reflect on decisions and consequences during the course of action.
- Bring moral, ethical, and socio-political issues for discussion.

Such type of reflection may be facilitated through analyzing stereotypes and biases through narratives and storytelling, practicing affective elements of caring and concern and reflecting on the role of school climate and society on education.

15.5 APPROACHES TO REFLECTIVE THINKING

Literature on reflective thinking describes three general approaches in the context of teachers' reflective thinking- Cognitive, Critical and Narrative approach. The cognitive approach relates to teachers' information processing and decision making; while the critical approach has its roots in ethical and moral reasoning. Narrative approach refers teachers telling their own stories (narratives) through problem framing, case studies and naturalistic inquiry etc.

15.5.1 Cognitive Approach

This approach focuses on teacher knowledge and decision making process. Shulman (1987) has identified six categories of knowledge; content, pedagogy, curriculum, characteristics of learners, context and educational purposes, ends and aims. Later on Shulman added a seventh category of teacher knowledge i.e. pedagogical content knowledge which encompasses the first three categories and refers how teachers portray important ideas specific to their content. The cognitive approach emphasizes how knowledge base is organized into networks of related facts, concepts, generalizations and experiences. These organized structures called 'Schemata', constitute the individual's comprehension of the world. Research findings indicate that the development of schemata is related to the experience of teachers and

consequently the experienced teachers have more developed schema than the novice teachers. These schema are, therefore, constructed through experiences of teachers with the help of the process of assimilation and accommodation.

15.5.2 Critical Pedagogy Approach

This approach considers knowledge as socially constructed. This knowledge is influenced and determined by the local culture, context and customs (NCF, 2005). While the cognitive approach emphasizes *how* teachers make decisions, the critical approach stresses *what* of those decisions by examining the experiences, values and goals of teachers in terms of their sociopolitical implications. Critical approach is often considered in terms of critical pedagogy. Mc Laren (1989) stated that “critical pedagogy attempts to provide teachers and researchers with a better means of understanding the role that schools actually play within a race, class and gender divided society”(p163). NCF 2005 has explained it as “a pedagogy that is sensitive to gender, class, caste and global inequalities is one that is not merely affirm different individual and collective experiences but also locate these within larger structure of power and raises questions such as , who is allowed to speak for whom? Whose knowledge is most valued? This requires different strategies for different learners. For example, encouraging speaking up in class may be important for some children, while for others it may be learning to listen to others” (p 24). Teachers therefore need to visualize teaching as a process of inquiry and think about the long term effect of the techniques adopted for teaching on students’ values and perceptions.

15.5.3 Narrative Approach

According to Cochran-Smith and Lytle (1990) “what is missing from the knowledge base of teaching..... are the voices of teachers themselves, the questions teachers ask, the way teachers use writing and intentional talk in their work life and interpretative frames teachers use to understand and improve their own classroom practices” (p.2). This approach emphasizes teachers’ own descriptions of the personal circumstances under which they make decisions. Teachers create their own pedagogical principles as they describe, analyze, and make inferences about classroom events. The information gained from this experience is often tacit and difficult to analyze.

Check Your Progress

Note: a) Write your answer in the space given below.

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

2) What is the difference between reflection- in – action and reflection-on-action?

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3) Describe the steps of tri-layer reflective thinking model.

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15.6 TECHNIQUES OF PROMOTING REFLECTION

Developing reflection among prospective teachers call for developing a disposition, whereby, they are motivated for a change within. Pollard et.al (2005) have described that ‘ reflective teaching implies an active concern with aims and consequences as well as means and technical competence’ (2005:15). The central objective of reflective teacher education is to develop reasoning among student teachers on why a particular teaching method should be employed and how they can improve their teaching to have positive impact on learners. This process of change can be encouraged and facilitated by teacher educators through various means. In order to promote reflection the teacher educator should:

- 1) Help student teacher to become aware of his/her learning needs.
- 2) Offer student teachers multiple perspectives of issue under consideration;
- 3) Facilitate student teachers in finding useful experiences;
- 4) Help student teachers to reflect on these experiences in detail.

By reflecting on their past experiences the trainee teachers may become conscious of their learning needs, and by formulating learning needs they often become aware of necessary learning situations. In our school experience programmes we have the provision of supervisor’s feedback and post teaching discussion which is usually utilized as a routine affair providing little opportunity to trainee teachers for reflection and further improvement or either not utilized at all. Discussions with mentor or supervisor after practice teaching may be crucial source to enable trainee teachers reflect on their own experiences. Here technology could play important role and audio or video recording of at least few lessons of trainee teachers may serve as mirror of reflection for them. Such recording offers an opportunity to replay certain important events of classroom practice and facilitate trainee teacher to analyze problems and achievements of his/her classroom practice.

Now the question arises how can the teacher educator promote reflection when working with large group of trainee teachers? Reflective thinking may be promoted among teachers in many different ways, such as teacher narratives, maintaining reflective journals, thinking aloud, discussions, collaborative group works, action research, role play, brainstorming, buzz groups, and questioning etc. Amongst these techniques, questioning is perhaps one of the oldest techniques that facilitates learners and teachers to meaningfully reflect on various aspects of issues under discussion which is otherwise ignored, assists learners in identification of issues, helps in value clarification and facilitates in development of deep insight into the problem etc.

15.6.1 Teacher Narratives

The narrative reflection is directed to understanding human action and focuses on particular and special characteristics of each action. Narrative has been considered as a mode of thinking (Bruner, 1996), and particularly valuable for presenting the richness of human experience. Through narratives human being play an active role in their knowledge construction. Teachers’ own narratives (or autobiographies) on their experiences in the classroom are significant in developing reflection. Ershler (2001) accepts that one of the important learning models is to reflect on one’s own experiences. One way of collecting ‘data’ about one’s own experiences is by writing about daily experiences in the classroom. However this reflection is not in a disorganized manner; Ershler has described the methodology of narrative reflection.

To begin with the trainee teacher may be asked to describe different events or instances of his/her teaching practice. These experiences are shared with their peers who are part of learning group. In the next step, these narratives are discussed with the group members at length. Usually the teacher focuses on specific event that is being narrated and then effort is made to establish connections and observe the isolated event within a larger context. By listening to the experiences of others, the trainee teachers can live some experiences, while the narrators get an opportunity to 'step outside' of their own personal experiences and analyze themselves as any other teacher in a particular teaching learning situation. It helps them to see clearly their own strengths and weaknesses more objectively and improve accordingly. Narratives, by nature are social and rational and cannot be separated from the socio-cultural context in which they emerge. According to Syrjala and Estola (1999), narratives help pre-service teachers to connect their past, present and future selves with the hope of nurturing and strengthening their teaching voices (p8).

15.6.2 Reflective Journals

In the context of reflective teaching the concept of reflective journal writing has acquired a prominent place. So what is journal/ reflective journal? It is a means of communication and conversation with oneself and the material, tutors, and peers, and helps to develop critical thinking, provides feedback and a platform to synthesis one's ideas and knowledge. Reflective journal, like the diary records experiences and events over a period of time. It provides a opportunity for trainee teachers to reflect on their own classroom behavior as well as other minor incidents of their School Experience Programme(SEP). Reflective journals are important tools for helping trainee teachers to better understand their pedagogical reasoning in relation to teaching and learning experiences. Journal writing helps them to:

- reflect on and develop insight into the purpose of school experiences programmes.
- highlight critical issues that may not have been considered by them at the time of the class;
- Reflect on one's own strengths and weaknesses.

Reflective journal, therefore, is simply not the summary of the course material, instead it is focused more on the reaction and introspection of trainee teachers on what they have learnt, seen, observed and experienced. It helps trainee teachers to become aware of the gaps in their knowledge and skills, and provides feedback, as well as future directions based of one's experiences. There is no single way of writing a journal and that can be evolved in numerous ways and the entries in the reflective journal may include:

- Brief summary of lecture, practice teaching, lab activity, group discussion, or reading material etc.
- Reflect upon these activities record your own thoughts, ideas, responses, and reactions to these.
- Make note of the concepts, and questions and confusions which are coming in your mind.
- Important events of school experience/internship;
- Explore possible solution to problems being raised in the classroom.
- Record new insights and problem solving strategies in a creative and innovative way.

- Some thoughts that are not fully conceptualized and need further clarification.

Learning can be augmented when trainee teachers are encouraged to reflect on learning event and use their own judgment about the content and process of learning. It reinforces reflection- in- action as the trainee teachers develop better understanding of integration between theory and practice. It also develops self awareness or meta cognition, orientation towards open-mindedness, and willingness to accept responsibility for self-directed learning besides developing a keen sense of observation, critical thinking, and reasoned analysis. Some of the useful phrases of reflective writing include I think...I felt...I was aware...I now think...I was uncomfortable about... and looking back, etc.

Activity 1

Being a trainee-teacher you will go for internship in a secondary/senior secondary school during first year of B.Ed. Programme. You should prepare a reflective journal during the internship and submit it during workshop at your programme Study center.

15.6.3 Discussions

Discussion is the basic teaching tool where the teacher tries to create understanding by providing opportunity to student teachers for exchanging information, opinions, or experiences while working towards a common goal. The facilitator (teacher educator) observes and encourages group discussion without being directly involved. One of the approaches in discussion that is useful in developing reflective thinking among learners is *Brainstorming* which helps the trainee teachers to freely share their views and encourage uninhabited participation of learners.

15.6.4 Cooperative Learning

Cooperative learning is a set of teaching strategies used to help learners achieve specific learning and interpersonal goals in structured groups (Kauchak & Eggen, 1998). Cooperative learning can improve individual's achievement more than the traditional approaches of instruction, if implemented effectively, which also ensures high learner motivation, active involvement and more time on various tasks. However, in order to be effective it has to be well planned and systematically executed by the teacher. We can not ensure learning just by dividing learners in various groups and assigning them some tasks to accomplish. There are very specific methods to ensure the success of group work. In cooperative group every learner has a specific task and every one is involved in learning. The essential components of cooperation are positive interdependence, face-to-face interaction, individual and group accountability, interpersonal and small group skills and group processing (Johnson, Johnson, & Holubec, 1993). Therefore it is essential to judiciously structure these elements in cooperative group work to ensure learning. To be effective cooperative learning must include group goals, individual accountability, and equal opportunity for success.

Cooperative learning technique has following advantages:

- It promotes learning and academic achievement among learners.
- It increases learner retention
- It enhances learner satisfaction with their learning experience
- It helps learners develop skills in oral communication

- It develops learners' social skills
- It promotes learners' self-esteem
- It helps to promote positive relations

15.6.5 Role Play

The use of Role play as an educational or training technique is part of reflective teaching. The idea of role play in its simplest form is that of asking someone to imagine that they are either themselves or another person in a particular situation. They are then asked to behave exactly as they feel that persons would. As a result of doing this they, and rest of the participants learn something about the person or situation. Situations for role play may be simple or elaborate, familiar or strange. They may be described in detail or left to the imagination of the role player. Participants in role play can be made to relive a particular work situation, so that they can get the real feel of the roles they are called upon to play. The experience enhances their knowledge and helps them understand the behaviour of others as well as their own emotions and feelings. Role play is:

- Helpful for trainee-teachers as it gives an opportunity to participants to have an exposure of real life situation
- Develops confidence among participants.
- Helps them work independently.
- Strengthens the communication and human interaction skills

In order to organise role play you will have to select a suitable topic first, then brief the participants the role to be played, and the manner in which it has to be played. A discussion after role play on what happened, why did it happen in a particular way, and what variation would have brought a better or worst result may help in developing better vision among the student teachers.

Check Your Progress

Note: a) Write your answer in the space given below.

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

4) What are various techniques for promoting reflection among teachers? Which activity you find most suitable and why?

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15.7 LET US SUM UP

Teacher Education is undergoing a period of change as a result of the paradigm shift visualized by the National Curriculum Framework (2005) and vision of teacher education reflected in the National Curriculum Framework for Teacher Education (2009). Reflection is part of our life and we reflect on day to day situations and seek solutions after carefully examining various alternatives that can lead to the

solution. Reflective thinking promotes the attitude of open mindedness, wholeheartedness, and intellectual responsibility. Reflection makes tacit knowledge explicit. Promoting reflection among teachers and trainee teachers is considered crucial so as to bring about the changes envisioned in NCF 2005 and National Curriculum Framework for Teacher Education (2009) into reality. This module has discussed in detail the concept and meaning of reflective thinking, process of reflective thinking and techniques of promoting it among trainee teachers. The reflective approach to teaching involves change in our perception of teaching and our role in the process of teaching. Reflective teaching indicates that experience coupled with reflection can be a powerful tool of teacher development.

15.8 UNIT END EXERCISES

- Why is reflective thinking important for teacher preparation programme? How can reflective journal contribute in reflective thinking? Discuss.

15.9 ANSWERS TO CHECK YOUR PROGRESS

- 1) Reflection is a process whereby the learner recalls and analyses his/her own experiences to arrive at some informed decisions.
- 2) Reflection-in-action refers to the process of decision making by teachers whilst actively engaged in teaching. Reflection-on-action is critical analysis and evaluation of the action and reflecting on what might have happened if a different course of action had taken place.
- 3) Steps of tri layered process of reflective thinking are technical, contextual and dialectic.

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UNIT 16 PROFESSIONAL DEVELOPMENT OF TEACHERS

Structure

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16.1 INTRODUCTION

In previous units of this block, we have analyzed various roles of teacher as innovator, action researcher as well as a reflective practitioner. All these roles summarize the role of teacher as a professional. For a professional teacher, continuous improvement and enrichment are key requirements for growing to achieve the ever changing goals of teaching-learning. Why is professional development important for you? What can a teacher do for professional development? What are the means of professional development for teachers, especially at secondary and senior secondary level? Present unit deals with these questions. The unit analyzes the present system of professional development for teachers and suggests new emerging ways to improve and upgrade our professional skills and competencies.

16.2 OBJECTIVES

After going through this unit, you will be able to:

- understand teaching as a profession;
- realize the importance of professional development for teachers;

- critically analyze present provisions for professional development of teachers;
- identify various ways and means for professional development;
- examine the potential of Open and Distance Learning (ODL) system in continuous professional development of teachers; and
- appreciate the role of Information Communication Technologies (ICTs) in continuous professional development of teachers.

16.3 TEACHING AS A PROFESSION

In order to understand teaching as a profession, let us first understand what is meant by a profession.

16.3.1 What is a Profession?

A profession can be defined as an occupation which requires some specialized study and training, and the purpose of which is generally to provide skilled services and guidance in lieu of a definite fee or remuneration. However, some professionals may provide services without asking for payment.

A profession is a calling and it implies acquisition of a fund of knowledge, range of skills and their application for the service of humanity. The service rendered by a professional may be direct as in the case of teachers and doctors or indirect as it is in the case of teacher educators i.e. teachers of teacher trainees. Further, this service may be rendered to a limited segment of the population, for a limited period of time or phase of life. This service is not rendered to the entire learner population undergoing graduation or post-graduation courses, but, it is rendered to those who have aptitude for the profession. It is rendered for a limited period of time in the sense that an individual is expected to go through training before taking up the profession and then, is expected to update his/her knowledge and skills after a regular interval of time.

There is another way of looking at the same situation. Any professional person provides professional service for a limited period of time when his/her clientele are in an institution or within the institutional framework; for example, a teacher who is a professional person renders his/her service for a period of time when students (clientele) are in educational institutions and within the institutional framework; of a school, college or university. A profession can be practiced independently or within an institution or both. This means if teaching is accepted as a profession, a teacher can teach either independently to students or within a school along with a team of teachers.

So far, we have learnt that a profession is based upon specialized study and training, it provides skilled service and guidance for a definite purpose to a limited section of the population for a limited period of time and can be practiced independently or within an institution.

16.3.2 Characteristics of a Profession

A profession indicates certain specific characteristics. They are:

- i) A profession demands possession of a body of specialized knowledge and extended practical training.
- ii) A profession renders an essential social service.

- iii) A profession demands continuous *in-service* training of its members.
- iv) A profession has a clearly defined membership of a particular group, with a view to safe-guarding the interests of the profession.
- v) A profession involves a code of ethics.
- vi) A profession assures its members a professional career.

As stated above, a typical profession exhibits a complex of characteristics. Let us try to understand them with the following clarifications.

The creation of a professional organization, developing a code of ethics, offering a life career to its members, or even granting of action are all shared by trade associations or guides. Then what is the difference? There are two criterias that are basic to a profession. A profession “professes” to do two things: one is to serve and the other is to serve with conscious understanding and efficiency. While all other vocations serve, the profession not only serves but also makes service its prime motive. Even when there is a conflict between the interests of the client and that of the society, selfish interest retreats in favour of the professional interest. The profession and other vocations differ in the sense that a profession is well grounded in its sound knowledge and expertise. It has good qualities like altruism and longing for authentic knowledge on the part of the members which differentiates a profession from a trade.

16.3.3 Characteristics of Teaching Profession

We shall try to elicit the characteristics of a teaching profession to understand why teaching is called a profession. The following are the characteristics of a teaching profession:

i) It essentially involves an intellectual operation

Teaching, it has been said, is not mere talking. This is so because teaching requires conscious organization of learning activities, deliberate creation of a conducive and supportive learning environment. While providing learning experiences a teacher has to constantly analyze and evaluate classroom climate and evolve a suitable plan of action to achieve the pre-specified desirable change in the behaviour of a group of learners who are constantly varying with respect to their interest and pace of learning. All such operations, which are to be carried out by a teacher, are intellectual operations.

ii) It draws material from science

Teaching is not only an art but also a science. On the basis of this assumption, a teacher can be trained. The moment it is accepted as a science, it has definite steps which are followed in training a teacher.

iii) It transforms raw material into a practical and definite end

In teaching profession, the learners constitute the raw material. These learners are prepared to teach in a continuously evolving society which has varied expectations. Learners are trained into a practical and definite end by means of providing practical training in teaching and other pedagogical activities.

iv) It possesses an educationally communicable technique

As teaching is a science, teaching techniques are systematic and have definite steps to be followed. It is easily communicable.

v) It tends towards self-organization

It is self-organized in the sense that the personnels who are engaged in teaching profession are sensitive towards growth and development. They evolve a definite mechanism to sustain and promote the standards of teaching profession.

vi) It essentially performs a social service

Teaching is a social service. It has generally been accepted that education is potent tool to bring about changes in any nation. The obvious evidences of such a statement are the developed nations like U.S.A., Russia etc. These and other nations have been able to constantly develop because of high rates of literacy. It is through teaching that a society develops.

vii) It has a lengthy period of study and training

Teaching cannot be learnt in a year or so. A person willing to take up this profession has to study for a number of years and acquire a mastery over the contents of the subject matter. After this he/she has to undergo training in teaching.

viii) It has a high degree of autonomy

In our earlier discussion, we mentioned that definite steps have to be followed in teaching as it is a science. However, there is a high degree of autonomy in teaching profession right from curriculum development, planning activities of a year, identifying instructional objectives, deciding upon the method of teaching, deciding upon the use of media, identifying evaluation criteria, using appropriate evaluation techniques to deciding upon the admission and promotion rules, and autonomy in planning and execution of co-curricular activities. Ultimately, all these activities are planned keeping in mind the goals of education which are to be achieved in a limited period of time.

ix) It is based upon a systematic body of knowledge

Teaching profession is based upon a systematic body of knowledge which has been derived from social, psychological, historical, political and economic spheres of life. It is also influenced by the religious and spiritual beliefs of a society.

x) It has a common code of ethics

All over the globe, teaching profession has a common code of ethics.

xi) It generates in-service growth

In teaching profession, the teacher is learning at all the stages of teaching. This leads to growth of a teacher while in-service.

Apart from these, education is a dynamic discipline. New knowledge is continuously being generated with regard to teaching methods and other foundation courses of teaching. A professionally trained in-service teacher, needs to get revamped with new knowledge and update the already acquired knowledge and skills of teaching. This in-service training will ultimately lead to performance of the expected tasks by a teacher in an effective way.

From the preceding discussion, it is clear that the teaching profession has certain characteristics for it to be termed a profession. It is a complex profession in the

sense that it has to take into consideration needs and expectations of an ever changing society. It is affected by both the political ideology and economy of the nation. It learns from the history of not only a nation but other nations too. Students, who are the clientele, vary with respect to such variables as interests, ability, socio-economic background etc. With all such and many other complexities, teaching is a noble profession with the prime motive of rendering service to society.

Check Your Progress

Notes: a) Write your answer in the space given below.

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

- 1) List the distinct characteristics of a profession that distinguish it from a vocation or a trade.

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- 2) "Teaching is a complex activity." Discuss.

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16.4 NEED AND IMPORTANCE OF PROFESSIONAL DEVELOPMENT

“Professional development of teachers is not an event, rather it is a continuous process”, this is a common statement written in most of the documents dealing with professional development of teachers. There is no doubt that teaching is a profession and has certain professional obligations. Sometimes these obligations are written in terms of code of conduct or many times these are mere conventions. Teaching profession has changed a lot. In India, NCF-2005 has brought radical changes in teaching-learning process. This has influenced role of teachers also. Many such policy changes have influenced teachers’ role. Can you identify few such changes in first 15 years of 21st century, which have influenced the role of teachers in an elementary or secondary school?

Activity 1

Analyze the major policy changes/documents/schemes which have influenced teaching-learning system during 2000-2015. How these have influenced the role of a teacher in an elementary or secondary school?

Above activity will facilitate you to understand the need and importance of professional development for teachers. You must have noticed that every policy/documents or scheme has demanded something new in teaching learning process. In many cases, teachers teaching since long in the system were not prepared to cope up with these changes due to various reasons.

To understand these reasons in more realistic way, let us read the following case and try to analyze, what will be the solution.

In a Government secondary school, there were fourteen teachers. Out of which, six were appointed in late 80s whereas four were appointed in 1995. Rests were appointed in 2005. State government has announced for adopting the NCERT textbooks in all its school after NCF-2005. Continuous Comprehensive Evaluation (CCE) Scheme was also adopted by state in 2009. After implementation of RTE-2009, Schools were bound to follow the recommendations of RTE-Act also. School Principal issued circular time to time in this regard and asked teachers to prepare themselves accordingly. Teachers discussed within themselves and tried their level best to adopt all changes. In 2014, a Survey conducted by an independent researcher, it was found that most of the teachers are not using diverse techniques of assessment. Many of them were not aware of assessment indicators and how these indicators should be used in assessment. In the same survey, many teachers have reported that they did not find NCERT textbooks much useful as they are merely activity books with very less content. So they are forced to read other reference books and provide notes to students. They also reported that due to implementation of no detention policy, learners' attendance is decreasing and they are not responding seriously in unit tests and summated examinations. It was also reported that in that school, around 1200 learners are enrolled from class six to tenth. Teachers were of the view that due to increased workload and ever-changing policy, their performance is decreasing and are not satisfied with what they are doing.

If you analyze this case and identify the reasons, you will find that few of them are:

- implementation of policies
- lack of awareness among teachers,
- difference between assumptions and ground realities

But you should also think that before implementing these changes, if teachers were inducted and oriented properly about all these changes and their importance in teaching-learning, they may not have raised such issues. This is a demand to reflect on requirement of continuous training or orientation opportunity for teachers, which can facilitate teachers in implementing various policies or changes in teaching learning system. Answer to this problem is Continuous Professional Development (CPD) of teachers.

Professional development of teachers does not include giving them only an opportunity to learn a new concept or adopt a new teaching learning methodology, rather it also focus on developing their competencies to deal with changing scenario of teaching learning process and adopt the best for the benefit of learners. Professional development brings changes in teacher's approach, attitude, understanding and practice to enhance level of learning.

A definition of Professional Development for teachers is given below:

“The process by which ... teachers review, renew and extend their commitment as change agents ... and by which they acquire and develop critically the knowledge, skills, planning and practice... through each phase of their teaching lives” (Day, 1999: 4)

*Teacher’s Professional Development “is the body of systematic activities to prepare teachers for their job, including **initial training, induction courses, in-service training and continuous professional development** within school settings.” (OECD, 2010)*

Need of professional development for teachers can be summarized under following points:

- Expanding knowledge domain of subjects
- Due to changing pedagogy
- Increasing involvement of media
- Focus of use of ICT
- Enactment of policies and schemes
- Meeting demands of society and nation

You can increase as well as modify this list based on your experiences. In India, we have witnessed the efforts of professional development due to two main reasons: it is initiated either as a plan or policy implementation or teachers are doing this due to its linkage with their promotion and other monetary benefits.

Check Your Progress

Notes: a) Write your answer in the space given below.

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

3) Define professional development in your words.

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4) What are major reasons to initiate professional development activities in teacher education?

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Many times, in-service teacher training programmes are considered as programmes for professional development but it is not true in Indian context. In next section, we will examine various models of in-service teacher education programmes and their role in professional development of teachers.

16.5 IN-SERVICE TEACHER TRAINING AS PROFESSIONAL DEVELOPMENT

In India, teacher training programmes are generally categorized as pre-service and in-service teacher training programme. In broader sense, in-service teacher training programmes are considered as programmes for professional development of teachers. Many policy documents highlighted this dimension of in-service teacher education.

Role of in-service teacher training was highlighted by **Secondary Education Commission (1952-53)** under the chairmanship of Dr. A. Lakshman Swami Mudaliar which advocated:

“However excellent the programme of teacher-training may be, it does not by itself produce an excellent teacher. It can only engender the knowledge skills and attitudes which will enable the teacher to begin his task with a reasonable degree of confidence and with the minimum amount of experience. Increased efficiency will come through experience critically analyzed and through individual and group efforts at improvement. The teacher training institution should accept its responsibility for assisting in this in-service stage of teacher-training. Among the activities which the training college should provide or in which it should collaborate are: (1) refresher courses, (2) short intensive courses in special subjects, (3) practical training in workshop, (4) seminars and professional conferences. It should also allow its staff where possible to serve as consultants to a school or group of schools conducting some programme of improvement. (p. 139)”

The Education Commission (1964-66) also recommended that “school complexes” with a nodal school shouldering the responsibility for the continuous professional development of all teachers working in the schools, should be established. State Institutes of Education (SIEs) have come up in various states as outcome of these recommendations.

Report of the **National Commission of Teachers-I (1983-85)** titled “**Teacher and Society**”, also recommended that every teacher must attend in-service training of 3 weeks’ duration once in a block of five years and it should be linked with career promotion.

The National Policy of Education (NPE 1986/92) mentioned categorically that “*teacher education is a continuous process, and its pre-service and in-service components are inseparable.*”

In 1987, a crash programme on a massive scale orientation of five lakh teachers, every year was launched in the name of “Programme of Mass Orientation of School Teachers” (PMOST). Subsequently it was replaced by another crash course in the name of “Special Orientation Programme for Primary Teachers” (SOPT). Both these programme were short term measures and were able to create only awareness among teachers.

Clarifying the role of in-service teacher education as professional development activity, **The Acharya Ramamurthi Review Committee (1990)** explicitly advocated that “in-service and refresher courses should be related to the specific needs of the teachers. In-service education should take due care of the future needs of teacher growth; evaluation and follow up should be part of the scheme.”

Many review reports and documents on teacher education have critically examined the role of in-service teacher education in India. Highlighting the critical condition of in-service teacher education in India, **National Knowledge Commission (NKC) (2006-09)** commented that:

“In-service training shows problems of inadequate quantity, uneven quality, outdated syllabi, and poor management. A very large proportion of school teachers in the country have received no in-service training at all. In any case, many DIETs are currently understaffed, demoralized, and incapable of giving good quality training to teachers. In part, this is because teacher training positions are often occupied by those who have not themselves been school teachers.”(p.53)

In terms of remedy, it suggested that *“The teacher training course should not be seen in terms of a finite period of time, but as a process by which the quality of teaching and learning in the classroom can be regularly improved, in a context that fosters an attitude of lifelong learning. Therefore, there should be a mechanism for feedback and subsequent interaction between teachers and the training institutes, especially for pedagogical techniques that are new or require more continuous innovation from the teacher”*. NKC further *“suggests the provision of short term in-service courses (in both contact and distance mode) that teachers can choose from. These could include courses developed outside the DIET/SCERT structure, subject to a thorough review of quality. In addition to being made more flexible, in-service teaching courses need to be incentivized, possibly by making attendance and completion of such courses prerequisites to professional advancement.”*(p. 54).

NKC also suggested that if a web-based teachers’ portal could be developed, it will be a nice platform to interact, share experiences and ideas for teachers. It should be part of in-service teacher training programmes.

The Report by **NCERT (August, 2009)** on **“Comprehensive Evaluation of the Centrally Sponsored Scheme on Teacher Education”** has set out the immediate tasks which form agenda as under:

- 1) To enhance the institutional capacity available at present for ensuring the adequate supply of trained teachers for all levels of school education;
- 2) To utilize all possible kinds of institutions, including university departments of education and teacher training institutions in the private sector, for in-service training of the existing cadre at all levels, in addition to State institutions, including CTEs;
- 3) To recognize teacher education (for all levels of school education, from pre-school to senior secondary) as a sector of higher education and to facilitate co-operation and collaboration between institutes of teacher training and colleges of general education or universities with a view to enabling interaction between different departments of a local college (or university) (e.g. sciences, languages, social sciences) and the institute of teacher training.
- 4) To envision a comprehensive model of teacher education, utilizing the Chattopadhyaya Commission Report and updating its perspective, and ensuring that progress towards a new, comprehensive model is paralleled by necessary

modifications in policies of teacher recruitment, deployment and service conditions, including emoluments;

- 5) To prepare a curriculum policy and framework for teacher education which is consistent with the vision of the NCF, 2005, and to translate it into imaginative syllabi and textbooks for pre-service courses and sets of in-service training material suited to diverse conditions and needs; and
- 6) To bring about synergy between institutional structures operating at different levels, e.g. NCERT and NCTE at national level, SCERTs and boards of education at State level, DIETs and under graduate colleges at the district level and so on.

The Report states that “*Block and Cluster Resource Centers were established during DPEP in some selected districts after which these centres were expanded across the country as part of the SSA programme, for improving the quality of elementary education. Thus, the staff duties and responsibilities are presently based on the SSA Framework of Implementation and its objectives. But due to successful implementation of SSA programme the enrolment at secondary stage has increased. Besides this, universalisation of secondary education is also under active consideration. Keeping this in view, there is an urgent need to change the role and functions of BRCs and convert these into Block Level Institutions of Teacher Education (BITEs).*”

National Curriculum Framework for Teacher Education (NCFTE)-2009, proposed many initiatives to strengthen in-service teacher education as a mean of professional development. Chapter 4 of NCFTE deliberates in detail about continuous professional development and support for in-service teacher education.

Activity 2

Go through the principles to design in-service teacher education programme, as suggested by National Curriculum Framework for Teacher Education, 2009, pages 66-67. Analyze any one in-service teacher education programme in the light of these principles and prepare the report.

NCFTE is available on http://ncte-india.org/ncte_new/pdf/NCFTE_2010.pdf

It also suggested that various agencies can play a vital role in providing in-service professional development for teacher. Teachers could also be provided short-term fellowships and funding support (based on proposals) to either come to the DIET, CTE, IASE and University Department or carry out specific activities for the school children and teachers in their own district.

- University and college faculties of sciences, humanities and social sciences could include extension services for school teachers, opening up their labs and libraries to teachers and sharing with them advances and new ideas.
- Colleges of pre-service teacher education could include extension activities which would also enable their learners and faculty to keep in touch with active teachers. Teacher Learning Centres (TLCs) in teacher education institutes can act as the hub of both pre-service education as well as continued professional development for teachers in service. They could also provide special services to their alumni, continuing to mentor and keep track of their developments.
- Schools, under the leadership of interested principals and able to support additional adjunct faculty, could themselves develop into resource centres for neighbouring

schools. These could also include schools run by NGOs and other private agencies interested in contributing to the development of all schools in the neighbourhood, both government and private, and affiliated to any board.

- IASEs, CTEs, DIETs, BRCs and CRCs could also research and develop training aimed at overall school improvement or to target the needs of special schools or groups of children in the district. They could also focus on providing school based support to teachers, by working closely with the school heads.

The Revised Implementation Framework of SSA (2011) has recommended strengthening of the BRCs, Urban Resource Centres (URCs) and CRCs for providing academic support to teachers. BRCs/URCs and CRCs are the most critical units for providing training and on-site support to schools and teachers. Given the significance of these structures SSA, will strengthen faculty and infrastructure support to BRC/URC and CRCs. States must focus on improved selection criteria for the coordinators and faculty of BRC/URC and CRCs. The selection criteria should take into consideration experience, qualifications and aptitude for training and research. States must provide facilities for continuous skill enhancement of BRC/URC and CRC coordinators and faculty. Functional linkages between BRCs/URCs and CRCs and DIETs and district level resource groups should be strengthened. The norms governing the support under SSA for BRC/URC and CRC have been specified in the Framework.

Department of School Education and Literacy, Ministry of Human Resource Development, Government of India has come up with guidelines for implementation for Restructuring and Reorganization of the Centrally Sponsored Scheme on Teacher Education, in June, 2012. In the guidelines it has been suggested that,

“The in-service teacher education programmes would work for the development of Master Resource Persons (especially for training at the block level) as well as direct work with teachers with a view to continuously enhance understanding of and better quality of planning and implementation of all parts of the curriculum. DIETs are also expected to organize specially designed courses for Head Masters, Officers of the Education Department upto Block level, members of VECs, SMCs, Community Leaders, Heads of PRIs, BRC/CRC coordinators.” (p. 32)

In these guidelines, a shift was advocated as follows:

Table 16.1: Shifts Required in Teacher Education

To Enact a Shift in Perspectives and Practices	
From	To
Teacher directed, fixed designs	Learner-centric, flexible processes
Learner receptivity	Learner agency, participation in learning
Knowledge as “given”, fixed	Knowledge as constructed, evolving
Learning as an individual act	Learning as a collaborative, social process
Disciplinary focus	Multidisciplinary, educational focus
Assessment judgmental, mainly through competitive tests for ranking, through narrow measures of achievement, leading to trauma and anxiety	Assessment for Learning, self assessment to enhance motivation, through continuous non-threatening processes, to record progress over time

Source: Guidelines for Implementation for Restructuring and Reorganization of the Centrally Sponsored Scheme on Teacher Education, pp. 32-33

Report of the High-Powered Commission on Teacher Education constituted by Hon'ble Supreme Court of India (2012), titled “**Vision of Teacher Education in India: Quality and Regulatory Perspective**”, commonly known as Justice Verma Commission, suggested to set up a model INSET policy, which should focus on following issues:

- The in-service teacher education as a strategy for continuing professional development must address all categories of educational personnel in the school system i.e., teachers at all levels, school heads, supervisors, library staff, etc. It also advocates that teachers working in private unaided schools are out of domain in various centrally sponsored schemes for professional development. New INSET policy must make provisions for inclusion of teachers of private schools also for in-service education.
- It should be obligatory for every teacher to participate in the in-service education programmes, at a time of his/her choice and convenience.
- The parameters of successful completion of a training module in a training cycle need to be defined and should be linked with some incentives in the form of advancement in career or in terms of financial gains.
- Separate training modules have to be developed for elementary stage (primary and upper primary), secondary and senior secondary teachers, heads of schools, supervisors and library staff, etc.
- There is need to develop a national as well as state action plans to implement INSET policy in desired manner.
- Institutions imparting in-service teacher education need to be strengthened in several ways- learning resources, academic support from universities and other institutions, qualified resource persons, etc.
- There is shortage of institutions for imparting training to teachers at secondary and senior secondary levels. Hence, existing CTEs should be strengthened and new training centers can be established.
- A training center cum resource center should be established in ODL as a resource center for continuous professional development of teachers.
- The institutions of educational technology along with ODL institutions shall have to undertake programmes for development and production of audio-visual programmes.
- The success of in-service education depends on the strength of each of its four pillars: content of training, overall ethos of the training venue, resourcefulness and ingenuity of trainers and receptivity and involvement of the trainees.

As a teacher, if you go through these details, you can conclude that our policies are quite concerned about in-service teacher education as a tool for professional development. Many efforts have been made but still there is a large gap between demand and supply. Most of the governmental efforts are limited to teachers of government or government aided institutions and a large number of teachers teaching in private un-aided schools are deprived of it. The discussion also highlighted the efforts in terms of establishment of DIETs, CTEs and IASEs and their present situation. These institutions designed institutionalized methods for professional development of teachers.

Check Your Progress

Notes: a) Write your answer in the space given below.

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

5) What are the shifts required in in-service education programmes?

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6) What were the major drawbacks of PMOST and SOPT programmes?

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16.6 CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

CPD is the process by which teachers acquire, develop and strengthen their skills and know-how to become more effective. It is an ongoing process and is in response to the professional environment, which is ever changing.

Activity 3

“CPD must be implemented in every field, specially teaching”. Do you agree with this statement? Discuss the need for professional development in teaching.

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You may analyze your response to the above question and check whether these needs for professional development covers the following points:

- Updating knowledge
- Improving classroom practices
- Dealing with emerging challenges
- Professional networking

.....Think of more points that you may add to this list.

We shall discuss these points briefly.

16.6.1 Updating Knowledge

Continuous professional development (CPD) helps teachers as new knowledge is being gained and used for improvement of knowledge. Not only in our subject areas, but also in teaching methodologies and technologies, new knowledge is emerging continuously. For example, in the recent past, we have experienced a shift in the teaching learning process from behaviourist approach to constructivist approach. There are many more such new trends and developments. New discoveries and innovations are leading to increase in the corpus of knowledge base in various subjects. Knowledge domain of subjects ranging from languages to science, arts to social sciences is increasing day by day and a teacher has to be aware of these developments. As teachers we cannot remain oblivious of these developments in our subject area. A well informed feels confident and is respected by his/ her colleagues and the students. A teacher can respond to the queries raised by learners in a better way if s/he keeps him/herself abreast of the developments in his/her field.

16.6.2 Improving Classroom Practices

A good teacher is not only a good communicator but is also a facilitator of learning. S/he not only teaches but also learns from classroom experiences. S/he also tries to apply the emerging innovations, techniques and technologies to the teaching-learning process and thus improves his/her teaching learning process. Read the following example.

Mr. Mohit has been teaching at elementary level classes since the last 15 years. He had qualified as a trained teacher long back but is open to new ideas. With the implementation of the National Curriculum Framework-2005 and the changes that came about in the textbooks, he felt a strong urge to make changes in pedagogy. He accessed the internet for information on concepts like interdisciplinary approach, constructivism, active learning and so on. At the secondary level, he then adopted an integrated approach for teaching the content. He linked content areas from various disciplines and also with the daily life of children through suitable examples. He also facilitated the students in carrying out activities but made it a point to let them discuss, narrate and raise questions so that he could ensure that the activities had led to learning.

How did Mohit make professional development possible without attending a training programme? What was the impact of Mohit's attempt for professional development?

16.6.3 Dealing with Emerging Challenges

Today teachers are urged to adopt new methods of teaching and learning. They are also urged to integrate technology into the teaching and learning process. All these trends pose challenges to teachers. Managing the classroom without resorting to corporal punishment as a means for maintaining discipline, carrying out formative evaluation, teaching in inclusive classrooms and the like are also challenging. Challenges like dealing with diversity of learners in the classroom, ensuring gender, caste, class, ethnic, religious equity, making classroom inclusive, adopting positive discipline instead of corporal punishment, inculcation of humane values and ensuring social justice, are to be faced by a teacher in today's classroom. Many teachers find it difficult to adopt these new practices. For example, some teachers who are into the traditional educational system for a long time do not feel comfortable with new technology and are reluctant to shift to technology mediated teaching learning process. On the other hand, increasing use of technology by children who are e-savvy make teachers feel that they are not properly equipped to teach them.

16.6.4 Professional Networking

Unlike in the past, today it is the age of collaboration rather than competition and individual working. Team work, sharing of resources and networking enhance the capacity of individuals rather than grappling alone with problems. CPD also implies that teachers gain the ability and the attitude for cooperation and collaboration. Hence the ability for technology mediated networking for sharing information, ideas, and experiences, collaboration on projects, and so on is required. Professional networking is needed not only for educational benefits but also for discussing and reflecting collectively on professional issues. In such networked systems, more experienced and knowledgeable colleagues can provide effective guidance and facilitation. Opportunities of CPD provide us with the ability for creating technology mediated network and using the network for benefitting professionally. Now-a-days self-initiated efforts for professional development as life-long learning are also required.

Activity 4

Apart from the need for CPD mentioned above, there could be many more. You may list them.

You will now agree that CPD is basically meant for equipping teachers with knowledge and skills that are needed to keep pace with the changing world. After this introductory discussion, we will now focus on the role of ICT specially computer and internet for professional development. Our focus will be more on practice in place of fundamentals and technological details.

16.7 CPD THROUGH ICT

16.7.1 ICT for Access to Resources

Information Communication Technologies (ICTs) have become an essential part of whole teaching learning process. ICT enhances learning opportunities and as you know provides the user the flexibility regarding time and pace of learning. In the following sections we shall discuss the use of ICT for providing opportunities for CPD. However, for CPD, it is required that you just do not read about the technologies mentioned but also use at least some of them for accessing and sharing information.

Portal for Educational Purposes: SAKSHAT

The screenshot shows the SAKSHAT portal interface. At the top, there is a navigation bar with links: LOGIN, REGISTER, REQUEST INFORMATION, VIRTUAL TOUR, POST A PUBLIC COMMENT, FAQ, RSS FEED, LEAD FORUM. Below this is the SAKSHAT logo and the tagline 'The National Mission on Education through ICT (NME-ICT)'. The main content area is divided into several sections:

- ANNOUNCEMENTS**: NMEICT
- USEFUL LINKS**: Select Language
- STUDENT'S CORNER**: Support self learning through virtual classes and testing services; nurture learners through guidance and counselling; Manage scholarships under the National Merit Scholarship Scheme.
- TEACHER'S CORNER**: Provides links to teacher's empowerment programmes; uploading project proposals for NME-ICT and announcement of class schedules.
- KNOWLEDGE PLUS**: Explore the world of web-based knowledge resources in the form of e-books, e-journals and open educational resources.
- INTERACT**: Communicate and share knowledge with teacher/mentor or peer group in real time or asynchronously.
- EDUCATION BROADCAST**: SRINAGAR GOVERNMENT SCHOLARSHIPS - 2014-15. Website of Sanctioned Projects.

The footer includes 'Launch of Botany eContent', 'Inviting Proposals NME/ICT Connectivity Support Services', and a list of links: Privacy policy, Disclaimer, Tell a Friend, Sitemap, Feedback, Contact Us, About Us. Copyright 2013. Information Provided and Updated by Ministry of Human Resource Development.

Ministry of Human Resource and Development, Government of India has launched a One Stop Education Portal on October 30, 2006 to facilitate lifelong learning for students, teachers and others in pursuit of knowledge, free of cost.

The vision of the project ‘SAKSHAT’ is to cater to the learning needs of more than 50 crore people through a proposed scheme of ‘National Mission on Education through Information and Communication Technology (ICT)’. The scheme is to provide connectivity to all institutions of higher learning to the world of knowledge in the cyber space, to leverage the potential of ICT, in providing high quality knowledge modules with right e-contents, to address to the personalized needs of learners, in order to take care of their aspirations. These modules are to be delivered through ‘SAKSHAT’.

Major benefits of SAKSHAT are that it brings all ICT initiatives from various government organizations at one place and provide information on new developments/ initiatives on integration of ICT in education. In order to understand its benefits, you are suggested to undertake following the activity.

Activity 5

Visit the teachers’ corner as SAKSHAT portal and analyze the benefits of various subsections under it for a teacher. Prepare a critical report on role of SAKSHAT in promoting ICT-mediated/supported education in India.

MOOCs as Life-long Learning Opportunities
Massive Online Open Courses (MOOCs)

DIGITAL TOOLS » TEACHING STRATEGIES »

MOOCs for Teachers: Coursera Offers Online Teacher Training Program

Katrina Schwartz | April 30, 2013 | 4 Comments

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MOOCs are one of the recent innovations in ICT based teaching learning. The philosophy underlying MOOCs visualizes teaching and learning as a lifelong process. MOOCs are ICT based initiatives in distance training programme, which have wide scope in teacher education, which provide ample opportunities for many people

including teachers to get education. MOOCs based teacher training is in initial stage in developing countries like India and most of the initiatives are being taken by individuals and not by organization. Most of the MOOCs teacher training programme are of capsular in nature and focused on basic ICT skills or Content enrichment issues but MOOCs have potential to develop as full-fledged teacher training medium in near future.

In 2016, MHRD, Government of India has also launched its MOOCs platform called SWAYAM. SWAYAM stands for Study Webs of Active-learning for Young Aspiring Minds.

MOOCs can best be utilized for continuous professional development of teachers. Organizations can initiate such projects or teachers can participate in any such course individually.

Activity 6

Visit following MOOCs based website, enroll yourself in a short duration course and based on your experiences prepare a critical report on benefits of MOOCs on continuous professional development of teachers.

Using OER Repositories and NROER

You must have heard about Open Education Resources (OERs) and its benefits for learners. OERs are basically the teaching and learning materials made available freely for everyone to use. Anyone, whether he/she is a teacher, a student, an educator, an educational administrator or a freelancer can get benefited by the content provided as OERs. Variety of content including texts, article, lesson plans, techniques and tools of learning and assessments, teacher made designs, laboratory manuals, text and reference books, pictorial quizzes, and many more resources in audio/video forms, picture, graphs, etc., are available as OERs.



The ideology of OER is in tune with collaborative and cooperative nature of teaching and learning. OERs are providing an opportunity to assess quality content to learners and teachers without much investment of time and money. There are many OERs platforms in various institutions but two indigenous models of OERs are –

One is of National Institute of Open Schooling (NIOS) and other is the National Repository of Open Educational Resources (NROER) being managed by NCERT, New Delhi. These OERs can be used by teachers for various purposes.

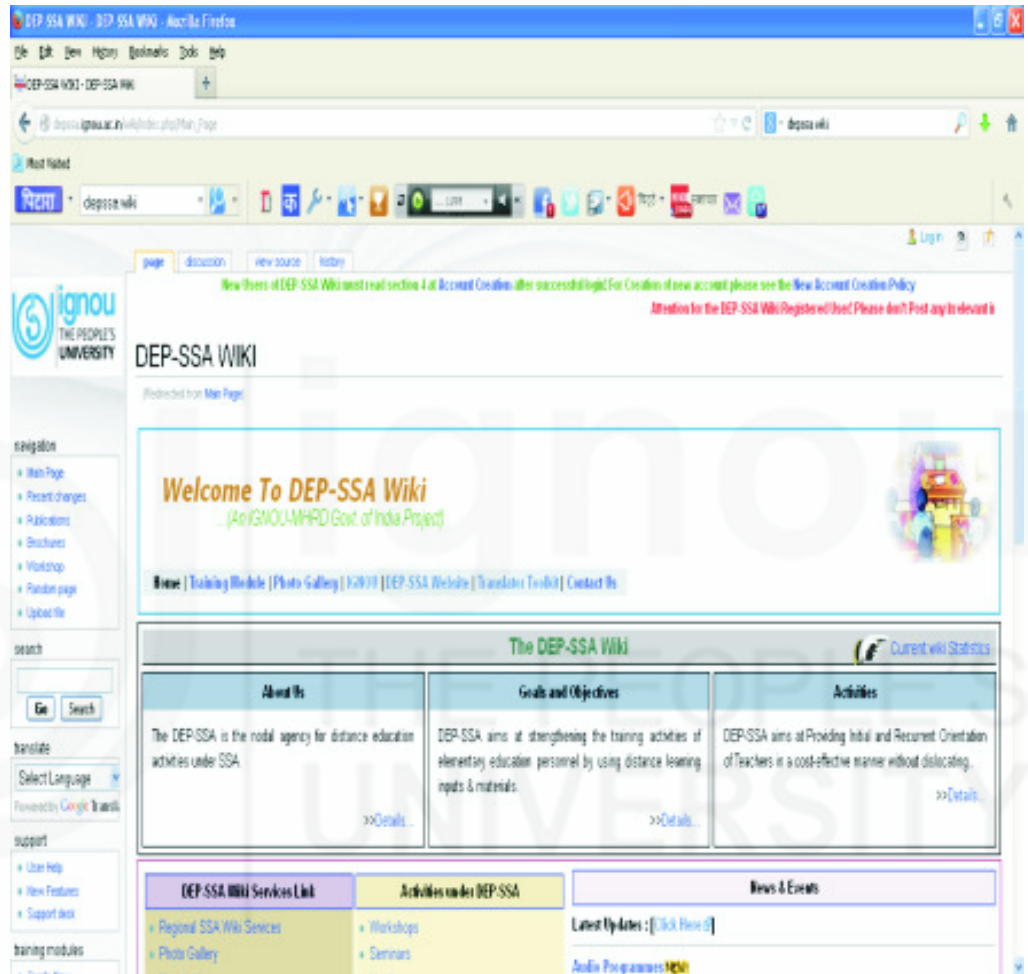
Activity 7

Visit NROER and select some content/audio-video, which is related to your subject. Use it in your classroom transaction. Make a report highlighting its benefits for teachers and give suggestions to improve it.

16.7.2 ICTs for Interaction and Collaboration

Wiki

Wiki is very interesting and useful web application where people can add, modify, or delete content in collaboration with others. Teachers can use a number of wiki pages available for knowledge updating in their specific field.



Wikipedia is a commonly used source of information. But do you know that you can also use it for creating content and that too collaboratively and also edit it and let other group members edit it? You can thus create your own wiki page and better still do it collaboratively and have a discussion group on wiki to share and discuss various academic and professional issues.

The best way to experience WiKi is to create your own page and practice on it. WiKi provides opportunity to not only share content but you can post audio, video, pictures, graphs and you can give hyperlinks also to other WiKi pages as well as other websites.

You can start an article at http://en.wikipedia.org/wiki/Wikipedia:Starting_an_article or you can attend some WiKi Tutorials. You can practice on some freely available pages like Create your wiki now at http://www.wiki-site.com/index.php/Create_your_wiki_now or at <http://www.wikia.com/Special:CreateNewWiki>. There

are some good tutorials for editing, formatting, links, citation, etc. available at <http://en.wikipedia.org/wiki/Wikipedia:Tutorial> . You can read and practice after that.

Blogs and Discussion Forums

Blogs provide a great way for people including teachers to share experiences, ideas and content like lesson plans, classroom management tactics and other helpful tips. There are blogs on various issues related to teaching and teacher. Some of them focus on specific issues or subjects while some are comprehensive in nature.

Now days you can find many Blogs on ideas for classroom management, sharing of learning material, for engaging learners, etc. Subject focused blogs helps you to keep you updated on particular topics, allowing teachers who need a refresher to quickly glean important facts about historic events and figures.

There are many popular blogs on various aspects of education. If you visit these blogs, you will find that teachers from all around the globe are sharing their experience, content, methods and teaching learning experiments through these blogs with teaching community. Make a habit to visit and follow such blogs, which are beneficial for you not only in knowledge updating but also in sharing and experiencing new ideas and innovations in teaching and learning.

Discussion Groups and Forums

Another use of ICT is for creating discussion groups and discussion forums. Some discussion groups focus on a theme like problems of teachers, or that of teachers of specific subject groups. Online discussion groups and forums are dedicated online platforms where people post, share and discuss some issue in closed group.

People add their comments by posting a block of text to the group. Others can then comment and respond. Discussion groups differ from chatrooms and instant messaging because they usually deal with one topic and personal exchanges are typically discouraged. Discussion groups are often archived. These archives may be organized by thread, which means all the messages that reply to a starting message can be read in some order.

These discussion groups are providing a common platform to like-minded teachers to share, debate, discuss and enrich their knowledge and sharpen their skills. In order to experience its benefits, you are advised to develop your own discussion group or join any discussion group on any topic of your choice.

Activity 8

Start a discussion forum on a portal providing facility of discussion groups. Make a group of minimum 10 members and discuss about your teaching experiences daily. Prepare a report of your experiences after 15 days.

16.7.3 Social Networking

Social media is one of the most influential innovations of the present times. Development of social networking sites (SNS) has boosted the tremendous growth of internet users. On-line social networking communities such as Facebook, Twitter, LinkedIn and others have become a part of daily life of many teachers and learners as they use these to communicate, share information and to build and maintain relationships. One can share, communicate, read, comment, update, criticize or suggest anything on these sites.

If you visit such social networking sites, you will find many communities of teachers from one organization or one interest area like science teachers, teachers as researchers, action researchers, etc. are collaborating or just sharing content.

Such platforms have been playing very effective role in teachers' professional development. Not only in enhancing content knowledge and pedagogical expertise, but also in sharing professional challenges, issues of classroom management, good experiments and practices in organization of activities are key features of these sites. Teachers can share opportunities for qualification enhancement, professional development events like seminars, workshops, symposia or short term training programmes with their colleagues so that most of the people in teacher community could be benefited.

Professional issues related to teachers' welfare, teachers' problems and issues of criticisms have been discussed on these forums at large. SNS provides a democratic virtual social environment to express views with freedom of expression and promotes healthy debates among professionals.

Knowledge Sharing Communities

Mostly teachers use text or PowerPoint presentations or Audio/video content to communicate with learners. Many times teachers develop their own content in these commonly used forms. There are some dedicated online communities where a teacher can share and get useful material. For examples sharing PowerPoint Slides; Academia to share articles/research papers/experimental outcomes/action research documents; TeacherTube (to share audio/video developed by teachers).

At slide-share, you can share PowerPoint presentation developed by you and post any slide of your interest. Your post can be linked with your social networking site (like Facebook) account and you can inform all members in your list about your presentation. The members of the community can access that content.

On a community named, Academia.edu, you can share your research, publication, experience, article, action research report with academic community in text form. It gives you an opportunity to upgrade yourself about new developments in your field of study as well as to follow the researches and work of other scholars of your field. Your account at this site can also be linked with your Google e-mail account or with Facebook for regular updates.

To share and use audio/video related to education and specific content, mostly teachers use Teacher-Tube, a YouTube based application dedicated to education. Teacher-Tube is one of the largest audio/video repositories on education and many teachers/student share their audio/video through this site with rest of the academic world.

We have discussed about these knowledge sharing communities but to use and interact with these communities, you have to create your account on these sites and share the content developed by you. Many of you may be well aware of MSWord or MS PowerPoint but to develop, edit and upload audio-video in proper format needs more exercise.

16.7.4 E-conferences and Webinars

As a teacher we all are aware of role of seminars and conferences in our professional development. Such events not only provide us opportunity to interact with other

people of our field but also provide us an opportunity to share our experiences and get benefited from experiments and experiences of our colleagues from various institutions. With the advancement of ICTs, traditional conferences and seminars have transformed accordingly. Now-a-days E-conferences and Webinars have been replacing traditional ones. There are a number of web portals providing opportunity to participate in e-conferences and webinars.

Major benefits of E-Conferences and Webinars are:

- Participant can contribute from their work place.
- No restriction on number of participant due to virtual space.
- Every participant can share his/her views with all and get immediate feedback, comment on the post.
- The whole proceeding could be archived for future use.
- Synchronous and asynchronous communication is possible. Recorded sessions are available for future reference.
- People can figure out the activity of their own benefit.
- Boundaries and limitations like regional, national or international are dissolved through these events. Teachers and educationists from many countries can contribute and share their work at one platform.

Activity 9

Identify one webinar or e-conference of your interest. Prepare an article/research paper and participate in it. Prepare a report on your experiences and compare the traditional approach of seminars/conferences with ICT based webinars/E-conferences.

16.8 LET US SUM UP

Present Unit has attempted to provide an idea of opportunities of continuous professional development (CPD). Being an in-service teacher, many times you have to undergo various training programmes, all these programmes are under continuous professional development but many time, due to lack of time or resources, you missed few opportunities. Unit starts with discussion on need and importance of CPD and explains that CPD is required not only for knowledge updating but also for equipping ourselves to deal with emerging challenges and for professional networking. Unit focuses on ICT applications, which are useful for you in your professional development. Discussion on portals like SAKSHAT will help you to explore government initiatives to promote ICT in teaching learning process. E-conferences and webinars are another important application for professional development and networking, which you can utilize as per your convenience and interest. New online teacher training initiatives like MOOCs are discussed to give you an idea about new platforms of collaborative and cooperative learning. Discussion on open education resources and NROER will help to keep you updated about new developments and you could search new resources for quality content to improve learning outcomes of learners.

16.9 UNIT END EXERCISES

- Organize a discussion on professionalism among teachers at your school. Observe and record the views of other teachers and prepare a report highlighting the major points for discussion, consensus on major issues, challenges and suggestions.
- Visit a CTE/teacher education institutions in your nearby area and critically analyze its role in providing continuous professional development opportunities to teachers at secondary and senior secondary level.
- Do you think, ICT mediated professional development can help you as a teacher? discuss the modalities of using ICT for professional development of a secondary school teacher.

16.10 ANSWERS TO CHECK YOUR PROGRESS

- 1) Following are the distinctive characteristics of a profession.
 - a) A profession demands possession of a body of specialized knowledge and extended practical training.
 - b) A profession renders an essential social service.
 - c) A profession demands continuous in service training of its members.
 - d) A profession has a clearly defined membership of a particular group, with a view to safe-guarding the interests of the profession.
 - e) A profession involves a code of ethics.
 - f) A profession assures its members a professional career.
- 2) Teaching profession has to take into consideration needs and expectations of an ever changing society. It is affected by the political ideology of a nation, and is influenced by the economy of a nation. It learns from the history of not only a nation but other nations too. learners, who are the clientele, vary with respect to such variables as interests, ability, socio-economic background, etc.
- 3) Answer in your own words.
- 4) Expanding knowledge domain of subjects, Due to changing pedagogy, Increasing involvement of media, Focus of use of ICT, Enactment of policies and schemes, Meeting demands of society and nation
- 5) Refer to table 16.1.
- 6) These programmes were short term measures and were able to create only awareness among teachers.

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