

UNIT ONE: MEANINGS AND THE BASIC CONCEPTS OF REFLECTION

What is 'reflection' mean to you?

Its derivation is the Latin *refectere*, meaning “**to bend back**.” It has applications in grammar, physics, and psychology.

- Grammatically, a pronoun is reflexive if it used as an object to refer to the subject of a verb, as in “I prepared **myself** for the journey.”
- In physics, reflection is the **return** of light, heat, or sound after striking a surface.
- In psychological terms, reflection refers to **a mental image** or representation.

From the above meanings of reflection used in different context, we can understand that the original Latin meaning of “**bending back**” is apparent in each of these cases. In another way, to clarify more about the metaphor of “reflection”, think about looking at your reflection in a mirror and you will get your image shown back to you. Through the mirror, the image of yourself is bending back to you so that you can clearly see the defect or the beauty of your body.

Having said this much about the general meanings of the word “reflection”, let us see how the scholars define it as follows:

- Reflection involves “**a state of doubt, hesitation, perplexity, or mental difficulty, in which thinking originates.**” It is “an active, persistent and careful consideration of any belief or supposed form of knowledge” (Dewey, 1933).
- Reflection means **thinking about what one is doing**. It entails a process of contemplation with openness to being changed, a willingness to learn, and a sense of responsibility for doing one’s best. (Jay, 2003).

- Reflection is an important human activity in which people **recapture their experience, think about it, mull over & evaluate it**. It is working with experience that is important in learning' (Boud, R. & Walker, 1985).

The term reflection is used to describe a vast array of practices. Just as with other popular terms, reflection can have a multitude of meanings as it is translated into professional teacher development. Since reflection is so complex and its varieties so numerous and unique, researchers have identified categories of reflection to describe how it looks in real life. They divided it in terms of its nature, process and the level of practice. Now let us see each categories of reflection in detail.

1.1. Nature of reflection

The nature of reflection is considered as one of the categories of reflection. In this material, the three natures of reflection are addressed as follows.

Returning to experience

It refers to recollection / recalling of memory situations, events and activities that happened in the past.

- Description of what you did or plan to do (and why)
- Description of how you approached something or how it worked and how it did not.

Connections

Reflective connections are the most frequent source of influence on teachers' practical decision making. In these moments of reflection, teachers connect a particular aspect of their teaching experience with plans for instruction, moving from experience to reflection to action. The teacher may back to his/her experience as student and ask questions to connect his past experience to his/her presence. For instance:

- What was the feeling back there as a student? Did I feel good or bad when I think of my experience as a student? Why?
- Which teacher was my favorite? Why?
- Am I teaching my students the same way that I loved to be learned as student?

Evaluation

It refers to evaluation of experiences and development of a teacher. The subcategories of evaluation are:

- giving an opinion
- Examining what you have learned.
- drawing conclusions about your own development
- evaluating your knowledge or functioning
- investigating whether you have achieved your learning objective
- examining what you found difficult and progressing

Case

Abiy is a new English teacher who is hired in Joint Military College. She is very committed teacher who always puts her students' interest first. She is always thinks back about every class lesson she had. She simply writes on her journal about every activity of her students as well as herself. She thinks about her experience as high school students learning an English lesson. She liked her 9th grade English teacher because all the session was fun. There is less control of the teacher, discussion, debates, essay writing were the popular methods he used. That was the year she thought she learned the language as her own best. Wherever she thinks about this learning experience she smiles. Therefore, she uses frequently the methods of her teacher in her classroom. When she sees her students' gradual progress, she proud of herself.

- Identify the three more important actions Abiy did
- Do you think the three actions help her to be successful? If yes /no how?

1. 2. Process of reflection

Reflection engages in the process of carrying back and forth between thinking and action. However, the process may appear differently in different situations. One useful way to understand the complexity of reflection is to consider **when the reflection takes place**.

According to Schon (1983), he divided them in to two categories:

- Reflection-in-action (thinking on your feet)
- Reflection-on-action (retrospective thinking/thinking back).

Reflection-in-action (thinking on your feet)

It takes place in the midst of action, not after the task or the experience is accomplished. It involves a surprise (an unexpected behavior that challenges one knows in action), a response to surprise or conducting an action experiment on the spot by which we seek to solve the new problems. We test our new way of seeing the situation, and also try to change that situation at instant for the better. Reflection in action is not method that the teacher uses but it shows the art and a talent of the teacher.

Reflection-on-action (retrospective thinking/thinking back)

It is the most familiar image of reflection involves a sequence of *action* then thought. It is an action to look back your practice or experience after it is accomplished to see how it went – what went well, what did not, what could be changed for the next time.

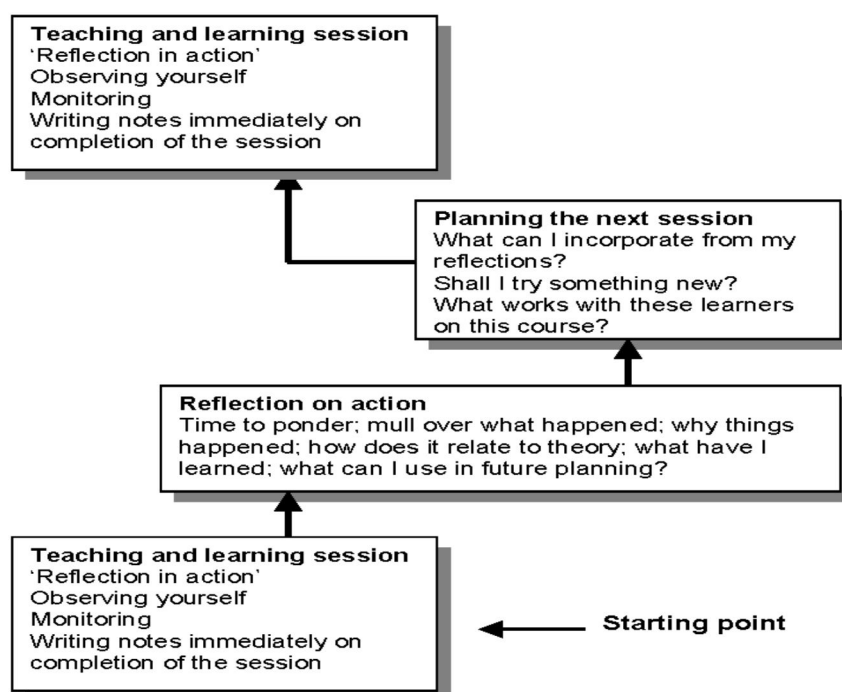


Figure 1-Process of Reflection

Read the following scenarios and respond to the following questions:

- What are issues of individuals?*
- Which types/processes of reflection each case represents?*
- What are the solutions you propose to make the individual a better reflective person?*

Case one

Almaz is knowledgeable and smart English teacher. She planned her lesson carefully before she entered to her class. Some of times she accomplished what she planned and sometimes she fails to do that. However, when she came out of the class, she cares less even to think about if she did as she planned.

Case two: Alem is a civic teacher in high school. He is very committed teacher in the school. He has mostly used student centered method like brainstorming, pair or group discussion and presentation. Sometimes, he uses lecture methods when need .But one day, during his lecture, he realized that only few are seemed following, the rest looked bored; some of them are sleeping. Suddenly, he stopped lecturing and started to tell them jokes. All students were burst to laugh .Then he came back to his lecture.

Case three:

Helen is freshmen student in college. She was very competitive students in high school. She has a good study habit. However, when she went to the library to study, some boys frequently had interrupted her and took her out the library and talked to her. When she came back to her study she barely focused on. As a result, she re admitted for a semester. When she comes back after a semester, she continually goes out from library to talk and hear what boys have to say. She doesn't even know that this is the reason for her failure.

Case four:

Seifu is a mathematics teacher in high school. He is young, handsome and energetic. At the first year of his employment, he used to go out with many girls, including his female students. In the fall of the year, he found himself HIV positive after free HIV checkup arranged in the school. Though it was a shocking experience for him, he managed to calm himself and look back what he did in the whole year. He remembers all the girls he went out with and the unsafe sexes he had.

Example of Possible answers for the case-3**Issues**

Helen was competitive student in High school. She has a good schedule for her study. However, she is frequently destructed from her study to talk to boys.

Solutions

Helen should have critically seen her experience before she came for readmission program .She should have questioned why she was failed, how her destructed study habit contributed to her failure.

Through reflection, if she found out it was boys who frequently destructed her from study and became a cause for her academic readmission; she would have decided to tell them that if they liked her they should respect her study time. At least, she could reduce destruction and increase her focus to her study.

Section Two. Reflective thinking and reflective practice

Reflection, reflective thinking, reflective practice and reflective teaching are often used interchangeably in some literatures, although they have slight distinctions.To get clear

understanding of these terminologies, reflective thinking and reflective practice will be discussed in detail separately.

2.1. Reflection as thinking process

The domain of thinking Processes encompasses a range of cognitive, affective and metacognitive knowledge, skills and behaviors. It is organized in three dimensions:

- Reasoning, processing and inquiry
- Creativity
- Reflection, evaluation and metacognition.

- **Reasoning, processing and inquiry**

The *Reasoning, processing and inquiry* dimension encompasses the knowledge, skills and behaviors required to enable teacher students to find out the world around them, and to use critical thinking to analyze and evaluate information they encounter. Students learn to assemble and question information and develop opinions based on informed judgments. They also develop the capacity to transform information into coherent knowledge structures.

- **Creativity**

The capacity to think creatively is a central component of being able to solve problems and be innovative. In the *Creativity* dimension, teacher students learn to seek innovative alternatives and use their imagination to generate possibilities. They learn to take risks with their thinking and make new connections.

- **Reflection, evaluation and metacognition**

Learning is enhanced when individuals develop the capacity to reflect on, and improve their existing ideas and beliefs. In the *Reflection, evaluation and metacognition* dimension, teacher students learn to reflect on what they know and develop awareness that there is more to know. They learn to question their perspectives and those of others. They evaluate the validity of their own and others' ideas. They also develop their metacognitive skills in planning, monitoring and evaluating their own thinking processes and strategies.

Cases: Identify the dimension of the thinking processes of the following cases and justify.

1. The teacher gives a student a starting story and let everyone finish it by their own.
2. Given a politician speech, students draw out the weak and the strong side of the speech with justification.
3. After HIV/AIDs awareness program, students look back their sexual experience they had because of the lack of this awareness. And, they decided to change and control their unsafe sexual behavior for the future.

2.2. Reflective thinking

What is reflective thinking?

To understand the meaning of reflective thinking, we have to first define **Critical thinking** since both are used synonymously. **Critical thinking** is used to describe as:

"... the use of those cognitive skills or strategies that increase the probability of a desirable outcome thinking that is purposeful, reasoned and goal directed - the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions when the thinker is using skills that are thoughtful and effective for the particular context and type of thinking task. Critical thinking is sometimes called directed thinking because it focuses on a desired outcome." (Halpern, 1996).

Reflective thinking is a part of the critical thinking process referring specifically to the processes of analyzing and making judgments about what has happened. *It is an active, persistent, and careful consideration of a belief or supposed form of knowledge, of the grounds that support that knowledge, and the further conclusions to which that knowledge leads.* For instance; learners are aware of and control their learning by actively participating in reflective thinking – assessing what they know, what they need to know, and how they bridge that gap – during learning situations (Dewey 1933).

To sum up, **critical thinking** involves a wide range of thinking skills leading toward desirable outcomes and **reflective thinking** focuses on the process of making judgments about what has

happened. However, reflective thinking is most important in prompting learning during complex problem-solving situations because it provides students with an opportunity to step back and think about how they actually solve problems and how a particular set of problem solving strategies is appropriated for achieving their goal.

<p><i>How can we prompt and support reflective thinking in the class room?</i></p>

When students are faced with a difficult problem, reflective thinking helps them to become more aware of their learning progress, choose appropriate ways to explore a problem, and to build the knowledge they need to solve the problem. Thus, in the classroom, the teacher has to aware of the following features of reflective thinking that able students engage in reflective thinking:

1. Perplexity/puzzle, confusion, doubt.

The teacher has to provide a problem or scenario

2. Conjectural anticipation/guessing the reasons behind.

The teacher provides many opportunities to engage students in gathering information to look for possible causes and solutions for a problem given.

3. Careful survey (examination ,inspection, exploration, analysis)

The teacher will give activity sheets to help students evaluate the evidence they gather and questions that prompt them to consider alternatives and implications of their ideas

4. Consequent elaboration of the tentative hypothesis/suggest solutions.

The teacher will prepare questions and activities that prompt students to draw conclusions from the evidence they gathered and pose solutions

5. Taking one stand upon the projected hypothesis as a plan of action, doing something overtly to bring about the anticipated result and thereby testing the hypothesis/evaluate and monitor the implementation of the solution.

The teacher will provide opportunities for students to choose and implement the best alternative and encourage them to monitor and reevaluate their results and findings throughout the entire unit.

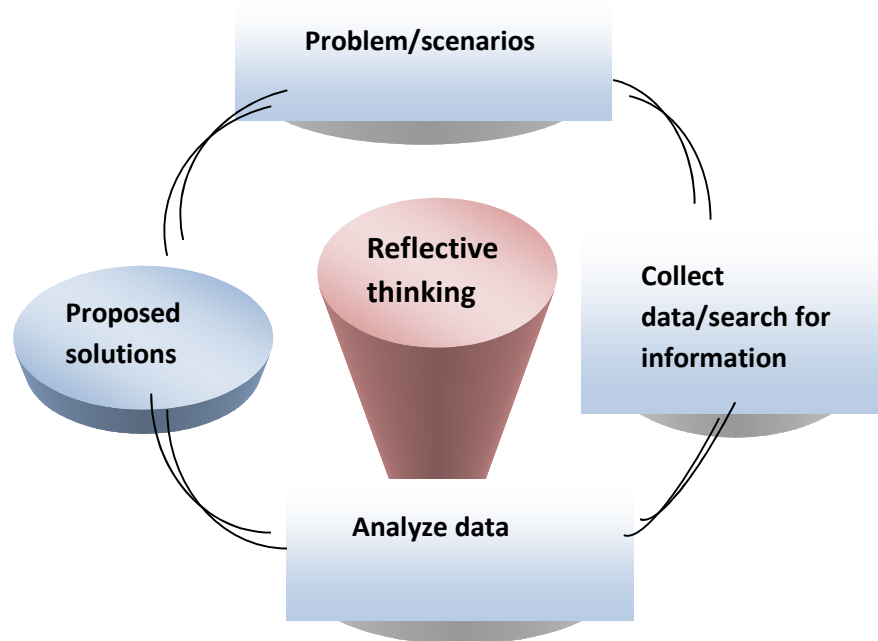


Figure 2-Reflective Thinking

Additionally, to create conducive environment for reflective thinking in the classroom, the teacher can

- provide enough wait-time for students to reflect when responding to investigation.
- provide emotionally supportive environments in the classroom encouraging re-examination of conclusions.
- prompt reviews of the learning situation, what is known, what is not yet known, and what has been learned.
- provide real tasks involving ill-structured data to encourage reflective thinking during learning activities.
- prompt students' reflection by asking questions that seek reasons and evidence.
- provide some explanations to guide students' thought processes during explorations.
- provide a less-structured learning environment that prompts students to explore what they think is important.

- provide social-learning environments such as those inherent in peer-group works and small group activities to allow students to see other points of view.
- provide reflective journal to write down students' positions, give reasons to support what they think, show awareness of opposing positions and the weaknesses of their own positions.

What do you think teacher as reflective thinker should be?

Teacher as reflective thinker choose to be

Active:-Voluntarily and willingly taking responsibility for personal actions.

Reflective:-Searching for information and solutions to problems that arise in the classroom; identifying the strengths and needs of individual students.

Persistent:-Being committed to thinking through difficult issues in depth; consistently and continually modifying teaching approaches.

Relational:-Striving for quality interactions in the classroom to set the tone for learning.

Evidence seeking:-Trying new approaches while documenting their effectiveness and making adaptations based on evidence in the form of student learning.

Although persistent and careful thinking is important to the reflective teacher, such thinking does not automatically lead to change and improvement. But, it is also important for teachers to translate their thoughts into reflective practices or actions.

2.3. Reflective practice

What is reflective practice?

Reflective practice is:

- **adialogue of thinking** and doing through which one becomes more skilled (Schön, 1987).

- a process that helps teachers **think about what happened**, why it happened, and what else could have been done to reach their goals (Cruickshank & Applegate, 1981).
- an inquiry approach that involves **a personal commitment** to continuous learning and improvement (York-Barr, Sommers, Ghere, & Montie, 2001).
- **the practice of analyzing one's actions**, decisions, or products by focusing on one's process for achieving them (Killion & Todnem, 1991).
- a critical, questioning orientation and a deep commitment to the discovery and analysis of information concerning the quality of a professional's designed action (Bright, 1996).
- **a willingness to accept responsibility** for one's professional practice (Ross, 1990).
- a systematic and comprehensive data-gathering process enriched by dialogue and collaborative effort (Osterman & Kottkamp, 2004).
- The **capacity to think creatively**, imaginatively and, eventually, self-critically about classroom practice (Lasley, 1992).
- **an ongoing process of examining and refining practice**, variously focused on the personal, pedagogical, curricular, intellectual, societal, and/or ethical contexts associated with professional work (Cole & Knowles, 2000).

2.3.1. Levels of reflection practice

The levels of practice are one of the classifications of reflection. They indicate in what level an individual is practicing reflection. The topic addresses from simple to complex levels that one can develop to. There are three major levels of reflective practice (Day; 1993; Farrell, 2004 and et al). These are:

- An initial level focused on teaching functions, actions or skills, generally considering teaching episodes as isolated events.
- A more advanced level considering the theory and rationale for current practice.

- A higher order where teachers examine the ethical, social and political consequences of their teaching, grappling with the ultimate purposes of schooling.

The short summary of the levels presented here are stand for and adopting the terminology of technical reflection, contextual reflection, and critical reflection respectively.

Technical Reflection

At the first level, teachers' reflections focus on strategies and methods used to reach predetermined goals. They are concerned with what works in the classroom to keep students quiet and to maintain order, rather than with any consideration of the value of such goals as ends in themselves. It is the lowest level of reflection.

Typical questions the teacher asks at the level of technical reflection are:

- *did I spend too much time on group work today?*
- *how can I keep students on-task?*
- *did I have enough (too many) activities?*
- *how can I get students to pay better attention?*

Contextual Reflection

Teachers engaging in contextual reflection attempt to understand the theoretical basis for classroom practice and to foster consistency between supported theory (what they say they do and believe) and theory-in-use (what they actually do in the classroom). Teachers reflecting at this level can determine when there is conflict between what they practice and what they preach (e.g., seeing themselves as humanistic yet belittling students when they persist in disobeying rules).

Typical questions the teacher asks at the level of pedagogical reflection are:

- *how can I improve learning for all my students?*
- *how can I build in better accountability for cooperative learning tasks?*
- *am I giving my students the opportunity to develop decision-making skills?*
- *what else can I do to help students make connections to prior knowledge?*
- *is there a better way to accomplish this goal?*

Critical Reflection

Critical reflectivity is interchangeably used as the dialectical level. At this stage, teachers reflect on the moral and ethical implications and consequences of classroom practices on students. They extend their considerations to issues beyond the classroom to include democratic ideals. Acknowledging that classroom and school practices cannot be separated from the larger social and political realities, critical reflective teachers strive to become fully conscious of the range of consequences of their actions.

Critical reflection is mostly considered as a higher-order level of reflection. It adds the following dimensions:

- questioning of underlying assumptions, biases, and values one brings to bear on their teaching.
- conscious consideration of the ethical implications and consequences of practices on students and their learning.
- examination of how instructional and other classroom practices contribute to social equity and to the establishment of a just society.
- extended awareness beyond immediate instructional circumstances to include caring about democratic foundations and encouraging socially responsible actions.

Typical questions the teacher asks at the level of critical reflection are:

- *do all students in my class have daily opportunities to be successful?*
- *who is being included and who is being excluded in this classroom practice?*
- *how might the ways I group students affect individual student's opportunity for success?*
- *does this classroom practice promote equity?*
- *do I have practices that differentially favor particular groups of students (e.g., males, females)?*

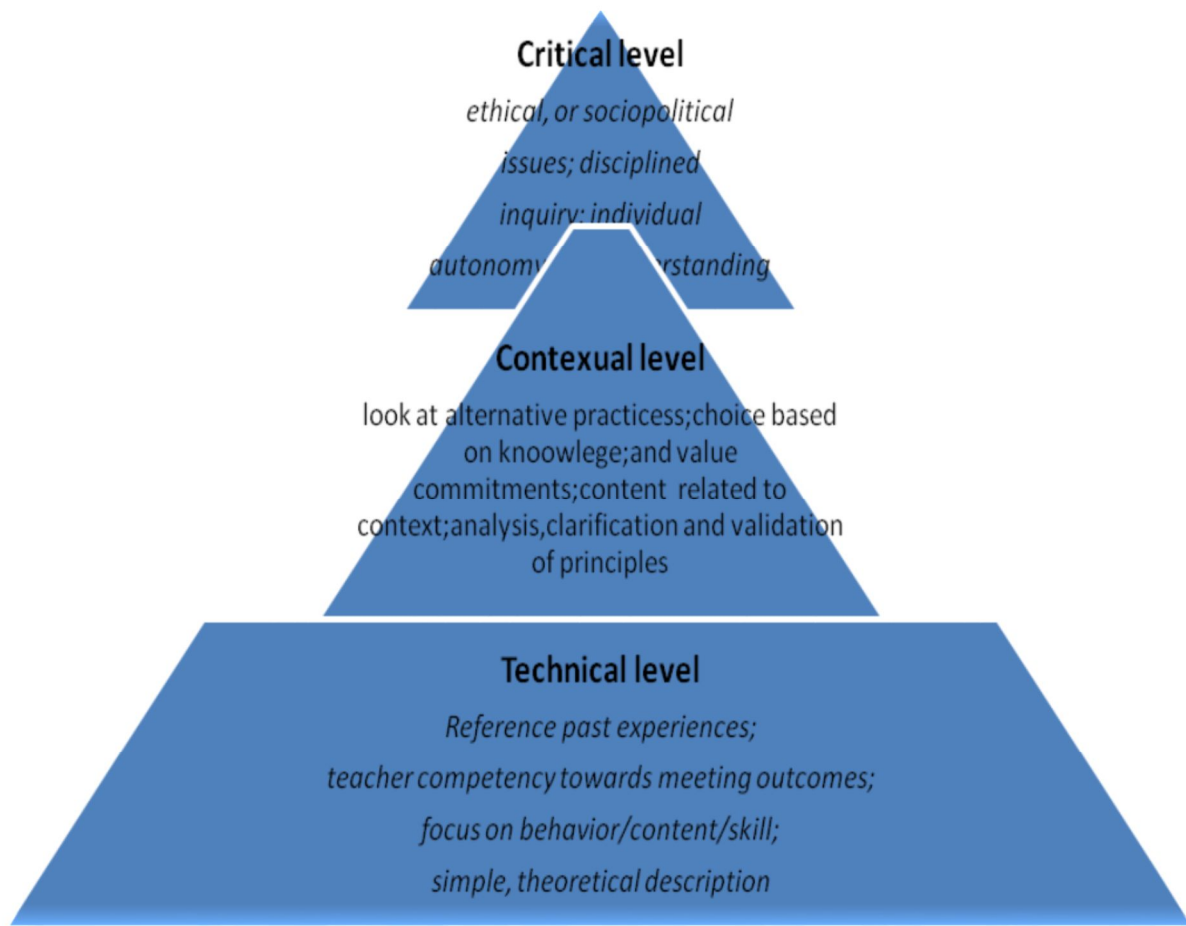


Figure 3-Levels of Reflective Practice

Reflective activity:

What important points you get from this lesson?

Demonstrate your plan to apply the three levels of reflection in your future classroom situation?

Case 1.

Zemen is very intellectual High school biology teacher. She believed that education has to equip students not only with theoretical knowledge but also the life skills that help them to survive outside of the school, as result, in most of her lesson, she manages to prepare examples and cases accordingly in order to aware students the current challenges like gender stereotypes and HIV/AIDS and their impacts.

1. Which level of reflection Zemen has practiced? Why?

Case 2.

Ayele is a teacher in primary school. After each of his class, he evaluates his and his students actual activities against his lesson plan to know whether he achieved them or not.

1. Which of level of reflection Ayele has practice? Why?

2.4. Tradition of reflection practice

There are **five different traditions of reflective practice** as described by Zeichner and Liston (1996). This framework ties different types of reflection to traditions in educational reform, emphasizing that each of the types derives from different underlying assumptions about the aims of education.

1. **Generic tradition;** It emphasizes reflective practice in general as central to teaching and teacher education, without a particular focus on the content, quality, or context of reflection when a teacher merely describes the situation in the classroom. In short, generic reflection is thinking about work and students.
2. **Academic tradition:** teacher education mainly emphasizes the teacher's role as a scholar and subject matter specialist. That is, academic reflection is thinking about content and instruction.

3. **Social Efficiency tradition:** The social-efficiency tradition focuses on the scientific study of teaching to provide the basis for building a teacher education curriculum, whose major manifestation in recent years is the Competency/Performance-Based Teacher Education (C/PBTE) programs. C/PBTE was stimulated partly by applications of behaviorist psychology to the training of personnel in industry and the military during and after World War II. Social efficiency reflection, in short, is about thinking about improving methods of instruction.

What is the basic difference you get from these three traditions? Write what you understand by your own words.

4. **Developmentalist tradition:** has its roots in the child study movement and assumes that the natural order of development of the learner provides the basis for determining what should be taught, both to pupils and to their teachers. This tradition has three aspects: (1) the teacher-as naturalist, a movement that stressed the importance of skills in the observation of children's behavior and in building a curriculum and classroom environment consistent with patterns of child development and children's interests; (2) the teacher-as-artist movement, in which the teacher/artist has a deep understanding of the psychology of child development, and prospective teachers are provided with a variety of experiences in dance, creative dramatics, writing, painting, and storytelling so that they are able to exemplify for their students an inquiring, creative, and open-minded attitude; and (3) the teacher-as researcher movement, which focuses on fostering the teacher's experiential attitude toward practice. In short, the focus of developmentalist reflection is thinking about student readiness.
5. The **social reconstructionist tradition** defines both schooling and teacher education as crucial elements in a movement toward a more just society. the social reconstructionist tradition in teacher education, recommend that teacher educators should be: (1) directly involved in teacher education programs in some capacity (e.g., as a teacher or administrator); (2) engaged in political work within colleges and universities; (3) actively

supportive of efforts within the public schools to create more democratic work and learning environments; (4) engaged in political work within professional associations and in relation to state educational agencies; and (5) working for democratic changes aimed at achieving greater social justice in other societal and political areas. Generally, the social reconstructionist reflection gives emphasis on thinking about equity and social justice.

Reflective activity:

What important points you get from this lesson?

Demonstrate your plan to apply the three levels of reflection in your future classroom situation?

Section Three. Benefits and issues of reflection**Why reflection?**

The rationale for reflection: It

- aims to improve practice by learning directly from experience
- is engaged in a process of examining the fundamental assumptions implicit in practice and experience and;

- is planning to change thinking and practices from this new awareness

3.1. Benefits of Reflection

Reflection is tied directly to experience. Individuals must have self-awareness as well as awareness of their environment to practice reflection. Practicing reflection has a lot of benefit for individuals. These benefits are categorized in to two for the sake of this material: Benefits of reflection for learners and teachers

➤ The benefits of reflection for learners

Reflection helps learners to:

- understand what they already know (at **individual level**). They improve their basic academic skills.
- identify what they need to know in order to advance understanding of the subject (at **contextual level**). They develop a deeper understanding of subject matter
- make sense of new information and feedback in the context of their own experience (at **relational level**). Students start to relate the subject matter to the non-academic world and to their own experience.
- guide choices for further learning (at **developmental level**). Students develop personally by enhancing their self-awareness, their sense of community, and their sense of their own capacities. They also develop higher level thinking and problem solving skills.

➤ The benefits of reflection for teacher

Teaching changes from one context to the next. The skills you develop in one class may be markedly different from those required in another while demonstrating or lecturing environment or group discussion. **Reflection is a process** in which lecturers become aware, or are supported to become aware, of the theory and motives behind their own teaching, to reflect on this and take some deliberate steps to develop to pulling the practitioner out of 'auto-pilot' and causing them to focus on some part of their teaching. This realization may be caused by an unexpected experience or outcome or just a sense of

something is not quite right. For example, if during a tutorial, students do not respond or engage well, and any questions are met with a wall of uncomfortable silence, the instructor aware there is a problem somewhere. **One option** is to attribute blame for this lack of interaction to the students and continue as planned. **Another option** is to reflect on the teaching and learning to help to identify how the teaching may be changed to initiate more discussion and student response.

Therefore reflection enables a teacher to:

- be conscious of our potential for bias & discrimination.
- make the best use of the knowledge available.
- avoid past mistakes.
- solve a problem or address an issue in the classroom
- to reduce confusion or frustration. Reflectivity is often a problem- or situation-based activity.
- maximise our own opportunities for learning.
- result feelings of pleasure and self-satisfaction

Unless we make *conscious & systematic* efforts to critique our own practice, we will

- be unaware of how & when we are being discriminatory
- not make use of the knowledge base developed by our own profession
- continue to repeat the same mistakes
- Our skills will decline rather than develop.

3.2. Issues of reflection

What are the barriers that hinder us to reflect on our experience? What could be the solutions?

Possible Barriers of reflection

- Lack of time
- Lack of awareness about the purpose of reflection
- Fear of judgement and criticism
- being closed to feedback and defensiveness
- fear of professional arrogance

Solutions for the Barriers

Mentors or teachers should:

- be a role model, e.g. a mentor or teachers who reflects on their own practice
- Give time for reflection. To reflect effectively on your experience, you should actively set a time from your each working day to reflect & analyse
- Provide Non-judgemental support to your colleague or your mentee.
- create as many opportunities as possible for engaging in reflection, e.g. pairs, groups reviews and discussion

Section Four. Reflection vs. Technical rationality

What is technical rationality? Where is the concept derived from?

Technical rationality is when professionals make decisions and solve problems through 'the application of scientific theory and techniques. Technical rationality holds that professionals possess specific, scientific and standardized knowledge. A first component of this professional knowledge is basic science, which for a 'major' profession such as medicine might include such knowledge as anatomy and physiology. From this basic science is derived applied science, which is the knowledge guiding the everyday work of professionals. Finally, in the technical rational model of practice, professionals are held to possess specific skills and attitudes, which are related to the process of providing services to individuals and the community.

The dominance of technical rationality in the Western world related to the rise to reputation, over some 300 years, of scientific and technological explanations for the workings of the world. The decline of religion, superstition, and 'fake knowledge', and their replacement with ideas founded on positivistic science, were essential in creating the conditions for the rise of technical rationality

Technical rationality was not able to account for much of what professionals do. The problems professionals attempt to solve, for example, are rarely abstract or clear cut. Problems occur in particular settings, and solutions therefore are found only in the specific contexts in which problems are framed. Therefore, rather than base their decision-making and problem-solving on

the application of empirical science, professionals who enter into the 'muddy low land' always use trial-and-error and 'gut feeling'. In dealing with situations characterized by uncertainty and uniqueness, positivistic knowledge may not have practical value that professionals reflect.

Take a minute and think about the issues of technical rationality and reflect what you understand

Reflection begins in working practice, particularly those areas of practice where professionals are confronted with unique and confusing situation. Teachers may have acquired the theoretical knowledge (technical rationality) of their subject or of the practice of teaching and learning. This may explain their classroom practice as it should be, but it might not explain it as it actually is. For example, trainee or new teacher might express the opinion that 'this theory stuff is very well, but it doesn't work in the real world'. Teacher trainer may be offended by the rejection of theory, but their trainees may have a point. The real teaching environment is where theory is applied, tested and evaluated. Theory is never used rigidly, nor does it provide all the answer to problems teachers encounter. It is however, the starting point for developing teaching and learning in practice. Reflection, in and on action, allows as teachers continually improve their practice

Exercise

1. Explain the nature of reflection
2. What are the differences between reflection on action and reflection in action?
3. What is reflective practitioner?
4. How can we encourage reflective thinking in the classroom?
5. When do we say a teacher is contextual reflector? What qualities he/she should have?
6. What are types of traditional reflection? Explain each of them with example?
7. What are the advantages of reflection?

Assignment: 15%

UNIT TWO: TEACHING AND REFLECTION

1.1. Nature of teaching complexity

Have you ever been afraid of becoming a teacher? Why?

What kind of difficulties you think you will face by being a teacher?

Facilitator: brainstorm individually and in group. Give them 5 min and let them reflect.

There are some of the major factors that make teaching more difficult or complex than other professional practices. These complexities are resulted from problem of:

- student's cooperation,

Section One: The nature of teaching, complexity, dilemma

- compulsory students,
- emotional management,
- structural isolation and chronic uncertainty about the effectiveness of teaching

- **The problem of students' cooperation**

Teaching is a practice of human improvement. Any practitioners depend on their clients to achieve any results. For example surgeon can fix the sickness of a patient who sleeps through the operation, and a lawyer can successfully defend a client who remains silent during the trial. But, success for a teacher depends heavily on the active cooperation of the student. The student must be willing to learn what the teacher is teaching. Otherwise, a teacher is understood as having failed. That is why you can't be a good salesperson unless someone is buying, and you can't be a good teacher unless someone is learning.

As a result teachers must devote huge amounts of skill and effort in order to make students cooperate. However, the result is far from certain. The students still may choose to reject or ignore the teachers effort and offer of improvement because of lack of interest, concentration, and etc. Therefore, the effectiveness of the teacher becomes more difficult to establish.

- **The problem of compulsory students**

The teacher- student relationship is a form of institutionalized domination and subordination. . . . The teacher represents the formal curriculum, and his interest is in imposing that curriculum upon the children in the form of tasks; however pupils are much more interested in life in their own world than in the dried out adult life which teachers have to offer (Waller,1965) .

In other words, students are likely to feel the pressure for school attendance as result of:

- their parents (who want school to take care of children during the day, to help them get ahead, and even to educate them),
- the market (which makes school credentials mandatory for access to a good job),
- their own social desires (school is where their friends are).

Summarize and reflect your understanding of the above complexities of teaching

- **The problem of emotion management**

One of the difficulty of teaching is teachers are required to establish and actively manage an emotional relationship with students. Other professional practitioners in general are expected to maintain a distinct emotional distance between themselves and the client. They focus on the particular problem for which the client is seeking professional help, they are judged on their performance in resolving this problem, they and the client are seen as independent agents pursuing their own ends through the relationship.

Unlike most professional relationship, Teachers need to develop a broad relationship with students for the purpose of understanding their learning problems. They also need to establish an emotional bond to motivate the student to participate actively in the learning process. Managing emotion become even more complex for the teacher to easily practice is because there is no prepared guidebook for how to accomplish it for any particular teacher in a particular classroom. Thus, teachers have to work things out on their own.

- **The problem of structural isolation**

Ever since the invention of age graded education early in the 19th century, teachers have found themselves practicing their job within the four walls of the self-contained classroom. They normally teach under conditions where they are the only professional in the room. They are left alone to figure out a way to manage a group of 45-60 students and move them through the required curriculum.

In this process, teachers have to work on control issue. Unless the teacher establishes control, there will be no learning, and if the teacher does not control the students, the students will control the teacher. To rise to this challenge, the teachers should establish classroom rules and customs.

- **The problem of chronic uncertainty about the effectiveness of teaching**

The technology of teaching is anything but certain, and teachers must learn to live with chronic uncertainty as an essential component of their professional practice. This uncertainty in the teaching practice can arise from different reasons:

- teachers have to operate under the kinds of scary conditions that introduce unpredictable elements of will and emotion into the heart of the teaching and learning processes.(as it is discussed in the problems of emotion management)
- what we know about teaching is always dependent on different overruling variables that mediate between a teacher's action and a student's response. As a result, there is always a dilemma in any instructional preparation: this works better than that, if other variables are constant.
- we cannot measure the effect of teachers have on students. For example, a teacher can measure how many of the spelling words introduced this week a student can spell or how well a student can solve word problems which is covered in class. But, how these kinds of lesson contribute to the most important outcomes of education, that is, the preparing of competent, productive, and socially responsible adults. These outcomes are removed

from particular classroom interaction between teacher and student for many years by different reasons.

- the contradictory purposes that societies impose on the whole educational enterprise, that is, in some ways, we want education to promote democratic equality (preparing competent citizens); on the other way, we also want education to promote social efficiency (preparing productive workers); in addition, we want education to promote social mobility (preparing individuals who can compete successfully for social goods). Yet, the kind of teaching and learning that will be effective differs depending on whether the primary aim is to prepare competent citizens or productive workers or social climbers.
- teacher does not know exactly his/her client because they are many and different. At one level, the client is the student. At another level, the clients are the parents of the student. At a third level, the teacher's client is the community at large, which not only pays for public education but also feels the effects of the teacher's ability to produce competent citizens and productive workers. Keeping all these clients happy is not an easy matter.

1.2. Nature of teaching dilemma

What is dilemma? Have you ever been in dilemma in your life or in your teaching profession? What have they? How do you come out of it?

Facilitator: brainstorm individually and in group. Give them 5 min and let them reflect.

A dilemma implies a situation where there is no clear easy choice or answer. Example, when you only have two extra tickets to an event and three friends that want to go.

Dilemma can rise from different reasons:

- a genuine clash of values
- uncertainty about the facts of the case
- a failure to be unaccepted, a deficiency in courage, a misdirected desire to be popular, and so on
- uncertainty about our position, our perceptions

- the merits of our decisions, and concerns about how they will be received and what their results will be .

What is teaching dilemmas? Construct your own definition

Teaching dilemma is when the teacher put in to the situations of two evils.

Some dilemmas of teaching:

- How to balance the needs and interests of some students over the needs and interests of others. Eg. Students with special needs and girls and other normal students in my classroom?
- What happens if there is a clash between the needs of individual teachers and those of institutions?
- Staying within your comfort zone or being prepared to take risks/become vulnerable. (Eg. changing teacher –centred method that one familiar with to student-centred method)
- For a teacher, balance between pursuing one’s own specific tasks (teaching, conducting research, participating in the department meeting) and the moral duty, as an ‘academic citizen’, and as belonging to a community (providing community service).
- How far should a teacher press students to participate in class (the shy, those for whom there are linguistic & cultural barriers, the reluctant, other special needs and female students) and whether to leave them alone after minimum non-pushy invitation to engage.
- How far to help students – can such help, at some point, go so far as to undermine or impede the development of autonomy, self-reliance, independent and self-directed learning?
- The relative time and energy devoted to teaching as compared with research & writing activities. Eg teaching load and Conducting Action research
- To what extent a teacher should disclose his /her problems faced to others. Does sharing make one look like failure even though it is important for professional growth?

- How teachers use his/her power over students? To avoid using power in fear of undermining and belittling students or to use more power to gain respect and listened by students.

If you face one of the difficulties and dilemmas of teaching mentioned above in your class, what would you do?

Section Two: The Professionalism Of Teaching: Teacher Thinking, Creativity And Teacher Learning

2.1. Teacher Thinking

What knowledge and belief you think the teacher possibly can have?

Facilitator: use silent sharing method. Group students and let them Share their ideas silently by writing—one person at a time—one of their ideas on the flip chart in the middle of their table. After they have finished dotting down, let them quickly look at the ideas expressed at other tables. What are the commonalities that you notice?

What is teacher thinking?

Teacher thinking is defined as “the set of cognitions, of mental representations that operates as a lens through which teachers look at their job, give meaning to it and act in it” .Even though it is difficult to observe and evaluate teachers’ thinking, their knowledge, beliefs and attitude that directly and indirectly influence their thinking are widely discussed in literatures and in this module as well.

There are different kinds of knowledge, attitudes and beliefs the teacher have:

- content knowledge refers to the depth of knowledge that a teacher has about the subject itself – for example, their procedural knowledge and conceptual understanding of mathematics topics, as well as of the connections between topics.
- pedagogical content knowledge is the knowledge teachers have about the ways student learn particular topics – for example, a particular teaching methods to help students understand the subject matter better.
- in addition to, general pedagogical knowledge is the knowledge a teacher have about classroom management and the characteristics of his/her students.
- teachers have knowledge about the context of schooling, from knowledge of the school in which he/she works, to the district, to the larger school system – for example, teachers may have varying degrees of understanding of school financing at various levels, or of how and where decisions are made about curriculum and resources.
- At even larger level, teachers hold personal value orientations and will have particular beliefs about the purposes of education and even the nature of knowledge.
- they have also beliefs about what it means to be a teacher – about the roles that teachers should and do play, what the act of teaching requires, what makes for quality teaching.
- teachers also have different attitudes and expectations for different students, say, for female and male students, minorities and students with special needs.

2.2. Teacher Learning and Change

How teachers learn? And where can they learn?

Teachers' learning and change is one of the concerns in education. One of the purposes of education is to produce citizen who are capable of solving societal problems and bring change to the betterment. Teachers play the greatest role in achieving this educational goal. They take day to day responsibility of teaching and guiding students to their level and preparing them

step by step to the larger outcomes of the education. The question is how these teachers should learn and train or change first to full fill their societal responsibilities. Teachers learn in

- **pre service teacher education;**
- **in- service program: teaching practice**
- **reflective practice.**

Which learning situations that you think you can learn more and better about teaching? Why?

- **Pre-service teacher education**

Pre service education is the place where student teachers are trained for the future career. These pre service programs have chosen different areas of knowledge on which to focus. Some may have a content-heavy academic focus, while others focus more on the teacher's personal development or general pedagogical knowledge. However, in most of the pre service program, there is no enough place given for reflective practice, interpersonal and communication skills, interdisciplinary approaches, dialogue, teamwork.

As research showed that the effectiveness of pre-service teacher education on changing teachers' thinking before they begin teaching is limited. They recognize that teachers' knowledge grows and their beliefs change through their actual practice.

What do you think teacher education programs should add in terms of skills, knowledge values?

Pre-service teacher education program should be designed to provide student teachers with a strong foundation in a range of knowledge areas and prepare them for continued learning and development throughout their career. Some of the attributes that have been proposed include: a strong, clear and shared vision of education; a solid basis in multiple areas of knowledge; **opportunities to link learning and practice**; and **multiple opportunities for inquiry** and reflection, so that the process of reflection on practice can begin during pre-service education.

- **In service program: The practicing teacher**

Learning and change continues throughout a teacher's career. Teacher learning and change comes from studies of particular **in-service or professional development programs**, which are designed to provide teachers with additional skills that they may need for teaching practice.

Why teachers need in service program?

Teachers need to be reorganized to accommodate the changing roles and functions within the teaching system through in-service or professional development programs. These learning areas can be: Health promotion, HIV/AIDS prevention, sex education, and life skills training, different approaches to teaching, learning based on strong human relations and interpersonal skills and computer skills. In general, the demands of the "new teaching profession" require the acquisition of skills that are much larger in scope than those necessary to simply transmit knowledge.

- **Reflective practice**

Why teachers need to learn to be reflective practitioners?

There are many reasons for teachers to develop as reflective practitioners. The most important is that teachers need to be reflective in order to deal with the inevitable uncertainties and dilemma involved in everyday decisions that affect the lives of students.

Since teaching is a complex and dilemma-ridden job, the need of ongoing learning as well as the capacity to be reflective is become mandatory. Because today's classroom represents increasing diversity among students, a teacher has to accommodate and adjust to this greater range of differences in ethnicity, socioeconomic status, developmental levels, motivation to learn, and achievement. Being responsive to this vast array of students' needs requires teachers who are reflective. Engaging in reflection helps teachers recognize behaviors and practices which impede their potential for tolerance and acceptance-the vital elements for meeting the needs of all students in a diverse society moving toward a global community

Another reason for developing as reflective practitioners is that it frees teachers from routine and impulsive acts, enabling them to act in a more deliberative and intentional manner. While following routine helps teachers manage the task of teaching, if teachers become slaves to

routine they eventually come to feel powerless to influence their future careers. Routine action is guided by circumstance, tradition and external authority while reflective practice entails voluntary and willingly taking responsibility for considering personal action.

A final reason is that emerging beliefs about quality teaching support teachers developing as reflective practitioners. What constitutes quality teaching is evolving. Major curricular changes that provide greater emphasis on socialization, and collaboration require fundamental changes in the way teachers view their role. These changing classroom demands redefine the teacher's role as social mediator, learning facilitator, and reflective practitioner. Being able to function in these roles begins with teacher self-awareness, self-inquiry and self-reflection. In fulfilling these roles, teachers in turn help students to learn to exercise self-direction, self-regulation and self-reflection – those qualities that are fundamental for democratic citizens.

From the above reading, where did you better learn about teaching profession? Is that from pre service, or in service program or through reflective practice? Why do you say so?

Section Three: Teaching roles, change in society and reflection

3.1. The role of teachers in the society

What do you think the role of teachers in the society?

A teacher's work can never end. From the role of everyday teaching process to managerial to the role as a member of the society, teachers play various roles to ensure that the education system and the society as a whole move along side by side. The roles of teacher in the society are classified into three main areas:

- knowledge and skill,
- social inclusion and
- Professional development of the teacher's role.

• Knowledge and Skills – a local issue

One of the defining characteristics of teachers across the centuries is that the teacher has a distinctive fund of knowledge and skills that are 'transmitted' to learners.

‘If you can read this, thank a teacher’. This is one of the roles which society has expected from its teachers for centuries. Literacy ability of children is strongly associated with the educational provision of teachers and schools in which they can work. And, of course, the favorable home circumstances of parents sharing books with their children and engaging them in word games are likely to reflect the work of teachers a generation earlier.

- **Social inclusion – a societal issue**

The diversification of the teacher’s role has given greater attention to the social inclusion of all the students for whom the teacher has responsibility. Developing an understanding of children, so as to make teaching and learning developmentally appropriate, has long been part of the teacher’s role. A growing awareness of the range of students’ special needs, and recognition of the implications of population migration, has led to national policy initiatives driven by social justice and harmonization agenda. Teaching has become more diversified not only to address different learning needs but also different first languages among the teacher’s students.

- **The professional development of the teacher’s role – a continuing issue**

Teachers are increasingly called upon to help young people become fully autonomous learners by acquiring key skills, rather than memorising information: teachers are asked to develop more collaborative and constructive approaches to learning and are expected to be facilitators and classroom managers rather than *ex-cathedra* trainers. These new roles require education in a range of teaching approaches and styles. In addition, classrooms now contain a more heterogeneous mix of young people from different backgrounds and with different levels of ability.

To equip the teaching body with skills and competences for its new roles, it is necessary to have both high-quality initial teacher education and a coherent process of continuous professional development, keeping teachers up-to-date with the skills required in the knowledge-based society throughout their careers. Evidence has consistently shown that investing in teachers is the most productive investment for increasing school effectiveness and improvement.

3.2. Teaching and Change in society

As the century goes, education has emerged at the forefront of the world’s concern over its own future. The challenges of the coming century to eliminate poverty and ensure

sustainable development and lasting peace will fall to today's young people. Educating the young to meet these challenges has become a priority objective for every society. The young generation is entering a world which is changing in all spheres – scientific and technological, political, economic, social and cultural.

What will be the teacher roles in the changing world?

It is often viewed that a societal change that has great impact on the teacher's work centered mainly on its technological side. The development of ICT has bigger effect on a teacher's work compare to that of the changes in political, economical, and environmental side.

As the study indicated, teachers who intensively used information technology emphasized, more than other teachers, the importance of using information technology for facilitating students' participation in progressive inquiry, collaborative learning, the learners' active engagement in knowledge formation process, and learn ability of intelligence.

The impact of economical and political change however does little to the work of a teacher when compared to the technology which brings greater impact on a teacher's work in a changing society.

What are the challenges of the teachers in the changing world?

Teachers will be facing a lot of challenges especially in the age of globalization that promises a degree of social change from time to time. When a social change takes place, challenges for teachers will increase and vary. The change in economics, politics, technology, cultures and others in a community will deter the type of challenges that a teacher may be facing. A change in culture, say, the culture in the rural areas differs from the culture in the urban areas, would give a challenge to teachers in their teaching. Students may be a lot passive than students from urban areas and there will be only little teacher-student interaction. A change in technology may result to poor effectiveness of learning, where the unfamiliarity of students' surroundings lowers the pace of teaching.

In the economical term, meanwhile, the students may find it hard to get books, stationeries, and even to buy uniforms. Another challenge a teacher faces is that a lot of children are not as prepared for school as they need to be. They come without a lot of literacy experience. They

come into the classroom holding books upside down, or not knowing where the books start. Teachers will also face the environment of gangsterism and the attitude problems which do not come from the students only, but the parents as well.

Section Four: Relationships in teaching: How are we getting on together?

A teacher's relationship can be divided into three main areas: the relationship with students, which mean the “ordinary teaching”, and the relationship with other staff members, the relationship with societies at large. Teachers link together to students, other teachers, school administrators, families, and community members to foster the learning success and healthy development of their students. The nature of these interactions among different stakeholders varies depending on the teachers' intent and the needs of their students. Now let us review the four major relationships the teachers have with:

- students
- school Staff
- parents
- community
- **Teachers and Students**

What kind of relation you expect teacher should have with his/her students?

The relationship between teacher and student has been a focus of inquiry for over 2000 years, since Plato, Socrates, and Confucius established much of the philosophical guidelines for teaching. By emphasizing the acquisition of knowledge through dialogue, each philosopher stressed a commitment to the teacher-student relationship.

The 20th century has witnessed the proliferation of ideas fostering teacher-student relationships. In the early 1900s, John Dewey and other progressive educators theorized that children flourish if allowed to grow freely in their own way at their own rate without being

forced or limited by too much teaching. Maria Montessori similarly argued that children should discover knowledge for themselves and learn by doing with a clear emphasis on sensory perceptions.

At the other end of the continuum, B. F. Skinner and other proponents of stimulus-response learning theory defined teachers as transmitters of knowledge and students as passive recipients. According to their respective theories of associationism and behaviorism, the classroom teacher presented content to children and conducted drill-and-review as children memorized the material.

How is the relationship between teachers and students now a day?

The relationship between teacher and student was redefined with the advent of cognitive psychology. Following the principles of constructivism, teachers and students were said to construct knowledge jointly. Teachers and students were believed to constitute a community of learners which engages in social discourse and produces common understandings. Teachers were seen as facilitators who guide and enrich children's learning activities, with students serving as co-contributors to the learning process.

Psychologists have recently addressed the psychosocial dimensions of teachers' relationships with students. Research on resilience indicates that caring teachers who express concern for students and act as confidants, role models, and mentors can contribute to children's capacity to overcome personal vulnerabilities and environmental adversities

- **Teachers and School Staff**

What do you think the relationship teachers and school staffs should be?

Teachers' relationships with their peers, other school staff, and school administrators have been researched for decades. These studies reveal that teachers are often isolated from their peers and other school professionals.

What do you expect the experience teachers should do for you when you are newly employed?

Professional relationships among teachers adhere to norms that govern the ways teachers ask for and provide help. Research on professional development reveals that interactions among mentors and mentee are often reserved, non-problematic, uncritical and not focused on the classroom practice. However, relationships between mentor teachers and new teachers should be about maintaining harmony and support, rather than developing competence.

What should be done to increase the positive relationship between teachers and school staff?

To increase the quality of teachers' work- relationships requires professional and organizational change through, for example, the establishing a positive relationship between participative decision-making and classroom instruction, noting an increase in innovations adopted by schools, professional development activities, teacher exchange of ideas and knowledge, and improved understanding of learning and classroom instruction.

- **Teachers and Parents**

To what extent teacher and parents should communicate? Why?

Teacher-parent relationships impact students' learning and well-being and many teachers attempt to involve parents in school management or classroom activities. These parent-involvement efforts help establish and foster parent-teacher relationships, and include parents in educational interventions, which are significantly more effective than those without parent involvement.

What are the advantages of parents' involvement in the school?

Parent involvement programs promote a number of desirable student outcomes, including: decreased teen pregnancy and drop-out rates, increased graduation rates, and improved achievement and school attendance. Teachers can encourage and support parental involvement through home visits and parent teacher conferences. Parents who participate in these programs are more likely to further their own education by attending classes and are more able to provide increased support to their children and their children's learning needs. Caring parents and teachers who act in concert can strengthen the effects of educational and social interventions. When there are positive relationships among parents and teachers, the resources of the home and school contexts are amplified, providing a greater likelihood of positive outcomes for children.

- **Teachers and the Community**

What the teachers and the community relationship involves?

To create rich, nurturing educational environments in the classroom, schools need to maximize the use of resources available in their communities. Teachers can incorporate parents' skills and knowledge and local organizations and programs into their curriculum to offer students supplementary information to complement their basic course work. Many teachers collaborate with local universities, museums, and community service organizations to expand the cultural resources available to students and enhance their educational experience. Teachers can forge relationships with outside agencies and community members to provide children with the best possible learning environment.

To meet the diverse needs of students in our public schools, community services and service providers are often connected to the children's school experience. As organizations, schools have the advantage of having the most frequent contact with students and therefore the potential to truly benefit children through the integration of school-linked services in meeting the children's needs. Teachers may work with social workers, family counselors, local health care providers, and others to address and fulfill the needs of their students.

Section Five .Professional identity: knowing oneself as a teacher

What is professional identity?

Professional identity refers to the set of attitudes, beliefs, experiences, ideals and principles that define a person in their professional career. Generally, they tend to determine who we interact with in our professional lives. These interactions and professional experiences proceed to define one's professional identity(www.ask.com).

What kind of teacher you want to be?

Any teacher will gain professional identity throughout the process of experiencing teaching. A teacher's disposition can be divided into four main areas as follow:

Able/Unable

The able teacher sees students as having the capacities to deal with their problems. The teacher believes students or other people in the school community are able to find adequate solutions to events in their own lives.

The unable teacher sees students as lacking the necessary capacities to deal effectively with their problems. The teacher doubts students' abilities to make their own decisions and run their own lives. If the teacher believes a student is able, the student will try to do his/her job to the best of his/her ability. If the teacher believes a student is unable, the student will often avoid responsibility.

Identified/Unidentified

The identified teacher relates easily with people, especially with people from diverse backgrounds. The unidentified teacher feels oneness only with those of similar belief and feels apart from all others. If the teacher feels a student can learn, then he/she will employ the most effective methods, as opposed to the teacher who makes materials for a general few and ignores the necessary adaptations that guarantee all students have access to the general education curriculum.

Larger/Smaller

The teacher identified as being larger has a global or broad perspective beyond immediate context. The smaller teacher has a very narrow focus on specific goals. The effective teacher understands the purpose of education is to have a long term, positive impact on a child's growth and development.

People/Things

The people teacher is concerned with the human aspects of day-to-day life. The attitudes, feelings, beliefs, and welfare of students and fellow community members are prime considerations in his/her thinking. The things teacher is preoccupied with all the impersonal,

detail-oriented management aspects of education. The effective teacher is not a concrete thinker concerned with what is right in the school setting but instead focuses on what is appropriate for the individual or situation. The teacher focused on things as a first priority will put schedules and rules ahead of looking for the cause of the problem.

Section Six. Teachers as lifelong learners

What is lifelong learning?

Lifelong learning is not rooted in any particular moral or professional commitment. Lifelong learning for teacher becomes an individualistic enterprise, its purpose to consume skills while turning teaching into an endless human resource development project. One way for a teacher to be lifelong learner is by continuously developing his/her profession.

What is Continuous Professional Development (CPD)?

It :•indicates that learning for the sake of improving professional practice(*HDP hand book, 2011*).

- consists of any educational activity which helps to **maintain, develop or increase knowledge, problem-solving, technical skills or professional performance standards, all** with the goal that to provide a better students' learning(www.en.wikipedia.org).
- is the means by which **professionals maintain and enhance their knowledge and skills**. The world is moving ever faster so on-going CPD is essential to support you in your current role as well as helping you with career progression. CPD is all **about upgrading knowledge, skills and capabilities to remain effective and competent** (www.cips.org).

In short CPD is: **“Anything that makes me a better professional”**(*HDP hand book, 2011*)

6.1. Approaches to CPD

What approaches or methods you used to continuously develop your profession?

Continuous professional development has employed in schools or higher institution in different ways as follows:

- ***Teacher career development in schools including:***
 - ✓ whole-college training days the induction,
 - ✓ mentoring and assessment of individual teachers
 - ✓ peer observation
 - ✓ Collaborative planning and evaluation, and self-evaluation.
- ***Looking beyond a particular school, teachers might build networks by:***
 - ✓ visiting other colleges
 - ✓ attending conferences
 - ✓ undertaking joint training exercises with other schools
 - ✓ joining teacher networks, and
 - ✓ Engaging with specialist subject associations.
- ***Outside the school environment, teachers might:***
 - ✓ attend short courses by NGOs
 - ✓ study for higher degrees eg. mastering the second degree, PHD
- ***Finally, looking towards the wider community, teachers might:***
 - ✓ Sometimes provide opportunities for community learning.

Which methods of CPD you mostly engage in to your college?

6.2. Rational and purposes of CPD

What do you think the purpose of CPD?

The rationale and the purpose of CPD can be summarized in four categories as follows:

- ***Greater authenticity and commitment to learning.***

Continuous professional development programs for teacher increases their involvement in learning activities such as professional reading, attending workshops, and joining in-school

groups to explore particular teaching-related topics .It also increases the ownership of teachers for professional growth and levels of what they described as teacher confidence and enthusiasm.

- ***Increased focus and personal accountability in learning.***

Continuous professional development is believed to help teachers focus, developing a clearer sense of purpose and meaning in their teaching and learning activities. And , it increases insight into one's own teaching, and helping define a personal vision for one's practice.

It also increases a personal accountability of teachers that goal-setting creates: When it's written down, he/she begin to relate everything that happens to that goal. They take more responsibility for their own professional development and they do much more "conscious planning" for their growth, and more thinking around questions such as, "How will I know when I get there? What will it look like?"

- ***Teachers' self-affirmation through learning.***

Continuous professional development program in the schools increases competence and growth rather than deficits and judgment. For examples, end-of-year discussions with teachers about their growth plans tend to highlight their accomplishments, positive changes and affirming incidents throughout the year that otherwise might be forgotten.

Assignment: 10%

1. What challenges do you think you will face as a teacher? List five challenges and discuss how it affects you and the teaching process?
2. Have you ever been in dilemmas in your life? Mention 3 dilemmas and discuss how you overcome it.

UNIT THREE: THE NOTION OF REFLECTIVE TEACHING

Section One: Meanings of reflective teaching

What is Reflective Teaching?

We should ridicule a merchant who said that he had sold a great many goods although no one had bought any. But perhaps there are teachers who think that they have done a good day's teaching irrespective of what [students] have learned

-John Dewey, *How We Think*

What counts as a “good day’s teaching”? How do we know it when we see it? Despite efforts to quantify, grade, test, and otherwise assess teaching and learning, it remains difficult to tell on a daily basis whether students are actually buying the goods teachers offer. Unlike the merchant, who can count his wares to see how many have sold, teachers must approach self-evaluation more creatively. For many accomplished teachers acclaimed for the quality of their practice, to do so involve ongoing reflection.

Reflection means thinking about what one is doing. It entails a process of contemplation with openness to being changed, a willingness to learn, and a sense of responsibility for doing one’s best. Perhaps this process seems natural, and indeed it may be; but it also poses a challenge. Consider a metaphor of “reflection.” Think about looking at your reflection in a mirror and you’ll get a sense of how easy it can be to “reflect,” or to see an image shown back to you. Yet it is much more difficult to truly look at yourself. It can be painful to face your imperfections, uncomfortable to acknowledge your strengths, and both odd and inspiring to glimpse yourself from another point of view. Such are the dualities of seeing your own reflection. So it is with **reflection in teaching**. **Reflective teachers** face the challenge of truly seeing themselves and their teaching. For instance, students learn when teachers teach well. But how do teachers know

when they're teaching well? How can they be supported and encouraged to think about the quality of their teaching and its impact on student learning? Unlike non-reflective teachers, reflective teachers approach their practice with openness, wholeheartedness, and responsibility, looking for the better path to take, the edges that need to be smoothed, and the changes they need to make in their practice to improve learning for students.

Therefore, **reflective teaching** necessarily encompasses the critical self evaluation of teachers, which can be difficult emotionally. Dewey (1933) defines reflection as "...active, persistent, and careful consideration of any belief or practice..." As teachers, we can reflect on classroom decisions and events, but reflection also involves the emotional, passionate, and intuitive side of teaching.

1.1.Routine action Vs Reflection action

What kind of actions considered routine and reflective for the teacher' Job?

Routine action is guided primarily by tradition, external authority and circumstance. In reflective teaching, teachers engage in active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and its consequences. Thus reflective teachers consistently assess the origins, purposes and consequences of their work.

Today's professional knowledge requires that teachers employ the reflective approach which is 'plan, act, reflect, evaluate'-rather than the traditional application approach: 'plan, implement, evaluate'

Section Two: Becoming a reflective teacher

How can we become reflective teacher?

There are attitudes and skills you should develop to be a better reflective teacher. According to Dewey (1933), there are three essentials attitudes and practices that characterize a reflective teacher.

2.1. Three essential attitudes of reflective practitioners

The three essential attitudes or habits of mind first described by Dewey are still considered the foundation of reflective practice. They are:

- open-mindedness,
- responsibility, and
- wholeheartedness.

- **Open-mindedness**

Open-mindedness is a willingness to consider new evidence as it occurs and to admit the possibility of error. Open-mindedness means being open to other points of view, appreciating that there are many ways to view a particular situation or event, and staying open to changing your own viewpoint. Part of open-mindedness is also letting go of needing to be right or wanting to win.

It requires hearing different views as valid ways of thinking, not as threats. Open-mindedness is described as “an active desire to listen to more sides than one, to give full attention to alternative possibilities, and to recognize the possibility of error even in our most dear beliefs.”

Being open-minded requires the capacity to criticize oneself. Teachers who are unable to acknowledge their errors tend to blame their students for any problems that arise. For example, if 90% of the class fails a test, teachers who are open-minded consider the possibility that the material, method or approach was lacking, rather than accuse students of not studying.

Open-minded teachers continually seek new information that might challenge their taken-for-granted assumptions about teaching, thus enabling them to envision a broad range of potential solutions and making it more likely that dilemmas will be resolved.

- **Responsibility**

Responsibility is the careful consideration of the consequences of one’s actions, especially as they affect students. Reflective thinking leads to responsible action. Responsibility refers to a teacher’s willingness to examine all decision making (e.g., decisions about curriculum, instruction, evaluation, organization, management) from a coherent philosophical framework of teaching and learning.

Responsibility is the willingness to acknowledge that whatever one chooses to do will impact the lives of students in both foreseen and unforeseen ways. Demonstrating responsibility means

owning the many positive and negative ways your actions might influence others, regardless of how things turn out.

- **Wholeheartedness**

Dewey believed that when people are thoroughly interested in a cause, they throw themselves into it with a whole heart. Teachers who are wholehearted approach all situations with the attitude that they can learn something new. The “need-to-know” is the driving force for their learning. Wholeheartedness is characterized as “a commitment to seek every opportunity to learn.”

From the above reading, which qualities do you think you have? And which qualities you need to improve for the future?

2.2. Three essential practices for becoming a reflective practitioner

While it’s not possible to prescribe a step-by-step procedure, there are actions and practices that are fundamental to developing as a reflective practitioner. The following three practices are essential:

- Solitary reflection,
- Ongoing inquiry, and
- Perpetual problem-solving.

The first creates an opening for the possibility of reflection while the others allow for a way of developing teaching practice that accepts uncertainty, recognizes contextual bounds and considers multiple plausible explanations for events and circumstances.

- **Solitary reflection**

Making time for thoughtful consideration of your actions and critical inquiry into the impact of your own behavior keeps you alert to the consequences of your actions on students. It’s important to engage in systematic reflection by making it an integral part of your daily practice. Keeping a reflective journal is one vehicle for ensuring time is set aside for daily reflection.

Teachers also need reflective time to consider the inevitable tradeoffs involved in everyday decisions that affect students. Any effort to become a reflective practitioner involves negotiating feelings of frustration and insecurity. Taking solitary time helps teachers come to accept that such feelings are a natural part of teaching.

- **Ongoing inquiry**

This practice involves unending questioning of the status quo and conventional wisdom by seeking your own truth. Being a fearless truth-seeker means examining the assumptions that underlie both classroom and school practices.

- **Perpetual problem-solving**

Perpetual problem-solvers are never satisfied that they have all the answers and constantly seek new information. Problems present opportunities to find better solutions, build relationships, and to teach students new coping strategies. The classroom serves as a laboratory for purposeful experimentation. A practice or procedure is never permanent. New insights, understandings and perspectives can bring previous decisions up for reevaluation at any time.

2.3. Adapting reflection in to one's teaching repertoire: Some tips

Mention some methods that you think facilitate reflection in classroom.

Some Tips you may want to use for facilitating reflection teaching in the classroom:

- prepare a framework for guiding the discussion.
- lead the group by actively engaging each student.
- set the tone by establishing norms of behavior such as: anyone in the group may speak at any time — no hand-raising is required, but the rules of polite conversation are followed.
- no profanity or sexual innuendoes are necessary to make a point.
- speakers should be respectful, open-minded, and not aim to put anyone down.

- insist that responses are clear, coherent sentences, not just a few words.
- clarify students' responsibilities and expectations (write them down and copy for all).
- arouse interest and commitment to the service learning.
- assess the values, knowledge, and skills that each student brings to the project.
- develop background information about the people and problems the students will encounter in the service situations to sensitize them and help to revise any misconceptions.
- develop and practice any skills that will be required, including being active observers and questioners of experience.
- get closure on emotional/affective issues by the end of each reflective session.
- leave some cognitive/topical issues open until the next session to give group members an opportunity to think more about them.

Section Three: Strategies/ Opportunities for reflection

In what way do you reflect your experiences?

To develop the habits of mind necessary to become reflective practitioners, preservice and novice teachers often need to be explicitly prompted to think, respond, and act in new ways. Reflection is enhanced when mentoring or coaching is provided that allows teachers as learners to tap into their own realm of experiences, reflect on those experiences, and construct personal meaning to inform their developing practice. Reflection, especially critical reflection and self-reflection, are complex constructs requiring strategically constructed mediation or facilitation.

In addition, establishing self-monitoring and self-reflective activities early on can promote the kind of self-awareness that allows preservice teachers to hear and listen to their own voices. Focusing on what they already know and believe about teaching has proven to be a useful starting point

Strategies of reflection help both teachers and students to address problems and learning challenges, deepen their understanding, and generate new insights. In addition to their reflection about their own practice, teachers may provide reflection exercises or assignments, examples, and challenges to enhance other teachers' and students' learning. So the question presents itself, how can teachers reflect, what *tools* can be used to facilitate the reflective process?

Strategies/ Opportunities for reflection that have been found to be useful in promoting reflection include journal writing, teacher narratives, autobiography, metaphor, critical incidents, support groups, critical friends, and action research. Merging these task structures in creative ways and utilizing them individually, collaboratively, and with facilitated coaching is likely to have the greatest potential for promoting higher-order reflection.

- Teacher narratives (autobiography and metaphor)
- Critical incident
- Portfolios
- Case study analysis
- Student input
- Action research

- **Teacher narratives (autobiography and metaphor)**

Narratives other than journal writing can render a rich understanding of what takes place in the minds of developing teachers as they construct their reality of teaching. Teacher narratives are stories written by and about teachers and can be used as the source of narrative inquiry (Cole, 2000). It is a more disciplined form of writing than journaling in that it has a structure and a focus, the intent to communicate a story. Either keen observers or teachers themselves write real stories about teaching that illuminate the realities, dilemmas and rewards of teaching.

Reflecting on teacher narratives can yield insights about motivations for teacher actions, the complexities of teaching, and about teachers. Teacher narratives can also be specifically designed to be used as case studies with the explicit purpose of reflecting on a specific problem. Using a vehicle of case story writing based on teaching experiences helped pre service teachers move toward critical reflection.

Autobiographical sketches, also called personal histories, are a specialized form of teacher narratives. These stories of a more personal and in-depth nature offer insight into the past to uncover preconceived theories of practice. When teachers write about their own biographies and how they think these have shaped the construction of their values, then they are able to see more clearly how social and institutional forces beyond the classroom and school have had an influence.

Some scholars advocated the use of metaphors to help teachers become aware of their teaching identities and develop alternative ways to think about an issue. The reflection that occurs in the examination of personal teaching metaphors involves reframing the lens through which a teacher perceives a problem. It attributes a critical reflection of a practitioner.

Metaphors bear the images teachers have of themselves as teachers, their professional identity. The practical theories of teachers are often expressed as metaphors as opposed to the more logical forms of expression.

Through metaphors teachers can elaborate and turn abstractions into real images, helping to give them firmer handles on slippery concepts such as teaching.

The following metaphors written by beginning teachers offer a glimpse of the images teachers have of themselves as teachers:

A teacher is like a song creating memories and bringing comfort when you hear it.

A teacher is like a candle melts itself and gives light for another

- **Critical incident**

Though generally conceived as a self-generated incident, a critical incident could also be a carefully chosen real-world example or case study of a teaching dilemma intended to serve as a springboard for reflection. Examining a critical incident can be a tool for deepening the level of reflection. Writing about critical incidents or dilemmas rather than typical daily events promoted critical reflection in novice teachers.

Descriptions of high and low moments in their practice, or details of significant incidents that stand out in their lives as teachers, provide the impetus to grapple with problems and dilemmas

becoming the basis for critical investigation. By sharing critical incident responses, teachers come to realize that their individual stories have generic qualities and themes embedded within them. They discover that their personal struggles are not so different from those experienced by their colleagues.

- **Portfolios**

Professional portfolios vary from online documents to 3-ring binder folios. Portfolios are designed to encourage novice teachers to reflect about important areas such as state and/or national teaching standards and to document evidence of their knowledge and experience of each. Portfolios can be developed over the course of an entire teacher education program to demonstrate growth in knowledge and skill and can provide evidence of achievements.

Portfolios can promote reflective thinking at various levels of deliberation on practical teaching matters as well as at higher levels of questioning institutional goals. The routine of reflecting on practice through portfolios can provide the novice teacher with a cognitive link between past experiences and newly encountered challenges. Discovering ways to understand present circumstances through previously acquired knowledge can help to generate new problem-solving abilities.

- **Case study analysis**

Case study analysis can be a valuable method for stimulating teacher reflection. Teaching through case study requires preservice teachers to review unique and challenging situations and to reflect on potential solutions

Case studies can present complex situations that require difficult analysis and depend on both instructor expertise and high levels of student comprehension. Case study written reflections could be shared and discussed with peers in an effort to learn about alternative ways of approaching problems.

- **Student input**

Some studies indicated that college teacher use student input, in its varied forms, as a reflective tool. Faculty believes that student comments are very important; they learn a great deal from

student evaluations as well as direct comments from the students. Additional forms include but are not limited to students' products, course evaluations, and informal student feedback.

- **Action research**

It is:

- an inquiry-based research that follows a process of examining existing practices, implementing new practices, and evaluating the results, leading to an improvement cycle.
- a powerful tool for change and improvement at the local level. To do action research is to plan, act observe and reflect more carefully, more systematically, and more rigorously than one usually does in everyday life.

Action research has been a popular methodology in education for those who maintain that practitioners are more likely to make better decisions and engage in more effective practices if they are active participants in educational research. Thus, educators are working in their own environment, with their own students, on problems that affect them directly. They are at the place where research and practice intersect and real change can occur. Results of their actions can be seen first-hand, and they can build on this information.

The main purpose of action research is to improve the understanding of teaching practice and to influence or change some aspect of whatever is the focus of the research. It is participatory research and usually involves collaboration between researchers. The evidence collected is qualitative and meaningful to those involved.

Unit Four: Action Research as a Strategy for Reflection

Section One: Meanings and nature of Action Research

In order to undertake an action research project within educational settings, we need to begin by giving some thought to the question: 'What is action research?' This, in turn, raises two further questions:

What is research?

*What is educational research?**What is action research?*

Research: is a 'systematic, critical and self-critical enquiry which aims to contribute to the advancement of knowledge and wisdom'(Bassey, 1999)

Educational research: 'is critical enquiry aimed at informing educational judgements and decisions in order to improve educational action' (Bassey, 1999)

Action research:

- is a process of **systematic reflection, enquiry and action** carried out by individuals about their own professional practice (Frost, 2002, p. 25).
- is a term used to describe **professionals studying their own practice** in order to **improve it**(GTCW, 2002a, p. 15).
- is an enquiry which is carried out in order **to understand, to evaluate and then to change, in order to improve** some educational practice (Bassey, 1998).
- combines a substantive act with a research procedure; it is action disciplined by enquiry, **a personal attempt at understanding while engaged in a process of improvement and reform'** (Hopkins, 2002).
- When applied to teaching, [action research] involves gathering and interpreting data **to better understand an aspect of teaching and learning** and applying the outcomes to improve practice* (GTCW, 2002),
- is a flexible spiral process **which allows action (change, improvement)** and research understanding, knowledge) to be achieved at the same time' (Dick, 2002).
- is usually described as cyclic, **with action and critical reflection taking place in turn**. The reflection is used to review the previous action and plan the next one' (Dick, 1997).
- is an approach which has proved to be particularly attractive to educators because **of its practical, problem-solving emphasis ...'** (Bell, 1999, p. 10).

Furthermore, Action research is not a 'thing' or an object of study. When we speak about action research we are always speaking about people investigating their work with other people. The divergence of opinion in the literature about how we understand action research reflects how we understand human enquiry in general, whether we observe life from a distance, or whether we are active participants, and what implications this has for the form of theories we generate

Section Two: Action research Vs other types of education researches

McNiff (2001).

According to McNiff, Lomax and Whitehead, (1996) a common sense view of action research is this:

- we review our current practice,
- identify an aspect we want to improve,
- imagine a way forward,
- try it out, and
- Take stock of what happens.
- we modify our plan in the light of what we have found, and continue with the 'action',
- monitor what we do,
- Evaluate the modified action, and so on until we are satisfied with that aspect of our work.

An examination of these definitions suggests the following: Action research is referred to variously as a process, enquiry, and approach, flexible spiral process and as cyclic. It has a practical, problem-solving emphasis. It is carried out by individuals, professionals and educators. It involves research, systematic, critical reflection and action. It aims to improve educational practice. Action is undertaken to understand, evaluate and change.

From the various definition of Action research given above, can you draw the common natures or features of Action Research?

What difference do you think between action research and other research you are familiar with?

As a starting point, it is useful to examine some texts that discuss a broad range of approaches to engaging in research. These reveal that there are: (1) many different types of research; and (2) numerous views as to the nature of each, how it should be conducted and what it aims to achieve. For example, when discussing social research, Robson (2002, p. 26) cites the following: 'ethnography, quantitative behavioral science, phenomenology, action research, hermeneutics, evaluation research, feminist research, critical social science, historical-comparative research, and theoretical research'. It is useful to compare this list with some examples offered by Blaxter *et al* (1996, p. 5): 'pure, applied and strategic research; descriptive, explanatory and evaluation research, exploratory, testing-out and problem-solving research; covert, adversarial and collaborative research; basic, applied, instrumental and action research'. When reading general texts, you will see many references to these (and other) kinds of research. At this stage, it is important to note several points. First of all, do not be confused or distracted by the 'labels' that are attached to various kinds of research. Instead, ask yourself:

1. What sorts of practices are being engaged in by those who undertake action research and other kinds of research etc.?
2. What rationale is offered to undertake action research or other kind of researches?

The basic characteristics shared by all of these all kinds of researches is that they are, or aim to be, planned, cautious, systematic and reliable ways of finding out or deepening understanding. (Blaxter *et al*, 1996). However, there are basic differences between action research and the rest kind of researches. A number of parameters is used to compare this differences. The table below has a detailed note as follows.

Areas	Formal/Applied Research	Action Research
Training needed by the researcher	Extensive	On own or with consultation
Goals of research	Knowledge that is generalizable	Knowledge to apply to the local situation
Methods of identifying the problem to be studied	Review of previous research	Problems currently faced
Procedure for literature review	Extensive	More brief
Sampling Approach	Random or representative sampling	Students or clients with whom they work
Research design	Precise control, long time frame	Looser procedures, change during study: quick time frame: control through triangulation
Data Analysis	Statistical test; quantitative techniques	Focus on practical, not statistical significance; present raw material
Application of results	Emphasis on theoretical significance	Emphasis on practical significance

2.1. The Rationale for undertaking Action Research

What is the rationale for undertaking action research?

The idea that teachers should be 'reflective practitioners' or should engage in 'reflective practice' has gained popularity due, in large part. As practitioners, they should:

(1) engage in the study of their own practice; and

(2) develop their own educational theories deriving from that practice. Action research provides an appropriate medium to enable these two aims to be achieved.

Action research undertaken for an academic award is essentially and inevitably a form of apprenticeship and success depends on one's ability to do several things with a certain degree of skill. Indeed, the ability and willingness to ask pertinent questions, to test assumptions, to ask for reasons and evidence to support arguments, and to engage in systematic thinking about relationships between theory and practice, are essential attributes of the researcher (and this irrespective of whether the activities engaged in are conceived of as being theory- or data-driven).

A focus on relationships between theory and practice leads us on to consider the notion of 'the teacher as researcher'. While the idea that teachers should be regarded as researchers, or as practitioner-researchers These teachers developed hypotheses about their teaching which could be shared with other teachers and used to enhance their own teaching'. More recent initiatives in advancing the cause of teacher research include the proposal that teaching should move increasingly towards being a research-based profession. This would involve practitioners undertaking research activity as an important aspect of their role, with a view to gathering data about a range of issues including strategies for effective learning and teaching.

Teachers should be at the forefront of educational research and that classrooms provide an ideal context within which to test educational theories. Unless teachers are fully involved in research being undertaken, they will not wish to be consumers of the findings that emerge from it. Furthermore, teachers have lacked opportunities (other than those offered within higher degree courses) to take on a more substantial role in the research process.

The relationship between research and teachers' professional development is a close one. At the present time, a welcome and much-needed debate is taking place about the nature of continuing professional development (CPD) for teachers and how this might be improved. Action research as conceptually explained earlier is the most effective way and tool for teachers' professional development. These days' high schools, colleges and higher education institutions in our country have designed CPD in their policy and practically introduced into their teacher daily roles and responsibilities. Similarly, many other scholars argue that all teachers should be entitled to high

quality and well-planned CPD provision throughout their career. However, such an entitlement carries with it certain responsibilities: to develop oneself professionally and to ensure that professional knowledge and skills are constantly updated. CPD activities take many forms. These range from attending courses to school based learning and undertaking action research.

Section Three: Steps in Action Research

What are the steps in action research?

The basic process of conducting action research consists of 4 to 9 steps or components. For your action research project, you can follow all the 9 steps (presented hereunder) or arrange them in to 4 components, namely: 1) Planning, 2) Acting, 3) Developing, and 4) Reflecting.

Step 1.Identify an issue/a problem/an area of focus, and limit it

Step 2.Learn more about your issue (formal and informal information gathering)

Step 3.Review Related Literature (in formal aspect otherwise it is optional)

Step 4.Plan and develop a strategy for your study

Step 5.Gather data

Step 6.Analyze and interpret the data

Step 7.Develop a plan of action

Step 8.Take appropriate action and share/communicate your results

Step 9.Reflect on the overall process and the results

Basically, action research begins with the finding of a starting point (mostly implicit) for development within one's practice and having the will to invest energy in pursuing it. Then, through conversations, interviews and other formal methods of collecting evidence, and through examination of the information gained, the situation is clarified, put into practice, and the research process may enter a new stage of clarification of the situation, which will lead to the development and putting into practice of further action strategies.

Step 1: Identifying an issue and limiting it for investigation

Your research topic should reflect an issue of importance to you as a teacher. It should lend itself for investigation of issues of concern by formulating questions. As there is no reason to invest resources (time, effort, material, money) on issues that have little or no importance, you should make sure that your topic and the emergent questions are interesting and important to you, to your students, to your faculty, to your fellow teachers, to the profession and to the society at large.

As part of step 1, your research questions should come from and directly related to the issue or problem that you have chosen to explore. If you develop more than one question, each needs to be related to the others, and together they need to be related to the overall issue or problem at hand. Also make sure that your questions are answerable. This may mean different things to different contexts and different people: may be scope or size, feasibility, importance, etc. To develop answerable questions, you may brainstorm about the overall of the problem or issue with your students, with other teachers in your department, and others as appropriate.

Step 2. Learning more about your issue/topic

After a topic (an issue) for research is identified, there is a need to problematic and develop it in the form of researchable questions. Your research questions as well as the topic itself can be reworked as you learn more about the topic and think about what intervention you hope to use in your classroom and what kind of data you'll need to gather.

This is a step of gathering information through talking with other teachers, administrators, students, etc. Alternatively, you may need to read more sources. As you search for specific sources that increase your knowledge of the topic, you'll find more and more others that will help.

Step 3. Reviewing Related Literature

Related literature refers to any existing source of information that can shed light on your topic selected for investigation. These sources of information may include books, research journals, web sites, manuals, modules, school documents, policies and guidelines, and the like.

Review of related literature helps you to:

- make informed decision about the research focus and plan;
- provide guidance for defining or limiting the problem;

- develop an appropriate design for your action research project
- select legitimate instruments or techniques for collecting your data;
- Connect your research to others' insights, discoveries, recommendations, etc;
- Identify topics;
- Establish a connection between your action research project and what others have said, done, and discovered before you.

However, some scholars considered this step as optional.

Step 4. Develop a Research Plan and a Strategy for Your Study

Developing a research plan is a way of charting the actual research undertaking. It is a means of deciding how you want to approach your study and consequently a decisive stage for success. Research planning includes conversion of your topic to research questions and the selection of an appropriate design for collecting and analyzing your data. In traditional educational research, the development of a research design and plan for collecting data is known as the research methodology. In designing action research study, there are several specific decisions to be made during this step. In most cases, once the topic is identified and focused, it is then appropriate to state one or more research questions and possibly to develop from those questions specific ones. A research question is a fundamental question inherent in the research problem. It is the question the action research seeks to answer through conducting study. It provides the guiding structure to the study itself. Every part of the action research study should be done so as to facilitate answers to the research questions. The following activity deals with some guidelines for good research questions.

There are three major characteristics that make a good research issues and questions.

- 1) The issue you have chosen to explore must be **important**--to you, to your fellow teachers, to your students, to your school. In most cases, the issue will either be a problem that needs to be solved or something that needs to be improved. After all, research involves some extra time and effort. It makes no sense to devote time and exert effort to work on something that is not important.

- 2) The questions are directly **related to the issue or problem** that you have chosen to explore. If you develop more than one question, each needs to be related to the others, and together they need to be related to the overall issue of concern to you, your students, and your faculty.
- 3) **The questions are answerable.** To some extent, this criterion relates to the largeness issue. But it also has to do with the type of information that is available to you. For example, it would be very hard to study either graduates or dropouts from your school as they might have gone far away.

Step 5. Collecting data

Once you've identified your strategy, you will need to think about what overt, observable behaviors you can measure to determine if your intervention has an impact. For this purpose, information is important. Any information that can help you answer your research questions is data. Good data are directly related to the questions; that is, they provide direct answers. It is advantages that you use more than one strategy or source of information for each question because this helps to ensure that the results will be valid. Data can come from almost anywhere, such as:

- a) Tallies (e.g., lists of books read);*
- b) Demographic information;*
- c) Surveys, and test results;*
- d) Observations, interviews, and documents;*
- e) Recording one's observations;*
- f) Tape recording and transcribing them word-for-word;*
- g) Documents;*
- h) Portfolios or students' writing; attendance information, test and, or any-thing else that already exists and might help to answer your questions.*

Some examples of primary data collection methods

This is a small selection of primary data collection methods. The key to action research is to select data collection methods that that are **appropriate for small scale** qualitative research.

Questionnaires:

- Have we explained clearly the purpose of the research?
- Is it clear that the information given is confidential and anonymous?
- Have we considered the design of questions (open or closed)?
- Have we conducted a pilot of the questionnaire to be sure of the language, reliability and validity?
- How many questionnaires should we issue and to whom?
- Is the sample size representative?
- What is our acceptable return rate?

Interviews:

- Have we prepared our questions?
- Will this be a structured or semi-structured interview?
- Who will conduct the interviews?
- Who will be interviewed and is this representative sample?
- How long will the interviews last?
- Where will the interview take place and are the arrangements suitable?
- What do we expect to find out?
- Have we thought about the design of open and closed questions?
- Have we explained the purpose of the interview, thanked the participants and at the end explained what happens next?
- Have we asked their permission?

Observations:

- Are we observing students or teachers or both?
- Have we explained the purpose of the research and asked permission to observe?
- How many persons will be observed and is this a representative sample?
- Have we agreed a suitable observation checklist to be used?
- Are we giving feedback to the student/teacher after the observation?
- Have we explained what will happen after the observation?

Field notes:

- Have we systematically kept notes of the group?
- Do the notes document significant aspects of the action?

Audio recording:

- Have we decided the points to be covered?
- Have we organized transcription of the tapes?
- Have we explained the reason for the recordings?

Digital recording:

- Have we booked the equipment?
- Do we know how to use the digital camera?
- Have we considered how to limit the effects of being filmed?
- Have we considered involving the students in the?
- Have we asked permission to film?

Research Ethics:

Research ethics must be considered as projects are planned and data are collected. If you seek information from or about your students, you need to first seek their permission to use the information. This usually involves simply explaining that you are doing a research project, describing the information you want to use, underscoring that their participation is voluntary, and promising confidentiality--that you will not use the person's actual name or any other identifying information in reports of the project. Before you begin your intervention, you will need to gather baseline data. Knowing how your students responded or performed before the beginning of your study gives you a starting point for comparing study results. You need to know your student's homework completion rate before you enact your strategy so you will know if there has been a change as a result of the intervention. The baseline and post-intervention data must be gathered in the same fashion for your study to be valid and reliable.

Step 6. Analyze the data

Data analysis involves examination of the data in order to answer your questions. In traditional quantitative research study, data analysis occurs following the completion of all data collection. In traditional qualitative research study, it typically begins during data collection, continuous throughout the remainder of the process of collecting data, and is completed following data collection. Action research combines the two. Inasmuch as action research is more of qualitative; it employs inductive process, involving the reduction of information that has been collected by organizing it into important themes or categories or types and patterns. One way to find these is

to sort data into piles such that each pile shares some broader characteristic. You can then write a summary that captures the essence of each broader characteristic. Together, these summaries should answer your questions.

To prepare your data analysis, therefore, you may want to make sure all your data are on paper, and you will probably want to read everything over at least once. If you have asked more than one question, you will want to sort the data according to the questions. And you may want to discard (or at least set aside) data that do not directly relate to the questions you have posed.

In short, whereas qualitative data are analyzed in: a) inductive process, b) creating themes, and c) using codes; quantitative data are analyzed in deductive process and using descriptive or inferential statistics. In both cases, it is possible to achieve validity and reliability.

Step 7. Developing an Action Plan

Once the data have been analyzed and the results interpreted, the next step in the action research process is the development of action plan, which is the ultimate goal of any action research study. It is the action part of action research. The action part is a proposed strategy for implementing the results of your action research project. As the action plan is implemented, its effectiveness must be continually monitored, evaluated, and revised, thus affirming about the cyclical nature of action research. The stage of developing an action plan consists of:

- 1) Captivating the results of your data analysis, your interpretations of those results and the final conclusions drawn from the interpretations; formulating a plan of action for the future;
- 3) charting strategies for the future implementation of the treatments, interventions, revisions and improvements to your instructional methods, and designs and proposal for the future action research cycle;
- 4) informal-brief statements or simple descriptions about the:
 - a) implementation of a new educational practices.*
 - b) a plan to reflect an alternative approaches to addressing the roblem;*
 - c) a plan to share what you have learned with others interested in the topic such as other teachers, administrators, PTA, or woreda education officers; or*
 - d) any other next step you may take.*

- 5) More formally written report:

- a. *for presentations, and*
- b. *as a complete report of your action research project [this is your duty in the course].*

Reflection and organization are integral parts of this stage. You need to reflect and organize your research. Here you have:

1) some sort of strategy for trying out, carrying out, or otherwise putting in to practice the changes resulting from the findings of your action research project;

2) to ask and answer the following questions:

- a) *what was learnt from the study?*
- b) *What should I do now?[based on what you have learnt from your study]*
- c) *What can I recommend for actions, related to specific research questions?*
- d) *Who is responsible for these actions?*
- e) *Who needs to be consulted, informed, or approached for permission for the implementation of future actions?*
- f) *Who will monitor or collect future data?*
- g) *What about a timeline for implementing the actions?*
- h) *What about specification of any needed resources?*

Developing an action plan demands to prepare action chart that delineates, in concise form research questions, actions, actors, supporters, time, and resources. The components in the following activities are important to guide you in your effort to develop an action plan for your action research project.

Step 8. Taking Action and Sharing/Communicating your Results

Take action as per your results findings. Next share/communicate your results and actions through different means. The research findings can be accessible to others, for example, through HDP final presentations, by the production of formally written reports, by putting brief accounts of your research results in newsletters, leaflets, brochures, or by publishing in journals or in the form of monograph or putting on Web site (if possible).

Among others, your results and actions could be accessible to others through:

- 1) *Formally written report;*

- 2) *Presentations at department meeting, college discussions, woreda-wide deliberations and, conferences at what so ever;*
- 3) *Submitting for publications in academic journals (if possible); and*
- 4) *Electronic disseminations;*

Sharing the results of your action research:

- 1) Reduce the gap between research/theory and practical application in educational settings;
- 2) Provides opportunity for you:
 - a) *To gain additional insight in to your study and ultimately;*
 - b) *To reflect not only on the topic of your investigation but also on the action research process;*
 - c) *As a very rewarding professional experience;*
 - d) *To locally present highlighting (briefly and focusing)*
 - background information,
 - purpose of the study,
 - methodology,
 - results,
 - conclusions,
 - action plan, and [action taken, if any]

Remember, action research can be an ongoing process. The answers you get from this project will generate more questions. It, therefore, leads to more research. It can also suggest refinements in programs or practices. In any event, the last stage of an action research process is to share your findings with others. Lots of this sharing will be informal--planned or spontaneous conversations or discussions. While writing the report of your project considers the three critical purposes.

- 1) As you write, additional insights often occur to you. So in a way, the act of writing can lead to further analysis or interpretation of your data and the issue.
- 2) Writing leaves a permanent record of the research that can be used by others in your faculty or throughout the college where your department is found.

3) Writing enables contribution to the body of knowledge that exists beyond the researcher.

The final report serves the purpose of sharing the knowledge gained through action research with others in a community of practice. Action researchers will need to decide what to write and to whom to write. You can also make presentations about your research at department meetings, before college community, or at professional meetings. Whether you share through writing or speaking, this final stage in the research process is important because others can benefit and learn from your project.

An important part of the sharing artifact of the inquiry is using portfolio, which is important for reflection. A good action research portfolio, like a report, documents practices at each step of the inquiry. The accumulation of content provides critical mass for reflection and for recognizing change of practice. There is no perfect template for an action research portfolio. One key idea, however, is to be sure to document each cycle and gather pieces accordingly. That documentation process should utilize both descriptive and reflective writing and become appendix for your final report of your action research project.

Step 9. Reflecting on the overall Process and the Results

In action research project, reflection occurs before, during and after the research process. The more formal reflection, nonetheless, comes at the final stage to reiterate the processes passed and the results obtained. This stage is a learning process you experienced as a result of completing your action research project. After the project has been completed, please take a few moments to consider the process. Note that the action research process is empowering, allowing you to not only identify and explore an issue close to your practice, but also to change the way you teach. It is therefore, important to reflect upon your experience and the usefulness of the process for improving teaching and learning.

Overall, reflection within the processes is looking back on your action after collecting data, and deals with:

- what thoughts come to mind?
- if you were to repeat the process, what would you change?

- what worked best for you?
- what most surprised you?

Final reflection is where you will take stock of your overall learning process during your action research project. It might be helpful to think of a reflection as a set of connections between the past, present and future. If this section is only a summary of events that happened, it is inadequate as a reflection. A reflection provides a deep understanding of why events occurred as they did, and how those outcomes helped you address your overarching question. At the conclusion of a good reflection, you should ideally know more than you did when you began. If you have not gained new insights about the problem and your problem-solving action, it is likely that you are only summarizing. Reflection is a powerful learning experience and an essential part of action research.

Section Four: A simple approach to develop action research proposal

Providing brief answer to each of the following “WH” questions will enable you to address the basic action research proposal development steps as detail described in the above section of this module.

1. What is my concern/issue?

Identification of the focus of your potential researchable issues or subjects within your professional practice; Possible area for Action Research will be,

- Aspects of instructional planning Eg. Lesson plan skill
- Contents to teach:-Eg. reading skill, electrical design skill
- Instructional/teaching methods:-Eg. contribution of group member; participation in classroom
- Learning assessments:-Eg. Performance
- Classroom management or environment:-
Eg. Misbehavior, lateness, missing classes
- Instructional materials:- reference books, teaching aids

- Gender issues/social inclusion .Eg. Participation ,performance; repetition, dismissal

Use the following criteria to evaluate your research topic:

- a. Is it interesting?
- b. Is it original?
- c. Is it significant and important?
- d. Is it feasible?
- e. Is it important?
- f. Is it doable?
- g. Is it ethical?
- h. SMART

Example: How can we/I reduce the absenteeism of grade 9 'A' students in Physics classroom in Addisalem secondary school?

Activity: Choose your title and write it in question form or statement form but be specific

1. Introduction:

- Give a context to the research. Where are you going to conduct the research? Give brief explanation about the context
- Introduce yourselves and
- Introduce your topic.

Activity: Write your introduction part

2. Why am I concerned?

- Why are so interested in the issue you selected than any issue.
- What is the objective of the research?

Example:

- a. Reason:-As I/we have observed that some students did not continuously cut the physics class
- b. The objective:- is to reduce the absenteeism of students in Physics class

Activity: State the one reason why you are interested in the problem. And
State the objective of the research

3. How will I produce evidence of my influence?

The methods and instruments of data gathering should be stated from the possible options given in literature but also as appropriate as to your issue and objective of the project. Based on the example topic stated above, here are some questions that guide you how you should select sources to get adequate evidence.

- How can you show things as they are before you take action?
- Who will be your research PARTICIPANT?
- How will you collect data?

Example:

- a. *Evidence:-observation and the attendance sheet for physics class*
- b. *Participants:- absentees*
- c. *Methods:-FGD/interview*

Activity: How do you prove scientifically if the problem exists or not? Who are your research participants? What method of data gathering will you use to know the causes of the problem?

4. How will I analyze my data?

- What will you do after gathering data?
- What methods of data analysis will you use?

Examples: I analysis my data qualitatively

Activity: How will you analysis your findings?

5. What will I do based on what I found out?

- Suggest some possible actions that you can do to solve the problem

Example: Giving consistent reminder for the students about the importance of attendance for physics class.

Activity: suggest one or two solutions for your research problem

6. What kind of evidence can you produce to show that what you are doing is having an impact?

- Gather data regularly and keep records of how you are monitoring and evaluating each cycle
- Triangulate the data

Example: Checking frequently the attendance sheet for reasonable absenteeism and unreasonable ones and research diary for recording my day to day observation for the progress.

Activity: State how you will monitor and check the action progress

7. How will you evaluate that impact

- What data will you use to say how your practice has changed overall?

Example: compare and contrast the attendance sheets before and after actions is taken

Activity: In what evidence that will you prove your action has brought changes?

8. How do I ensure that any judgments I make are reasonable, fair and accurate?

Here the main concern lies in the process of identification of the root causes and indicating of possible solutions, any judgments you make to data or action should be fair, reasonable, and accurate. In this case, *for instance*, you can ask colleagues or refer pedagogical guidelines before deciding to implement solution of a certain causes.