UNIT -1 PEDAGOGICAL ANALYSIS

Paradigm shift from pedagogy to Andragogy to Heutagogy – Concept and stages – Critical Pedagogy: Meaning, Foster independent thinking through critical pedagogy, Need and its implications in Teacher Education. Interaction Analysis: Flanders' Interaction analysis, Galloway's system of interaction analysis-Pedagogical Analysis

Education

According to DURKEIM Education is "The action exercised by the adult generations on those who are not yet mature for the social life. Its concern is to cause and develop a certain number of physical, intellectual and moral states in the child as a whole that require his social environment to which he is especially destined".

MORIN and BRUNET state the meaning of education is the action that consists in helping a human being to train himself, to develop him, to raise himself: it is also the results of this action". This definition highlights the involvement of both the educator and the educated in the educational process, which is recommended in the active pedagogy. Competences like knowledge, ability and skills that an individual acquires in all circumstances of life- either in family, in school or in society in general come from education. It is at the same time formal, non-formal or informal.

Pedagogy Meaning

Pedagogy comes from the Greek word paidagógia in this word "paidos" means "Child" and "ago" which means "lead"; so the meaning is "to lead the child". In olden days, a pedagogue was the slave in charge of taking roman children to everywhere, but particularly to school. Progressively, pedagogue loses its etymological meaning of accompanying a person and by extension; a pedagogue became synonymous of master, teacher or tutor.

Currently, even if the word pedagogue refers both meanings, i.e. educator and instructor, it refers also to the manner or method of teaching. The education offered by the pedagogue inclusive. It deals with all aspects namely intellectual, physical, socio-affective, moral, religious, etc

A best pedagogue not because he is a intellectual, or a deep thinker, though he may be so,

but because he know especially how to deal with his pupils, how to interest them, motivate them, communicate content, knowledge, skills, etc.,

Finally, we can conclude that pedagogy comprises what teachers do in classroom, but also their ideas, knowledge and attitudes in relation to the learners, the teaching and learning process and the curriculum.

Andragogy Meaning

The word Andragogy derives from the Greek word means "adult-leading". Andragogy means to a theory of adult learning that details some of the ways in which adults learn differently than children. For example, adults are more self-directed; self motivated, and ready to learn. Teachers can draw on concepts of Andragogy to increase the effectiveness of their adult education. The Andragogy is the combination of Adult Education, Adult Learning and Self Directed Learning. So, Andragogy is the art and science of helping adults learn, and a learner focused approach for people of all ages. Learning through SWAYAM is best example for Andragogy.

Assumptions about Andragogy

1. Self Concept: When we get older, our concept of which we are (self-concept) shifts from dependence towards independence and self-direction.
2. Past learning experience: As we grow and experience more life, we accumulate knowledge based on this experience that then becomes a more valuable resource for future learning. By the time we are adults, we have an abundance of experience to draw upon across a variety of contexts.
3. Readiness to learn: Our readiness to learn becomes more oriented to the developmental tasks of our social and work related roles.
4. Practical Reason to learn: As adults, our perspective changes from one of postponed application of knowledge to immediate application, and as such our orientation shifts from one of subject-centered to one of problem-centered.
5. Driven by Internal motivation : As we mature, the motivation to learn is internal

Principles of Andragogy:

Knowles (1984) discussed four principles that educators should consider when teaching adults

1. The learners are involved in the planning for themselves. They plan courses and evaluation pattern for themselves.
2. Mistakes and Positive Experience gives the strong feedback for their learning activities.
3. Learners are very much interested to teach the subjects that have real time problems.
4. Learner's learning is problem-centered and not content-oriented.

On the whole Andragogy emphasis on Self-directed approach in the adults

Nature of Andragogy

- Mainly Correlated with adult learning.
- It is mainly problem-centered.
- Teaching methods are specific and special for the learners.
- Maximum content is included which is immediate application in our life.
- The syllabus framed based on their experience.
- Mainly focused on Personal learning.
- The learners learn according to their self-speed. So, it is self-paced learning.

Pedagogy	Andragogy
Learner is dependent on the teacher.	Learner depending on self
The teacher is one who evaluates the progress.	The method requires self evaluation and direction and self-take responsibilities.
Learners come with little life experience.	Learner uses life experience as a foundation.
Students pass on to the next stage once they have completed the necessary Steps.	Learning is triggered by any number of life experience and not necessarily led by designated instructor.
Learning is proscribed by the instructed and sequenced in a way that Makes logical sense.	Learning is prescribed by self.

Learners are motivated by external sources, such as parents and teachers.	Learners are motivated intrinsic means: self-esteem, quality of life and problem solving.

Heutagogy

Heutagogy (based on the Greek for "self") was defined by Hase and Kenyon in 2000 as the study of self- determined learning. It is the highest level of learning. Heutagogy applies a holistic approach to developing learner capabilities, with learning as an active and proactive process, and learners serving as "the major agent in their own learning, which occurs as a result of personal experiences". As in an andragogical approach, in Heutagogy the instructor also facilitates the learning process by providing guidance and resources, but fully give up ownership of the learning path and process to the learner.

Characteristics

Heutagoical approaches encourage the students to find their own problems and questions to answer. Instead of simply completing the tasks teachers assign, these students seek out of areas of uncertainty and complexity in the subjects they study.

Teachers help by providing context to student's learning and creating opportunities for them to explore subjects fully.

Teacher provides the material but students decide how to negotiate the learning process.
The purpose is to establish an environment where learners can be determining their own goals, learning paths, process and product. Emphasis is placed on development of learner's capability. The Heutagoical approach is a progression from pedagogy to Andragogy to Heutagogy with learners likewise progressing in maturity and autonomy.

More mature learners require less instruction and course structure and can be more self directed in their learning. In Heutagogy, it is the learner who sets the learning course, designs and develops his own map of learning from curriculum to assessment.

Principles of Heutagogy

- Knowing how to learn is a crucial skill.
- Educators focus on learning process rather than content.

- Learning goes beyond the specific discipline.
- Learning occurs through self-chosen and self- directive action.

Double-Loop Learning

In double learning, learners consider the problems and the resulting actions and outcomes. In addition to it, there is reflection upon the problem solving process and how it influences learner's own belief and actions. Double loop learning occurs when learners reflect upon and question one's personal values and assumptions as being central to enhancing learning how to learn.

Heutagogy has its principles and practices rooted in Andragogy.
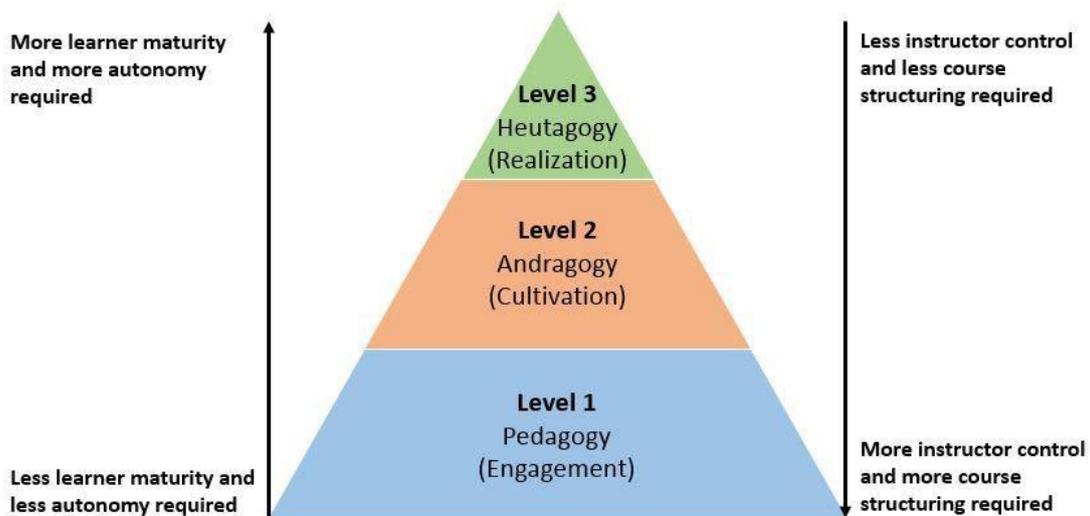
Heutagogy and Andragogy

Heutagogy (Self determined)	Andragogy (Self directed)

Double loop learning	Single loop Learning
Capability development	Competency Development
Non linear design and Non linear approach	Linear design and Linear approach
Learner directed	Instructor and Learner directed
Getting students to understand how they learn	Getting students to learn

Pedagogy, Andragogy and Heutagogy

Pedagogy	Andragogy	Heutagogy
Instructor Led	Self Regulated and Self Directed	Self Determined
Instructor is the center	Instructor and learners are center	Learners only center
The process is mostly unidirectional	The process is bidirectional	The process is multi directional
Learner contribution is limited	Learners contribute	Learners contribute and create
Mostly witnessed in school environment	Mostly witnessed in adult learning.	Mostly witnessed in research environment
Cognition	Meta-cognition	Epistemic-cognition
Child leading	Man leading	Self leading

Critical Pedagogy

The main aim of teaching is to promote the critical thinking capacity of students and thus, to create good citizens for a just society. Classroom teaching must also waken the values of justice and equality in student minds. Critical pedagogy is a vital teaching strategy, one designed to strengthen the awareness of learners about social equality, while improving their knowledge. But, now day's teachers prepare the student for scoring high marks in the examination. Due to this reason, teaching is most often test oriented rather than knowledge

oriented.

The center of the curriculum used the fundamental goal based on social and political criticises of everyday life. The educationist required implementation of range of educational causes with the goal of creating not only a better learning environment but also a better world. Students should think critically about the educational situation. It must be recognized connections between the individual problems and which they are embedded.

Critical pedagogy is an effective method to develop the critical thinking ability of students and to create positive behavioural change in students' lives. According to Freire critical pedagogy defined as a "critical approach to education, highlighting the importance of having learners engage actively in their learning process, and being able to find and develop their own opinion and position".

Kaya and Kaya state that critical pedagogy is a concept that addressed the problem of education and the education system itself. The purpose of critical pedagogy is to signal how question of audience voices, power and evaluation can actively work to construct schools into an environment where teachers and students can question the relationship between theory and practice, critical analysis and common sense, learning and social change.

Critical pedagogy is a relationship between teaching and learning. It takes shape in the classroom as a dialogue where teacher and students collaborate and investigate everyday topics, academic content, and social issues. Students become active agents of their own learning through guided dialogue carefully crafted into critical and democratic problem-posing frameworks for getting beneath the surface of public and private concerns of conditions for the production of knowledge, values, beliefs, and skills.

Interaction Analysis

Interaction Analysis is a tool used in the classroom to capture quantitative and qualitative aspects of verbal instructor behaviour. It captures the verbal behaviour of teachers and students as an observational device that is directly linked to the social-emotional environment of the classroom. The interaction analysis is using a system of categories to encode and quantifies classroom behaviour of teacher and student. The main purpose of interaction analysis is that a teacher can be trained to use them for analyzing classroom behaviour and for studying teachers own teaching activities. Interaction analysis is a process of encoding and decoding the study pattern of teaching and learning.

Coding process means, a code symbol is allocated to each category and a trained observer records by marking down code symbols. Decoding step, a trained analyst explains the display of coded data and reconstruct the original events on the basis of the encoded data even though he may not have been present when the data were collected. The teacher should be familiar with the interaction analysis encoding and decoding process. The classroom teaching of teacher's trainees is studied through interaction analyses during teaching training programme. The classroom observation sheet should be given to the teacher concerned and the matrix table should be prepared for him to decipher his own behaviour. The process of decoding provides him with own educational and behavioural components.

Characteristics of Interaction Analysis

1. The verbal interaction of the classroom can be made more effective and interesting.
2. Student's participation can be increased.
3. The teacher will turn his direct actions into indirect conduct.
4. The innovative behaviour, understanding and exercise of interaction modes can be established.
5. This interaction analysis can be used with microteaching.

Theoretical Assumptions of Interaction Analysis

The various theoretical assumptions, which are basic to idea of interaction analysis, are as follows;

1. In the classroom the verbal communication is predominant.
2. Verbal behaviour of teacher can be observed with higher reliability than most non-verbal behaviour.
3. The verbal statement of a teacher is consistent with his non-verbal gestures.
4. The teachers deploy a great deal of influence on the student.
5. The relation between student and teacher is very important in the teaching learning process.
6. It has been proved that social climate is related to productivity and to the quality of interpersonal relations.
7. The relation between classroom climate and learning is very important.

8. In the classroom teacher's verbal behaviour can be observed objectively using the observation technique.

9. According to feedback the teacher can Change his behaviour.

10. Teacher influence is expressed primarily through verbal statements.

Flander's Interaction Analysis

Ned. A. Flanders developed a system of interaction analysis to study about classroom interaction in a classroom when a teacher teaches. It is known as Flanders Interaction Analysis Categories System (FIACS). Flanders and others developed this system at the University of Minnesota, U.S.A. between 1955 and 1960. Flanders classified total verbal behaviour into 10 categories. Verbal behaviour comprises teacher talk, student talk and silence or confusion.

The ten categories are mentioned as under

1. Teacher Talk – 7 categories

2. Pupil Talk – 2 categories

3. Silence or Confusion- 1 category

Thus, the first seven categories include teacher talk. Next two categories include Students' talk. The last tenth category includes the small spans of silence or pause or confusion. The first 7 categories have been classified into

a) Indirect talk

b) Direct talk.

Teacher's Talk Indirect Talk

1. Accepts Feelings

2. Praise or Encouragement

3. Accepts or Uses ideas of Pupils

4. Asking Questions

Direct Talk

1. Lecture

2. Giving Directions

3. Criticizing or Justifying Authority

Student Talk

1. Student Talk Response

2. Student Talk Initiation

Neither Teacher Talk nor Pupil Talk

1. Silence or Pause or Confusion

		Category Number	Activity
Teacher Talk	Indirect Influence	1. Accept Feeling	Teacher Accepts feeling of student. Feeling may be positive or negative. Predicting and recalling feelings are included
		2 Praise or encourage	Teacher praises or encourages students' action or behaviour. Jokes that may release tension, but not at the expense of another individual. The teacher gives positive reinforcement by using the words like "Good", "Very Good", "Excellent".
		3. Accepts or uses ideas of students	It is just like 1st category. But in this category, the students' ideas are accepted only and not his feelings. If a student says on some suggestions, then the teacher may repeat in important point in his own style or words. The Teacher develops ideas or suggestions given by a student.
		4. Ask Questions	Asking question about content or procedures, based on The teacher ideas and expecting an answer from the student.
	Direct Influence	5. Lecturing	Giving facts or opinions about content or procedure expression of his own ideas, giving his own explanation or citing an authority other than a pupil.

		6. Giving Direction	The teacher gives directions, commands or orders or initiation, with which a pupil/student is expected to comply with, -Take down the notes -Open your books. - Stand up on the benches.
		7.Criticizes	When the teacher asks the pupils not to interrupt with foolish questions, then this behaviour is included in this category. Teacher's ask "what" and "Why" comes under this category.
Students Talk		8.Students' Response	It includes the student talk in response to teacher's talk. Teacher asks question, student gives answer to the question.
		9.Students' Talk Initiation	Talk by student that they initiate. Expressing own ideas; initiating a new topic; freedom to develop opinions and a Line of thought like asking thoughtful questions; going beyond the existing structure.
Silence		10. Silence	Pauses, short periods of silence and period of confusion in which communication cannot be understood by the observer.

Encoding Procedure

1. The observer is to memorize the code Numbers, in relation to key words which are indicated in ten category system.

2. The observer sits in the classroom in the best position to hear and see the participants.

3. At the end of every three seconds he decides which category best represents the communication events just completed. Thus the time involves in coding one tally for every 3 seconds, is 20 tallies in one minute. For example, when a teacher accepts student's feelings puts 1, when class is silent without any communication puts 10.

4. In this process only the serial numbers of the categories are recorded.

5. When the observation is completed, the observer shifts to some other room and prepares the details on the basis of those serial numbers of the categories.

6. In this observation process, the writing of serial numbers of the categories is called as ENCODING.

7. Writing details of behaviour on the basis of these categories is called as DECODING.

Advantages of Flander's Interaction Analysis

1. It is an effective tool to measure the social- emotional climate in the classroom.
2. It is also used for Student teacher feed back
3. It provides feedback to the Faculty development participant teachers.
4. It is a reliable method for observation of classroom teaching.
5. It is much useful in team teaching and microteaching.
6. Different matrices may be created and used to compare teachers' behaviour at various levels of age, gender, subject matter, etc.
7. It is an efficient instrument in the classroom to evaluate the social-emotional environment

Limitations of Flander's Interaction Analysis

1. It consumes much time in preparing 10 x 10 matrix without which, interpretation is not possible.
2. The observers have to be trained in order to code correctly.
3. Classroom interaction of pupil-pupil type is not considered here.
4. The system of coding and decoding procedure very difficult and expensive.
5. The totality of the classroom activity is not defined by the method. Some acts are still ignored and that is to say that the unrecorded elements of the teaching act are more relevant than those registered.
6. Efforts to characterize teaching are sometimes viewed as measuring the act of teaching and the teacher. Although descriptions can be used as an assessment basis, decision can only be taken after additional value assumptions have been defined and applied to data.

It is expensive and tedious and requires some form of automation to collect and analyse raw information

Galloway's Interaction Analysis

This system of Interaction Analysis was developed by Charles Galloway in the form of a teachers' training technique. It is basically a category type system involving categorization

of all sets of possible verbal and non-verbal behaviour of a teacher in the classroom while interacting with the students.

In total there are ten categories of verbal behaviour and ten categories of non-verbal behaviour. These are divided into three major sections:

1. Teacher talk

2. Student Talk

3. Silence and Confusion

In this system connection to the non-verbal signs is given along with the verbal behaviour, as the teachers do pass information to students through non-verbal signs. Theses signs can be either spontaneous and facilitate any effort to understand others and to be understood. Since, the teacher is the important person in the classroom and his behaviour is one of the most important factor in producing communication and continuous interactions. Thus, this system provides a special approach to a more complete analysis of interaction in the classroom as it is combination of both verbal non-verbal dimensions of teacher behaviour.

This method of interaction is named as IDER system. That means

I- Indirect Verbal Interaction D-Direct Verbal interaction

E- Encouraging Non-verbal Interaction R- Restricting Non-

Verbal Interaction

Assumptions in the System

1. Non-verbal communication of a teacher do, has a remarkable part in the classroom interaction.

2. As one cannot see when he behaves, so, a feedback is necessary for the behaviour.

3. The Non-verbal signals are essential and important, as they can reinforce and helpful to motivate the student.

4. Non-verbal communication can be more powerful during interaction in the classroom.

5. If one can aware of non-verbal incidents occurring around, then he can get a better understanding

6. To enhance the aspect of non-verbal communication among teachers, the training will play the vital role.

7. The system is based upon the theory of modification of the teacher's

behaviour.

Characteristics of the Galloway's Interaction Analysis

1. If we give correct feedback, teachers can change their verbal or non-verbal behaviour.
2. It helps in describing direct and indirect influence in teaching behaviour.
3. Importance is given on both verbal and non-verbal behaviour.
4. It is analysis of initiative and response of a teacher.
5. It is very much used in research in teaching.

Category wise verbal and Non-verbal Behaviour Recording of Classroom Events

The observer chooses a correct position in class to listen and watch smoothly. He must to be trained, must memorize the code number and letter. The observer marks the slash / (for encouraging) and dash (Restricting) to the right of recorded tallies for e.g. during lecturing when non- verbal behaviour also appear the observer writes s/ if non verbal behaviour does not appear "S-". A critical number is used to denote purely non-verbal behaviour e.g(S). Then note down code within every 3 seconds. For example a teacher is praising observer marks as 2 when lecturing writes S. Mark 20 observations per Minute.

Advantages

1. Modification of behaviour can be done through continuous feedback.
2. Give opportunity to a teacher to improve upon its Non-verbal behaviour.
3. It is reliable technique of observing and analyzing the verbal and non-verbal behaviour of a teacher in class.
4. It analyze the pattern of teacher
5. It is very much useful in research. i.e., to study about usefulness in pre-service and in-service training.

Limitations

1. Teacher may feel shy to express concept when a supervisor absorbs him.
2. It is very difficult to observe at the same time verbal and Non-verbal behaviour.
3. It could not be properly categorized.

4. It takes more time. So it is time consuming.

5. It does not describe the total classroom behaviour.

6. Student – Student interaction is not mentioned.

The value judgment is not included. Example Good behaviour and Bad Behaviour
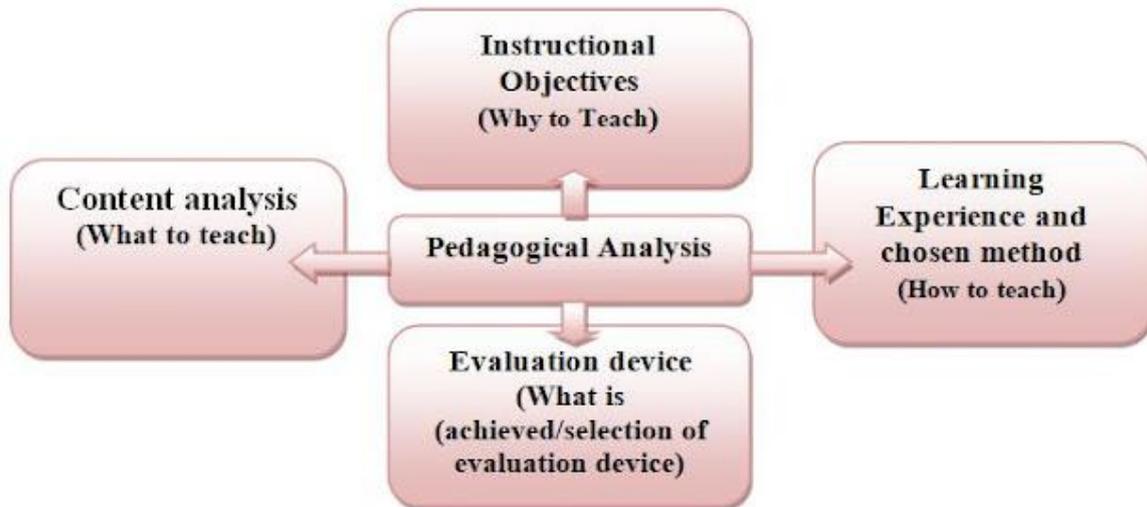
PEDAGOGICAL ANALYSIS

Introduction: The concept of pedagogy is not a new concept in the field of education. It was most popular before 1960 and also it was a course of study in education. After 1960, the term educational technology had replaced the term pedagogy. In between 1960 to 1980, the term educational technology was most popular all over the world in the discipline of education. After 1980, the term pedagogy has emerged as a new innovation in education. Both of these concepts -: educational technology and pedagogy are interrelated. The pedagogy helps in understanding the meaning of educational technology. Hence, educational technology is nothing without pedagogy. Pedagogical analysis is utmost important for a language teacher to make his/her teaching effective to achieve the aims and objectives of curriculum of a particular class.

Meaning of Pedagogical Analysis: Generally, the term pedagogy means is the art as well as science of teaching method. The science deals with effectiveness of teaching and art relates to artistry. Similarly the knowledge of teaching is achieved by practice and experience in classroom. The term pedagogical analysis is the combination of two words-: "Pedagogical" and "Analysis". It is the scientific and analytical study of teaching a topic. The sole objective of pedagogical analysis is to make teaching learning process more scientific, effective, and impressive. The term pedagogical analysis has been explained with the help of the following chart.

Teaching is a complex phenomenon as its nature is artistic and scientific. The most we considered teaching as an art, loaded with emotions, feelings, values, beliefs, and excitement, the most difficult is to drive rules, principles, or generalization. When we considered teaching as a science or at least partly science, then pedagogy is predictable to that extent, it can be observed and measured with some accuracy and research can be applied to the practice of teaching.

Components of pedagogical Analysis: Pedagogical analysis is based on four essential pillars along with their mutual relationships and interdependence for being considered essential in the effective teaching learning process. The components of pedagogical analysis are given below with the help of the following chart.

Four fold activities of Pedagogical Analysis: To make teaching learning process more effective, systematic, scientific and impressive we have to carry out these different activities of pedagogical analysis. Hence it is better to discuss and understand the following constituent parts of pedagogical analysis.

- Unit Analysis/Content Analysis.

- Formulation of instructional objectives.

- Learning experience and chosen method.

- Evaluation method.

The Five 5 Pedagogical Approaches in Teaching are:

1. Constructivism or the Constructivist Approach

2. Collaborative Approach

3. Inquiry-Based Approach

4. Integrative Approach

5. Reflective Approach

Constructivism or Constructivist Approach

Constructivist teaching is based on constructivist learning theory. It based on the belief that learning occurs as learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. Learners are the makers of meaning and knowledge.

Collaborative Approach

Collaborative learning is a situation in which two or more people learn or attempt to learn something together. Unlike individual learning, people engaged in collaborative learning capitalize on one another's resources and skills (asking one another for information, evaluating one another's ideas, monitoring one another's work, etc.).More specifically, collaborative learning is based on the model that knowledge can be created within a population where members actively interact by sharing experiences and take on asymmetry roles.

Inquiry-Based Approach

Inquiry-based is a form of active learning that starts by posing questions, problems or scenarios rather than simply presenting established facts or portraying a smooth path to knowledge. The process is often assisted by a facilitator. Inquirers will identify and research issues and questions to develop their knowledge or solutions. Inquiry-based learning includes problem-based learning, and is generally used in small scale investigations and projects, as well as research. The inquiry-based instruction is principally very closely related to the development and practice of thinking skills.

Integrative Approach

Integrative learning is a learning theory describing a movement toward integrated lessons helping students makes connections across curricula. This higher education concept is distinct from the elementary and high school "integrated curriculum" movement. Integrated studies involve bringing together traditionally separate subjects so that students can grasp a more authentic understanding. Interdisciplinary curricula have been shown by several studies to support students' engagement and learning. Specifically integrating science with reading

comprehension and writing lessons has been shown to improve students' understanding in both science and English language arts.

Reflective Approach

Reflective teaching is a process where teachers think over their teaching practices, analyzing how something was taught and how the practice might be improved or changed for better learning outcomes. Some points of consideration in the reflection process might be what is currently being done, why it's being done and how well students are learning. You can use reflection as a way to simply learn more about your own practice, improve a certain practice (small groups and cooperative learning, for example) or to focus on a problem students are having.