Course: General Methods of Teaching (8601)
Semester: Autumn, 2020

ASSIGNMENT No. 1

Q. 1 Give answers to the following short questions.

i. Define teaching in more effective terms.

Teaching is one of the instruments of education and is a special function is to impart understanding and skill. The main function of teaching is to make learning effective. The learning process would get completed as a result of teaching. So, teaching and learning are very closely related.

Teaching is a process in which one individual teaches or instruct another individual. Teaching is considered as the act of imparting instructions to the learners in the classroom situation. It is watching systematically. Dewey:- considers it as a manipulation of the situation, where the learner will acquire skills and insight with his own initiation.

(1) H C Morrison:- Teaching is an intimate contact between the more mature personality and a less mature one.

(2) Jackson:- Teaching is a face to face encounters between two or more persons, one of whom (teacher) intends to effect certain changes in the other participants (students).

(3) J B Hough and James K Duncan:- Teaching is an activity with four phases, a curriculum planning phase, an instructing phase, and an evaluating phase.

This definition presents the organizational aspect by which we can describe and analyze the teaching process.

(4) N.L.Gage (Democratic point of view):- Teaching is interpersonal influence aimed at changing the behavior potential of another person.

(5) Clerk:- Teaching refers to activities that are designed and performed to produce in students behavior.

We can define teaching according to the following three viewpoints.

(a) Authoritarian

(b) Democratic

(c) Liassez faire.

(a) Authoritarian:-

According to this viewpoint-

- Teaching is an activity of memory level only
- This teaching does not develop thoughts and attitude in the students.
- Is known as thoughtless teaching
- This teaching is teachers centric criticism of the teachers.

(b) Democratic teaching:-

According to this-

- Teaching is done at understanding level.
- Memory level teaching is the prerequisite (concept) is first memorized and then understand

- Such teaching is known as thoughtful teaching.
- According to this point of view, teaching is an interactive process, primarily involving classroom talks which takes place between teachers and student.
- Here students can ask questions and criticize the teachers.
- Here students can ask the questions and self-disciplined is insisted.

(c) Laissez Faire Attitude:-

- It is known as reflective level teaching.
- It is more difficult then memory level and understanding level of teaching.
- Memory level and understanding level teaching are must for the reflective level of teaching.
- It is highly thoughtful activity.
- In this level both students and teachers are participants.
- This level produces insights.

ii. What is conducive learning environment?

By definition, a conducive learning environment is a platform devoid of both physical intimidation and emotional frustration, which allows for a free exchange of ideas. The key proponents of the learning process are teachers and learners, as such their freedom of interaction, safety and respect should be equally guaranteed within the physical and emotive environment they find themselves in. The first port of learning is the physical environment, which includes, but is not limited to classrooms. The classroom should be neat, well ventilated and spacious to allow for free movement.

The chairs and desks should be arranged neatly to give the teacher a clear view of the class, with learners facing the chalkboard. All learning and teaching materials like chalks, books and charts should be at hand. The classroom should be safe to both the teacher and the learners. The smaller the classes, the more effective teacher pupil interaction is, and the more rewarding teaching becomes. Most learners also feel weighed down by larger numbers in classrooms. Emotions play a crucial role in both teaching and learning and therefore should be harnessed and embraced. Mutual respect is an indispensable ingredient in the recipe of learning, (Stronge: 2002; Wilen et al: 2004). A teacher who feels disrespected easily gets frustrated and is likely to deliver dismally; similarly a disrespected learner disengages himself/herself from the learning process. The learner should feel relaxed, respected, trusted, accepted and safe when his or her teacher is around. The teacher, therefore, should always be unintimidating, friendly, respectful, tolerant and accommodating for learners to warm up to him or her. He/she should be respected and not feared. Younger learners, especially the lower forms, tend to withdraw into their shells if the teacher exhibits aspects of intimidation and patronization. Under no circumstances should the teacher use disparaging remarks even to those physically or intellectually challenged, neither should he/she allow such remarks in the classroom. A marketer is quick to remind his customers that a good

product sells itself, but its reputation is heightened through repackaging and constant advertising; and it is also indisputable that an experienced captain or pilot is a safety assurance to passengers. Credibility sells, thus the competent teacher should be aware that learners are not dullards, as they can easily discern mediocrity from excellence. The effectiveness of any learning method applied depends largely on the teacher and its worth is determined by results. If the results are always poor, then the trainer's reputation dips, and the opposite is always true. His or her credibility both in deportment and delivery heightens reputation. As is the case with passengers on a plane, learners feel secure in hands they can trust, and that in itself regulates their behaviour and learning patterns. It is perilous therefore, for one to walk into a classroom clueless and ill prepared. Learning is an interaction of ideas whose effectiveness lies in the consideration of both the teacher and the learners as they all contribute to the outcome. The teacher may be the source of knowledge but is certainly not the only one, as learners also have access to other sources of information like textbooks, journals and the internet. In today's globalised world the teacher should be the custodian of the knowledge that learners acquire as raw data elsewhere, guide them in the acquisition of such information and hone it, so that it becomes effective as academic knowledge.

iii. Write down the five merits off lesson planning.

Every teacher needs a carefully drawn lesson plan, irrespective of the training, experience or competency. A **lesson plan** is required to assist the students in achieving the learning objectives, on the short term and long term as well. Having a lesson is exactly like having a complete and clear picture of how a learning process is going to take place and how students are able to grasp and retain what is being taught to them.

1. Inspiration

A thorough lesson plan inspired the teacher to improve the lesson plan further. You can make it better for the purpose of achieving the lesson plan in a better way.

2. Evaluation

A lesson plan helps the teacher to evaluate his teaching and to compare it with set objectives. This evaluation will help you in achieving the set targets in a better way .

3. Self-confidence

These lesson plans develops self-confidence in the teacher and make them to work towards definite goal.

4. Previous Knowledge of the Students

A teacher can take a proper care by considering the level and previous knowledge of the students in your class.

5. Organized Matter

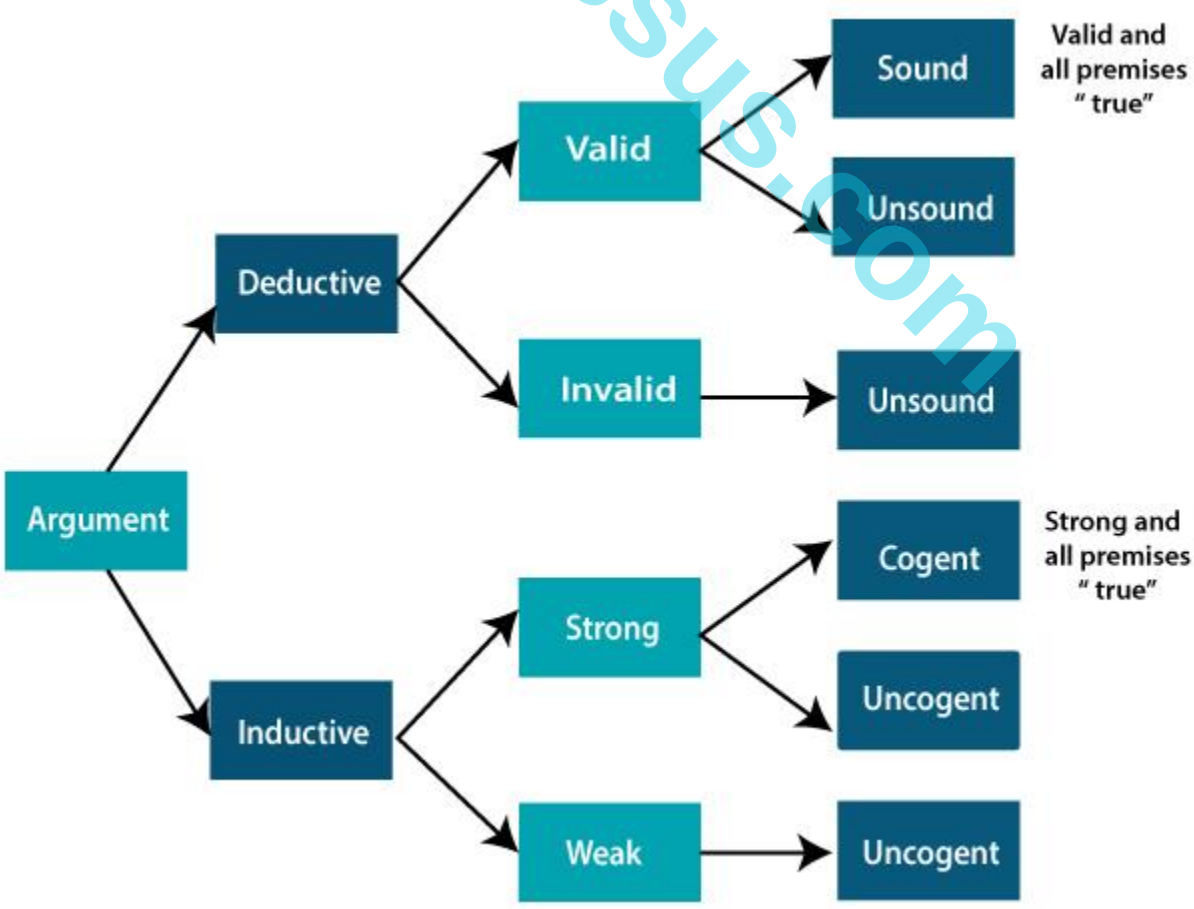
A teacher will be able to finish a particular lesson in a limited time frame. This will help him or her to make the students learn a better and precise manner.

iv. Differentiate between inductive and deductive reasoning.

Reasoning in artificial intelligence has two important forms, Inductive reasoning, and Deductive reasoning. Both reasoning forms have premises and conclusions, but both reasoning are contradictory to each other. Following is a list for comparison between inductive and deductive reasoning:

- Deductive reasoning uses available facts, information, or knowledge to deduce a valid conclusion, whereas inductive reasoning involves making a generalization from specific facts, and observations.
- Deductive reasoning uses a top-down approach, whereas inductive reasoning uses a bottom-up approach.
- Deductive reasoning moves from generalized statement to a valid conclusion, whereas Inductive reasoning moves from specific observation to a generalization.
- In deductive reasoning, the conclusions are certain, whereas, in Inductive reasoning, the conclusions are probabilistic.
- Deductive arguments can be valid or invalid, which means if premises are true, the conclusion must be true, whereas inductive argument can be strong or weak, which means conclusion may be false even if premises are true.

The differences between inductive and deductive can be explained using the below diagram on the basis of arguments:



v. Enlist the limitations of activity method.

Advantages of Activity Based Instruction:

1) The most important feature of activity based instruction is learning by doing. So this method of instruction can fulfil the natural urge of a growing child on one hand also can help them learn their lesson.

2) The method also promotes better understanding of a lesson among students as they learn the lesson by practicing the task themselves.

3) It inspires the students to apply their creative ideas, knowledge and minds in solving problems as well as promoting competitive spirit among them.

4) It also helps learner psychologically as they can express their emotions through active participation in something useful.

5) The method also helps in developing their personalities, social traits and inter-personal management skills.

Disadvantages of Activity Based Instruction:

1) The activity based instruction method requires long-term planning with minute details of the whole process because before engaging the learners, the teacher has to make sure that all students have sufficient knowledge and skills regarding the task they are going to perform. So this method can not be used on a regular and daily basis as it involves a lengthy procedure.

2) The objectives of the method can only be fulfilled if the planning of the lesson is flawless. If there is slightest flaw in the planning, this method would do more harm than good.

3) Learners have varied levels of merit and understanding. So less meritorious students might not prepare for a task as other which might lead to failure of objectives of the whole process.

4) Many renowned educationists also are of the opinion that the activity based method is more suitable for branches of experimental sciences and less useful for subjects of social sciences.

Q. 2 What is lesson planning? Describe the classical models of lesson planning.

A lesson plan is a teacher's detailed description of the course of instruction or "learning trajectory" for a lesson. A daily lesson plan is developed by a teacher to guide class learning. Details will vary depending on the preference of the teacher, subject being covered, and the needs of the students.

There are six key aspects to how we implement the Classical model at TCS. These are each described in more detail below.

1. We teach each subject using three tools of learning: Grammar, Logic, and Rhetoric.
2. We teach lessons that combine multiple subjects within each grade level. This is also called "vertical integration."
3. We feature a logical progression of course material and subjects as a student moves up grade levels. This is also called "horizontal integration."
4. We offer Greek, beginning in first grade, and Latin, beginning in second grade and continuing through to Rhetoric School.
5. We use a range of distinctly Classical teaching methods in both the on-campus and at-home classrooms.
6. We use Classically-focused content for our reading, texts, and enrichment materials.

We teach each subject using three tools of learning: Grammar, Logic, and Rhetoric.

We place emphasis on mastering these tools of learning, not only the traditional subjects. These three tools correspond to the student's natural stages of development so they work "with the grain" to effectively educate the student. The phases of learning used in the classical model at TCS are as follows:

- **Grammar**. The basic facts or particulars which must be known about the subject. Emphasis is on mastery and memorization of basic facts and figures at an age where children naturally enjoy and absorb information. Examples of this phase could include memorizing the 70 basic phonograms, solving math facts and story problems, memorizing a Grammar of History timeline, studying vocabulary and spelling, and learning Latin. This phase is emphasized in Grades Pre-K through 4.
- **Logic.** The rules by which those particulars are ordered or governed. Emphasis is on teaching logic at a point where children naturally like to argue anyway, helping them to do so in a well-trained fashion. Examples of this phase could include writing to support an argument, learning algebra and mathematical logic, performing critical analysis of literature, and applying the scientific method. This phase is emphasized in Grades 5 through 8.
- **Rhetoric.** The expression, synthesis, and application of a subject's grammar and logic. Emphasis is on clarity of expression, at the point where young adults are seeking to define and express themselves. Examples of this phase could include public speaking and composing in-depth essays. This phase is emphasized in Grades 9 through 12.

Summary of the Three Phases

	Grammar Phase	**Logic (Dialectic) Phase**	**Rhetoric Phase**
Grades in this phase	PreK to 4th	5th to 8th	9th to 12th
Student's developmental stage. See the Lost Tools of Learning	Poll-Parrot: children naturally enjoy and absorb information.	Pert: students enjoy argumentation and finding opposing points of view.	Poetic: young adults seek to define and express themselves.
Emphasis for mastery	Basic facts and figures.	Logic and argumentation.	Clarity of written and verbal expression.
Focus of the phase	The fundamentals of each subject.	The rules by which the fundamentals are ordered and governed.	The expression, synthesis, and application of the fundamental grammar and

			logic.

We teach lessons that combine multiple subjects within each grade level.

Curriculum is aligned vertically within each grade which means that l

essons are interrelated and assignments can span more than one subject. For example, as students learn about ancient Egypt, aspects of that culture would relate to a classroom's study of language, history, and science.

We feature a logical progression of course material and subjects as a student moves up grade levels.

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s students progress from year to year, there is a natural flow and continuity to their studies. Sometimes this is referred to as the c

urriculum being "horizontally aligned" between grade levels. Students begin a four-year sequence in Grade 1 that follows an historical timeline and allows related subjects to be taught in a complementary way. A new four-year sequence begins in Grade 5, and a final sequence begins in Grade 9. TCS graduates from 12th Grade will have completed three cycles of courses spanning from Creation to the modern day.

- In Math, students build on material they have learned and review frequently to ensure mastery.
- In History, the progression is as follows:
  Ancient History ► Medieval History ► Explorers, European History, Early Modern ► Modern History.
  This follows the timeline from Creation to the present day. This four-year cycle in History begins in Grade 1 and repeats three times until graduation in Grade 12. Each successive study is in greater depth and builds on the Grammar-Logic-Rhetoric progression.
- In Language Arts and Literature, students read from books covering their period in the historical timeline. In Logic School and Rhetoric School, students read from original sources from the historical periods.
- In Science, the Grammar School progression is as follows:
  Life Science ► Astronomy and Earth Science ► Chemistry ► Physics.
  This follows the historical order in which these disciplines were first thoroughly explored and understood. This four-year cycle begins in Grade 1 and ends in Grade 4. In Logic School, these subjects are covered again in a similar sequence with the addition of anatomy and physiology in Grade 8, as follows:
  Biology ► Earth Science ► Physical Science (Chemistry & Physics) ► Astronomy, Anatomy, & Physiology

This Logic School sequence allows the science sequence to align with the Rhetoric science sequence beginning in Grade 9. In Rhetoric School the order of the science subjects changes somewhat to align with a "Physics First" sequence and with the TCS Math curriculum.

Q. 3 Define and clarify the concept of motivation. Describe difference between intrinsic and extrinsic motivation.

Motivation is the **word** derived from the **word** 'motive' which means needs, desires, wants or drives within the individuals. It is the process of stimulating people to actions to accomplish the goals. In the work goal context the psychological factors stimulating the people's behaviour can be - desire for money. success.

When you're intrinsically motivated, your behavior is motivated by your internal desire to do something for its own sake -- for example, your personal enjoyment of an activity, or your desire to learn a skill because you're eager to learn.

Examples of intrinsic motivation could include:

- Reading a book because you enjoy the storytelling
- Exercising because you want to relieve stress
- Cleaning your home because it helps you feel organized

When you're extrinsically motivated, your behavior is motivated by an external factor pushing you to do something in hopes of earning a reward -- or avoiding a less-than-positive outcome.

Examples of extrinsic motivation could include:

- Reading a book to prepare for a test
- Exercising to lose weight
- Cleaning your home to prepare for visitors coming over

At first glance, it might seem like it's better to be intrinsically motivated than extrinsically motivated. After all, doesn't it sound like it would be ideal if you didn't need anyone -- or anything -- motivating you to accomplish tasks? But, alas, we don't live in such a motivation-Utopia, and being extrinsically motivated doesn't mean anything bad -- extrinsic motivation is just the nature of being a human being sometimes. If you have a job, and you have to complete a project, you're probably extrinsically motivated -- by your manager's praise or a potential raise or commission -- even if you enjoy the project while you're doing it. If you're in school, you're extrinsically motivated to learn a foreign language because you're being graded on it -- even if you enjoy practicing and studying it. So, intrinsic motivation is good, and extrinsic motivation is good. The key is to figure out why you -- and your team -- are motivated to do things, and encouraging both types of motivation. Research has shown that **praise** can help increase intrinsic motivation. **Positive feedback** that is "sincere," "promotes autonomy," and "conveys attainable standards" was found to promote intrinsic motivation in children.

But on the other side of that coin, external rewards can decrease intrinsic motivation if they're given too willy-nilly. When children received too much praise for completing minimal work or single tasks, their intrinsic motivation decreased.

The odds are, if you're reading this blog post, you're not a child -- although children are welcome subscribers here on the HubSpot Marketing Blog. But the principles of this study are still sound for adults.

If you're a people manager, be intentional with your praise and positive feedback. Make sure that it's specific, empowering, and helps your direct reports understand your expectations and standards. But make sure you aren't giving too much praise for work that's less meaningful for your team, or they might lose intrinsic motivation.

If you're an individual contributor, tell your manager when their feedback is motivating -- give them positive feedback, too. By providing positive feedback to your manager when they give you praise that keeps you motivated, you, in turn, will extrinsically motivate them to keep managing you successfully. (Meta, huh?)

Extrinsic rewards don't just involve bribery (although bribery can work). In some cases, people may never be internally motivated to complete a task, and extrinsic motivation can be used to get the job done.

In fact, extrinsic rewards can promote interest in a task or skill a person didn't previously have any interest in. Rewards like praise, commissions, bonuses, or prizes and awards can also motivate people to learn new skills or provide tangible feedback beyond just verbal praise or admonishment.

But tread carefully with extrinsic rewards: Studies have shown that offering too many rewards for behaviors and activities that people are already intrinsically motivated to do can actually decrease that person's intrinsic motivation -- by way of **the overjustification effect**.

In these cases, offering rewards for activities the person already finds rewarding can make a personally enjoyable activity seem like work -- which could kill their motivation to keep doing it.

If you're a people manager, use extrinsic rewards sparingly to motivate your team to take on new responsibilities or achieve lofty goals. Bonuses, commissions, recognition prizes, and promotions can be an effective way to motivate or reward your team for learning new skills, taking on new challenges, or hitting a quarterly goal. But make sure you're giving your team members the time and resources to explore skills and projects they're already excited about independently -- without making them a part of their regular responsibilities, which could demotivate them.

If you're an individual contributor, work for the rewards you want, but don't over-exhaust yourself in the pursuit of extrinsic prizes. Make sure you're taking time, in your job or in your personal life, to explore activities that you enjoy just for the sake of doing them, to keep yourself balanced.

Q. 4 Define the term inquiry approach. What is meant by inductive reasoning?

Inquiry-based learning is a learning and teaching approach that emphasizes students' questions, ideas and

observations. Instructors actively encourage students to share their thoughts and to respectfully challenge, test and redefine ideas. With inquiry-based learning, instructors and students share responsibility for learning.

Inquiry-based learning refers to a transformation of the traditional classroom. Students are encouraged to take part in group work to learn from their peers and participate in forms of guided learning, which is delivered by an instructor. This form of learning enhances comprehension—rather than memorizing facts and taking notes, students are now encouraged to discuss ideas among their peers. This form of learning also allows students to take ownership of their learning and increases their engagement with the content.

Now that you know more about this learning approach, let's take a look at the advantages and benefits of inquiry-based learning.

1. Enhances learning experiences for children

   Sitting in a classroom taking notes isn't always the most effective (or fun) way to learn. Rather than memorizing facts from the teacher, inquiry-based learning enhances the learning process by letting students explore topics themselves.
2. Teaches skills needed for all areas of learning

   As they explore a topic, students build critical thinking and communication skills. The cognitive skills that students develop can be used to improve comprehension in every subject, as well as in day-to-day life.
3. Fosters curiosity in students

   An inquiry-based learning approach lets students share their own ideas and questions about a topic. This helps foster more curiosity about the material and teaches skills students can use to continue exploring topics they are interested in.
4. Deepens students' understanding of topics

   Rather than simply memorizing facts, students make their own connections about what they are learning. This allows them to gain a better understanding of a topic than they would get by just memorizing and recalling facts.
5. Allows students to take ownership of their learning

   Students have the opportunity to explore a topic, giving them more of a sense of ownership over their learning. Instead of the teacher telling them what they should know, students are able to learn in a way that works for them.
6. Increases engagement with the material

   As a form of active learning, this approach encourages students to fully engage in the learning process. By allowing students to explore topics, make their own connections, and ask questions, they are able to learn more effectively.
7. Creates a love of learning

   Inquiry-based learning is designed to teach students a love of learning. When students are able to engage

with the material in their own way, not only are they able to gain a deeper understanding—they are able to develop a passion for exploration and learning.

Inductive reasoning is an approach to logical thinking that involves making generalizations based on specific details. Inductive reasoning is an important critical thinking skill that many employers look for in their employees.

Inductive reasoning is an example of an analytical soft skill. Unlike hard skills, which are job-specific and generally require technical training, soft skills relate to how you interact with people, social situations, and ideas.

Employers need individuals who can discern patterns and use inductive reasoning to develop strategies, policies, or proposals based on those patterns. That makes inductive reasoning a useful skill to highlight in your job applications and job interviews.

With inductive reasoning, you make observations to reach a conclusion. This skill is useful in making predictions and creating generalizations. Your conclusion may not always be true, but it should be reasonable based on the evidence.

For example, you notice that customers have bought more of your product during the third quarter of the year for the past three years. Based on that information, you predict that your customers will buy more of your product during the third quarter of the coming year and you increase production to be prepared.

In practice, inductive reasoning often appears invisible. You might not be aware that you're taking in information, recognizing a potential pattern, and acting on your hypothesis. But if you're a good problem-solver, chances are that these examples will feel familiar:

1. A teacher notices that his students learn more when hands-on activities were incorporated into lessons. He decides to include a hands-on component in his future lessons regularly.
2. An architect discerns a pattern of cost overages for plumbing materials in jobs and opts to increase the estimate for plumbing costs in subsequent proposals.
3. A stockbroker observes that Intuit stock increased in value four years in a row during tax season and recommends clients buy it in March.
4. A recruiter conducts a study of recent hires who have achieved success and stayed on with the organization. She finds that they graduated from three local colleges, so she decides to focus recruiting efforts on those schools.
5. A defense attorney reviews the strategy employed by lawyers in similar cases and finds an approach that has consistently led to acquittals. She then applies this approach to her own case.

Q. 5 What is Problem Solving Approach? Specify the role off teacher in problem solving learning.

In order to effectively manage and run a successful organization, leadership must guide their employees and develop problem-solving techniques. Finding a suitable solution for issues can be accomplished by following the basic four-step problem-solving process and methodology outlined below.

Step	Characteristics
1. Define the problem	Differentiate fact from opinion Specify underlying causes Consult each faction involved for information State the problem specifically Identify what standard or expectation is violated Determine in which process the problem lies Avoid trying to solve the problem without data
2. Generate alternative solutions	Postpone evaluating alternatives initially Include all involved individuals in the generating of alternatives Specify alternatives consistent with organizational goals Specify short- and long-term alternatives Brainstorm on others' ideas Seek alternatives that may solve the problem
3. Evaluate and select an alternative	Evaluate alternatives relative to a target standard Evaluate all alternatives without bias Evaluate alternatives relative to established goals Evaluate both proven and possible outcomes State the selected alternative explicitly
4. Implement and follow up on the solution	Plan and implement a pilot test of the chosen alternative Gather feedback from all affected parties Seek acceptance or consensus by all those affected Establish ongoing measures and monitoring Evaluate long-term results based on final solution

Teacher's Role in Problem Solving

1. Give suggestions not answers
2. Offer a problem solving heuristic
3. Teach a variety of problem solving strategies
4. Allow time for the students to struggle with the problem

5. Choose problems that require time to think through a solution
6. Provide a variety of problems
7. Allow students time to practice a heuristic and strategies
8. Give similar or the same problem in different ways
9. Ask questions that encourage students to:
   - think divergently
   - explain how they are thinking.
   - to share strategies
   - think of other ways that the same problem could be asked
   - think of real life problems that are or relate to the problem
   - discover different problems that can be solved with the same strategy
   - discover multiple ways to solve the problem
   - reflect or check their solutions
   - reflect and discuss how they imagined a certain strategy might be possible
   - explain why they have confidence in their solutions
10. Provide encouragement and appreciation:
   - appreciate different solutions and strategies
   - encourage students to find multiple solutions to a problem
   - encourage students to take time to solve problems
   - compliment students on good problem solving strategies whether they reach a solution or not
   - make sure students know what a compliment or praise specifically relates to about the problem and problem solving
   - encourage students to keep trying and to learn by correcting mistakes
   - let students know that problem solving is difficult and rewarding
   - share and discuss attitudes and dispositions that are conducive to problem solving
11. Be a role model:
   - solve problems yourself
   - make problem solving a top priority
   - let students know that problem solving is an integral part of your curriculum
   - look for and comment on problem - solving situations anywhere they occur
   - imbed teaching and learning in a problem - solving format
   - use sketches, manipulatives, charts, graphs, and any other kind of representation that can thought
   - Use problem solving strategies and vocabulary