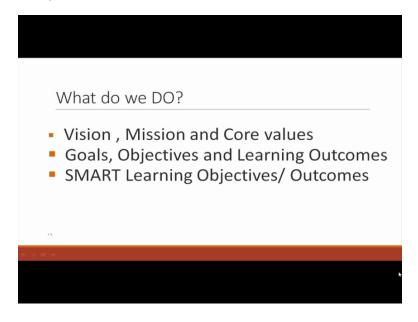
Outcome based Pedagogic Principles for Effective Teaching Dr. Tamali Bhattacharyya Center for Educational Technology Indian Institute of Technology Kharagpur Lecture 08 Outcome based Education

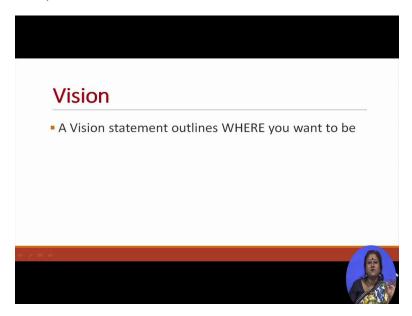
Outcome based education.

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Today we will discuss vision, mission and core values. Goal objectives and learning outcomes and how to write SMART learning objectives or outcomes.

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So, there is confusion between what is the vision and mission, okay.

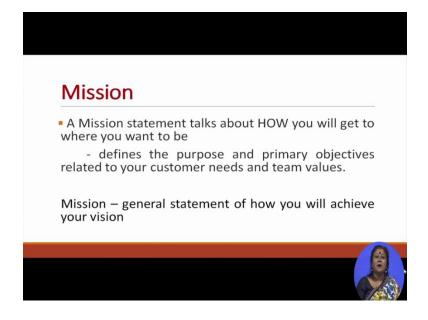
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So, what is a vision? A vision statement outlines where you want to be, okay. So, in that case, it is a big picture idea of what you want to achieve over a long period of time that is the vision. So, it is just is a future plan.

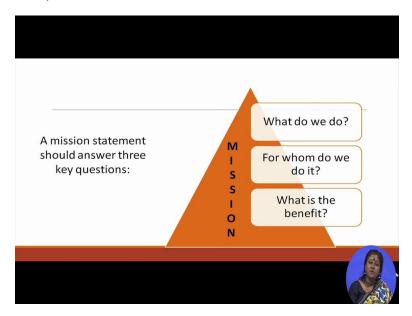
So, in that case features of that effective vision statement is that the vision statement should be concise and easy to remember. Everyone in the organization can focus on the vision, everyone. So, when people you know focus on the vision, their daily activities are automatically directed towards achieving the vision. So, if you know the vision then automatically we will go to the vision.

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Now, what is mission? A mission statement talks about how you will get to where you want to be. If you know the vision you will go for the mission. So, it defines the purpose and primary objectives related to your customer needs and team values. So, mission is the general statement of how you will achieve your vision.

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A mission statement should answer three key questions. What are those questions? What we do? For whom do we do? And where is the benefit?

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So, the features of the effective mission statement, there is some purpose and values of the organization. What business the organizations want to be in the in the case of the products, services or market or who are the organizations primary clients, okay. So, in that case what are

the responsibilities of the organization towards these clients and what are the main objectives that support the company in accomplishing the mission.

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So, suppose IIT Bombay's vision is, to be the fountainhead of new ideas of innovators in technology and science.

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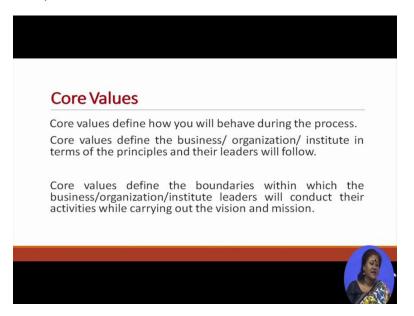
This is the vision and the mission to achieve the vision, the mission is to create an ambience in which new ideas, research and scholarship flourish and from which the leaders and innovators of tomorrow emerge. So, that is the mission.

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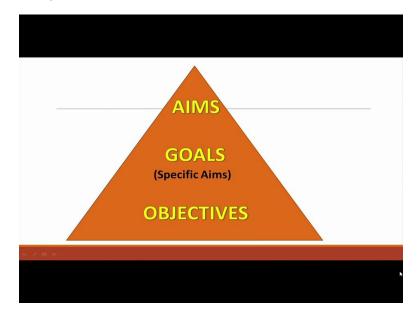
So, what is the difference between vision and mission? A vision statement is what the organization wants to become it and a mission statement is what the organization is all about. So, a mission statements gives the overall purpose of an organization while and a vision statement, it describes a picture of a perfect one preferred future that is the vision.

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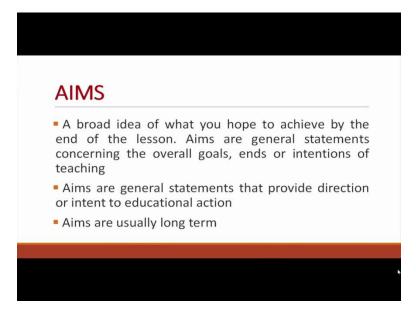
Now, if we know the mission and vision now we have to know what is the core values. Core values define how you will behave during the process. Core values define the business, organization, institute in terms of the principles and their leaders will follow. So, in that case core values defines the boundaries which the organization, institutes leaders will conduct, their activities while carrying out for the vision and mission. So, this is all about vision, mission and core values.

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Now, we will explain what is the aims, goals and objectives.

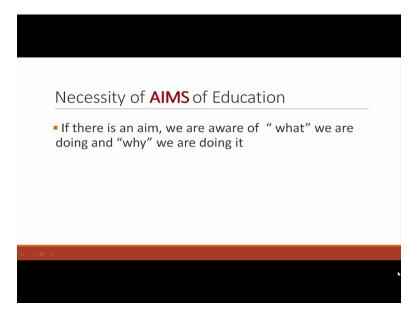
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Now, what is an aim? Aim is a broad idea of what you hope to achieve by the end of the lesson. Aims are general statement. It concerning the overall goals, ends or intentions of teaching. Suppose, you want your learner will you want your learner after your teaching in achieve this goal, right. So, if you consider that there is an river and the opposite of the river the goal is there. So, the learner has to go and achieve that goal.

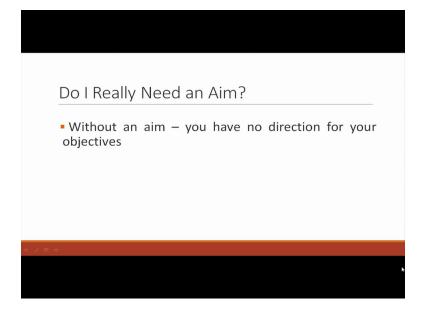
So, there is some stepping stones. So, right these stepping stones we call the objectives. So, that is the opposite side that goal that is the aim and the stepping stones is nothing but the objectives. So, in that case aims are general statements that provide direction okay and or intent to educational action, right. So, aims are usually long term. Long term, outcome is a mapping with that aims.

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Now, is it necessary of the aims in education? If there is an aim we are aware of what we are doing and why we are doing it. So, there should be an aim. Aims are necessary to access the outcomes or results of the educative activity.

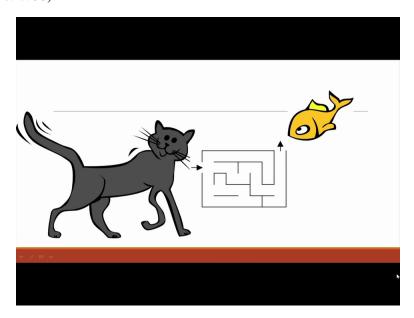
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Now, do I really need an aim? Without an aim you have no direction for your objectives. So, you know to cross the river that is the aim and the so in that case so, if you have aim then only you will get the objectives and you should decide on the aim of your lesson before writing the

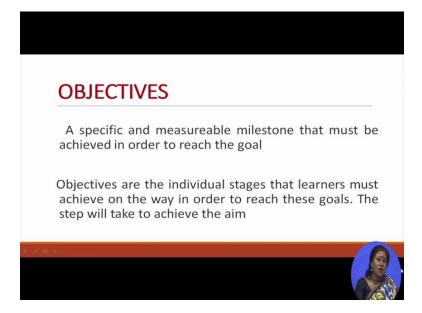
objective. So, in a lesson what I want if I know what I want from the learner if I know that then it is easy for us, it is easy for the teacher to describe there was the objective is.

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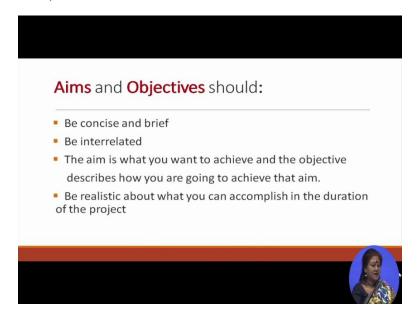
So, here in this picture watch there is one cat and other a fish. So, the cat he wants to eat that fish. So, fish to eat the fish is his aim and the cat is trying to cat is thinking how to go and catch the fish. So, then he will decide so that is his objectives and to eat the fish it is his aim.

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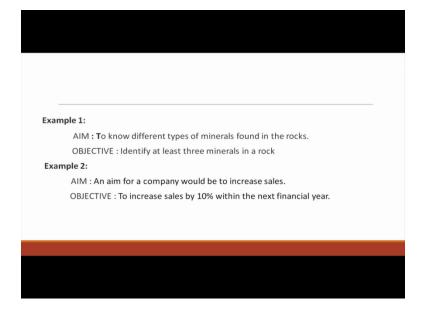
So, what is the objective? It is a specific and measurable milestone that must be achieved in order to reach the goal. So, objectives are the individual stages that learners must achieve on the way in order to reach these goals. So, the step we will take to achieve the aim.

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Now, aims and objective should be it should be concise and brief, it should be interrelated. The aim is what you want to achieve and objective describes how you are going to achieve the aim. It should be realistic about what you can accomplish in the duration of the project.

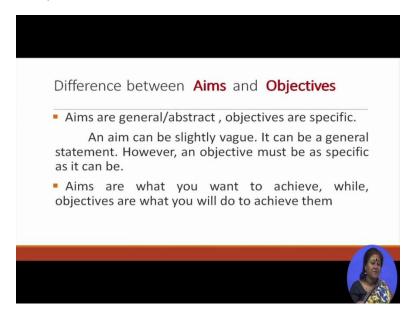
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Suppose one example, aim to know the different types of minerals founds in the rocks. This is the aim and objective I will say identify at least three minerals in a rock. The aim is identify to know different types of minerals founds in the rocks, but what is the objective? We will in that case we will say identify at least three minerals in the rock.

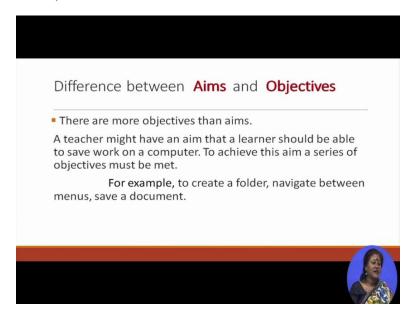
Now, suppose example two, an aim for a company would be to increase sale. Increase sale is in a year increase sale this is the goal but what is the objective to increase cell by 10 percent within the next financial year that is more compact and that is more specific, right. So, there is a difference between aims and objectives.

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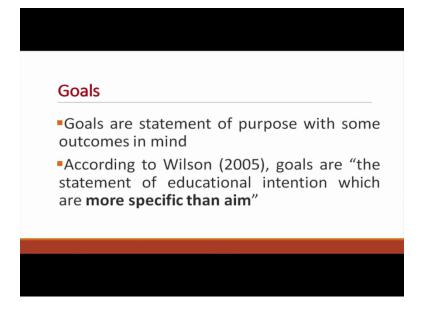
Aims are very general and abstract but objectives are very specific. Aims little bit slightly vague, this is the aim. It can be a general statement but objective it must be a specific that they the learner have to do this. So, it is very specific. Aims are what you want to achieve but objectives are what you will do it to achieve you have to don it in objective, right.

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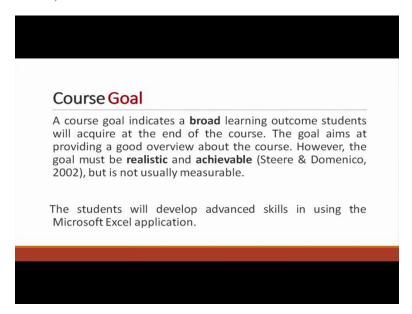
So, there are more objectives than aim, suppose a teacher might have an aim that a learner should be able to save work in the computer. So, in that case the learner have to do, the learner have to create a folder, navigate between the menus, save a document, these things. So, these are objectives but the teachers aim that learner should save a work in a computer right. So, aims are like strategy and objectives are like (())(10:27).

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Now, goals what is goals? Goals is nothing but specific aims, goals are the statement of purpose with some outcomes in mind. So, according to Wilson, goals are the statement of educational institution which are more specific than the aims right.

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So, suppose a course goal, a course goal indicate a broad learning outcome students will acquire at the end of the course. And the end of the course than is the goal. The goal ends are providing a good overview of a the course however; the goal must be realistic and achievable but it is not usually measurable but objective is measurable but goal in that case, it is realistic and it should be achievable. You know you cannot, you know imagine that your learner will if you do not you know at unrealistic you know, unrealistic goal you do not give them. So, course objective indicates a specific learning outcome which derived from the course goal.

All course learning objective should be measurable which means that it is easy to observe when if students succeed or fail to learn a specific task. So, there is a difference between the goals and the objectives.

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erence between Goals and Objectives				
	GOALS	OBJECTIVES		
Meaning	The purpose toward which an endeavour is directed	Something that one's efforts or action are intended to attain or accomplish; purpose; target.		
Principle	Based on Ideas	Based on Facts		
Measure	Goals may not be strictly measurable or tangible.	Must be measureable and tangible		
Orientation	Teacher-focused	Learner-centered		
Action	Generic Action	Specific Action		
Time Frame				

Goals from the meaning point of view, the purpose toward which an endeavor is directed. Objectives is something that one's effort or actions are intended to attain or accomplish purpose or target. So, from the principle point of view goals, it based on the ideas. Ideas of the teacher this is the goal and object is based on the facts whatever they have to do principle is based on the facts.

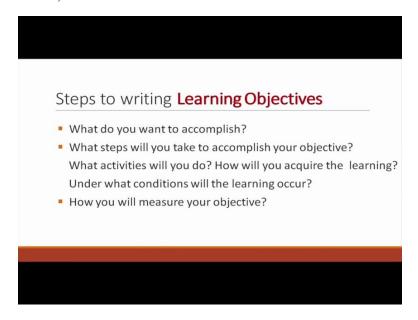
From the measure point of view, goals may be strictly measurable or tangible, but what is the difference between the goals and objectives. Now, from the meaning point of view, the goals is the purpose towards which an endeavor is directed that is the goals and object is something that one's efforts or actions are intended to attain or accomplish purpose that is the target. So, from the principle goals is based on the ideas but objective, it based on the facts.

From the measuring measure point of view, goals may not be strictly measurable. It is may not be strict it is the aim right, it is the goal of the teacher but what goal of the learner or the from the learner point of view from the instructors point of view but objective, it must be measurable and tangible.

From the orientation point of view I can say goal is teacher oriented but objective is learner oriented what the learner can do and in the goals means what the teacher wants. So, action it is generic action but in the objective it is specific action. Now, in the from the time frame, it is

longer term right goal, in the longer term the learner can achieve but objective it is mid to short term.

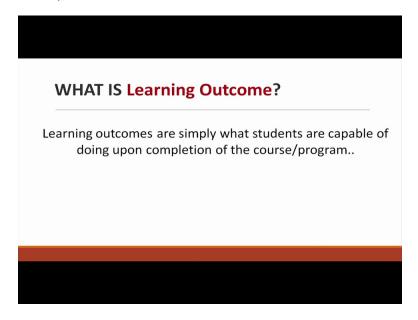
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So, to there are some steps to writing the learning objectives and some (())(14:29) when we will write we will check that is whether it is you know this question always you when we will write the objective we will keep this in our mind what do you want to accomplish, right.

What steps will you take to accomplish your objective? What activities will you do? How we will acquire the learning? Under what condition will the learning occur? How will you how you will measure your objective right? So, what now these things when you will write the learning objective we will keep in our mind.

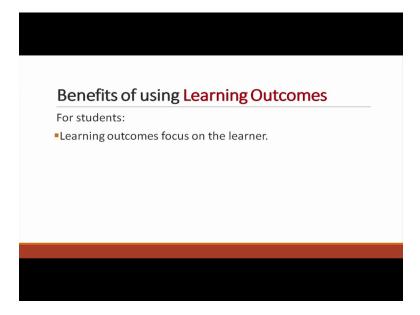
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Now, what is learning outcome? What is learning outcome? Learning outcomes are simply what students are capable of doing upon completion of the course or the program.

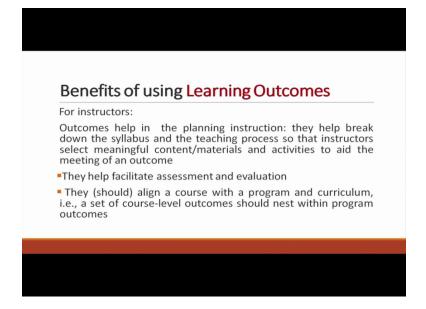
A good learning outcomes states what a student will know or be able to do at the end of the instruction. At the end of the 40 hours of the course what the student can do it that is important not the route learning. So, it focuses on students' performance. So, what they can perform right. So, there are some benefits using learning outcome from students point of view what's that learning outcome, it focuses on the learner.

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Well-written learning outcomes should give student precise statements of what is expected of them if the learning outcome is written so if they okay, after you know learning or after studying we will achieve this what the teacher wants that is the student can this is the learning outcome if they know, it is easy for them to learn on their own. Students can use the outcomes to measure and guide their own learning and determine how much support to ask for pursue.

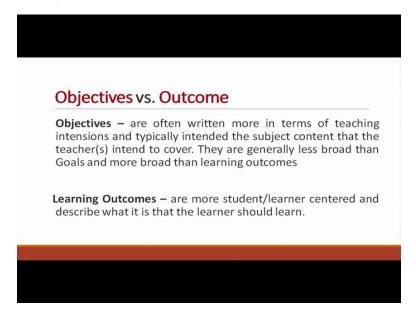
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Benefits for of using learning outcome from the instruction point of view what is that, outcomes help in planning instruction right. They help the break down the syllabuses and the teaching processes. They can break down so that the instructor select some meaningful content or materials and activities to meet the meeting of an outcome.

So, they help facilitate assessment and evaluation was that if they know that this is the learning outcome and this the learner will get in that case they can make their question paper, assessment and evaluation paper according to that. So, they should align a course with a program and curriculum that is a set of course level outcome should met within the program outcome that we will discuss in our next lesson how they can that the assessment and evaluation they can do.

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Now, there is a difference between the objectives and outcomes. Now, what the objectives are often written mode in terms of teaching intentions right and typically intended the subject content that the teachers intent to cover what the amount the teacher intend to took cover it. They are generally less broad than goal if the goal you know, it is very broad. It is generally less broad than the goal but it is more you know broad than the learning outcomes. So, goal, objectives, learning outcome.

Now, learning outcome are most students or the learner centered and described what it is that the learner should learn. So, there is a difference between the objectives and the outcomes. So

objective something that owners effort or actions are intended to attain or accomplish purpose target after a given period of time but the outcomes something that owners, efforts or actions are intended to attain or accomplish but in a given period of time, okay. So, once the principle is based objective it based on the facts.

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Difference between Objectives and Outcomes				
	OBJECTIVES	OUTCOMES		
Meaning	Something that one's efforts or actions are intended to attain or accomplish; purpose; target after a given period of time	Something that one's efforts or actions a intended to attain or accomplish; purpose target in a given period of time		
Principle	Based on facts	Based on detailed facts		
Measure	Must be measureable and tangible	Must be measureable and Tangible as per the objective		
Plan	Medium plan	Narrow plan		
Action	Specific Action	Specific Action on each topic		
Time Frame	Mid to short term	Short term		

An outcome it based on the detailed facts. Measure you know, it must be measurable and tangible but outcome, it must be measurable and tangible as per the objective if this objective is given so that learning outcome whether it is achieve or not that we have to see. The plan objective is medium plan but outcome is more narrow learning outcome is a narrow plan. Action, objective is a specific action but outcomes is the specific action of each topic right. So, time frame it is mid or short time but it is very short term right.

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What the teacher expects students to know and be able to do (as a whole) at the end of the instruction What the students are able to do (spontage) the end of the instruction	ecific) at
Not behavioural in nature – Verbs: Know, Understand Stated in behavioural terms – Verbs: I Discuss, Evaluate	dentify,
One course objective may generate several learning outcomes are derive one course Objective	ed from
Objectives are intended results or consequences of instruction, curricula, programmes or activities Outcomes are achieved results or consequences of what was learned – evidence that some lear place	

So, course objectives and course learning outcomes, suppose what the teacher expect students to know and be able to do at the end of the instruction that is the course objective and learning outcome what the students are able to do so, it is specific do at the end of the instruction. Now, it is note course objective is not behaviorally in nature verbs is know, understand, you know I may not you may understand I may not one student can understand another may not but in the learning outcome, the action was the very selected identify this, discuss this, evaluate your answer, justify your answer so that is the learning outcome.

One course objective may generate several learning outcomes so right but learn goal several learning outcomes all together they are derived from one course objective. Now, objectives are intended results or consequences of instruction, curricula programs or activities but outcomes are achieve results of the consequences of what was learned. So, evidence that some learning took place that is the thing learning outcome.

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So, this in this picture. The goal goals is the broad thing, it will the critical thinking, transfer of fountains, creativity. So, this is the goals in that goals apart that is the objectives. Objective is the stepping stones to achieve that goal right. So, in that case the instruction you know analysis of the you know case studies, case discussion you know to achieve that goal the learner have to do the case studies, case instruction and what is the learning outcome using this instruction, analysis and discussion what the learner can produce right that is the learning outcome. So, that is the difference that is the, you know total picture you can I can say that the goals, objectives and learning outcome.

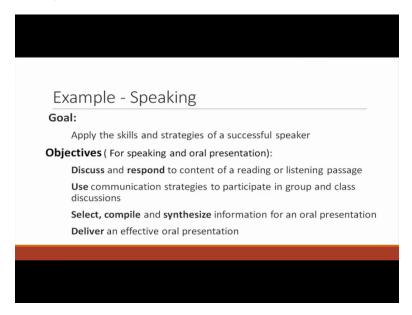
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Syllabus	
Course Goals	-
Objectives	-
Outcomes	
ļ.	

Now, in the syllabus if I write what is the course goal as a teacher what is the course goal? What the objectives? What the learning outcome you want from your learner, right. If it is clear then it is easy for the learner to know okay, this teacher he wants that after 40 hours of lecture they wants that so that they can prepare you know on their own to achieve that in the class or they can you know concentrate so that they can get that learning outcome.

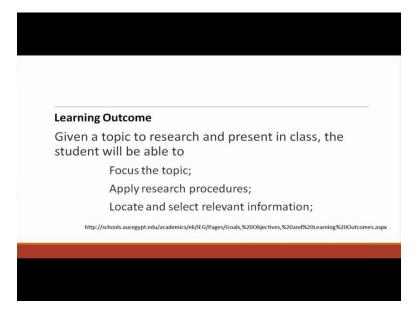
Now, suppose example one speaking we write the goal is the apply the skills and strategies of a successful speaker so that is the goal. Now, what is the objectives for speaking or oral presentations suppose discuss and respond to content of a reading or listening passage, right. Discuss respond it is important, use communication strategies to participate in group and class discussions.

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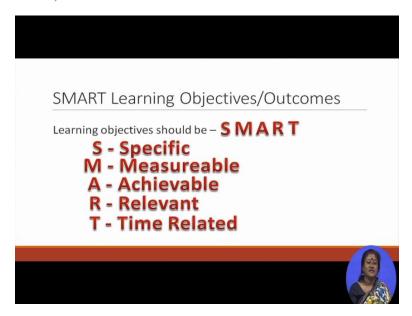
Select compile and synthesize information for an oral presentation and deliver an effective oral presenter. So, that is the objectives the teacher thinks.

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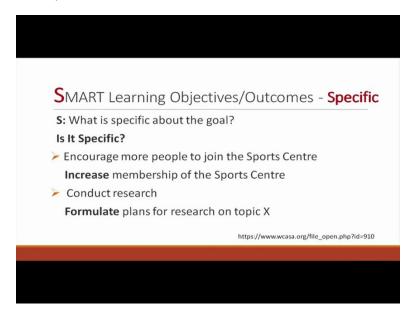
So, what is the learning outcome? Given a topic to research and present in class. The student will able to focus on the topic, apply research procedures and locate and select relevant information. So, that is the things goals, objectives and outcomes.

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Now, I will how to write a SMART learning objectives or outcome. Learning objective should be SMART. What's that SMART S for specific M for measurable A for achievable, R for relevant and T for time related right.

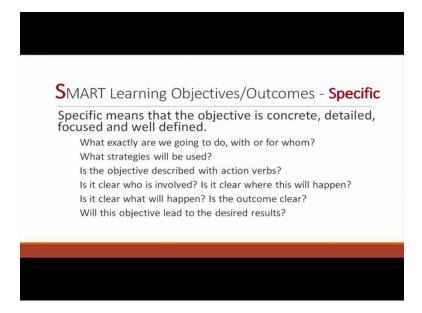
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So, smart learning objective the first S specific. What is specific about the goal is first, encourage more people to join the spots center, is it specific? Now, increase membership of the sports center. So, encourage you know that is the increase it so just very specific, okay conduct

research, is is more specific? Number, formulate plan for research on topic X. so, this is more specific. So, specific means that the objective is concrete detailed focused and well defined right.

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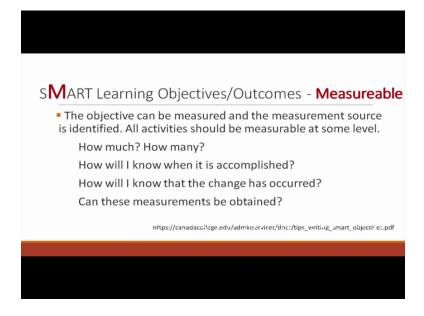
So, some question you know you will think that when there is a specific when write the objective or outcome. What exactly are we going to do, with or for whom? What strategies will be used is the objective described with action verbs? Is it clear who is involved? Is it clear where this will happen? Is it clear what will happen? Is the outcome clear? So, will the objective lead to the desired results? So, it should be very when we will write the learning objective and outcome, it should be very specific.

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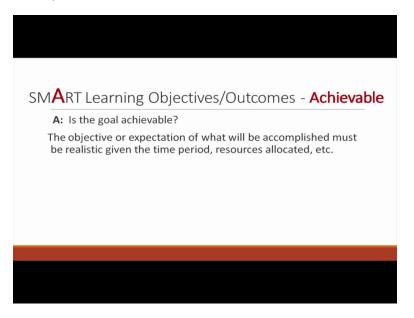
Now, the M for the measurable. M is the goals measurable how we will be determine that the goal has been achieved. So, it should be measurable. So, increase membership of the sports center but is it measurable? No. Increase membership of the sports center by suppose 10 percent. So, 10 percent you know it is measurable right. Formulates plans for the research topic X but here, formulate plans for the research on topic X and submit grant application to X research council. So, it is measurable.

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So, the objective can be measured and the measurement source is identified right. All activities should be measured at some level. How much? How many? How will I know when it is accomplished? How will I know that the change has been occurred right? Can these measurements be obtained? So, all these you know we will when we will write is it measurable that point we should keep it in our mind.

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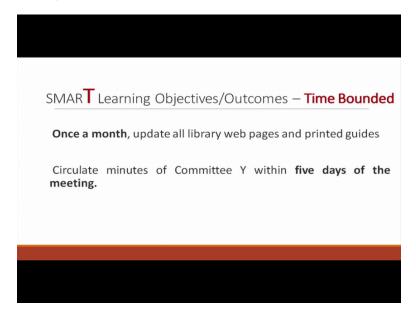
SMART it should be A, A for achievable. Is the goal achievable? So, the objective if I say a expectation of what accomplish must be realistic you know within the time period. So, is it really achievable? So, can we you know if I think that they can do that, it is you know our, problem. So, in that case the objective is achievable or not that we have to take. So, can we get it done in the proposed time frame? Do I understand the limitations and constraints? Has anyone else done this successfully is this possible? So, this is for the achievable part that SMART A.

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What is R? R is the goal realistic to performs performance expectations or professional development to be realistic. It must represent an objective toward believe you are both willing and able to work your objective is probably realistic if you truly belief that it can be you have to believe that okay, it can be achievable so, it should be realistic. Objective should be challenging but achievable they should not be unrealistic, suppose if I think that you know that is it is my plan is to lose 10 pounds a in weight but (is it) it is unrealistic to plan if I lose 10 pounds you know in one week, it is very difficult. So, this is the plan should be very realistic.

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T is for time bounded, increase membership of the sport center by 10 percent the previous (())(29:12) but increase membership of the sports center by 10 percent over the next six months. So, that is the time period we should maintain. Formulate plans for the research topics X and submit grant application to X research council but by 1st June 2009, so this 1 st June 2000 that time bounded. Once a month, update all library web pages and guides once a month. Circulate minutes of committee Y within 5 days of the meetings. So, five days of the meeting is important. So, that in the SMART we should be when we will write the learning objectives and learning outcome we will very we will think this five points carefully and then only we will write the learning objectives. Thank you.