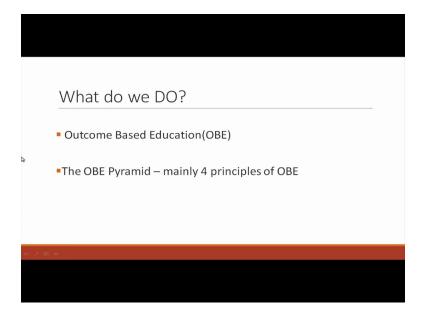
Outcome based Pedagogic Principles for Effective Teaching Dr. Tamali Bhattacharyya Center for Educational Technology Indian Institute of Technology Kharagpur Lecture 09 Outcome based Education (Contd.)

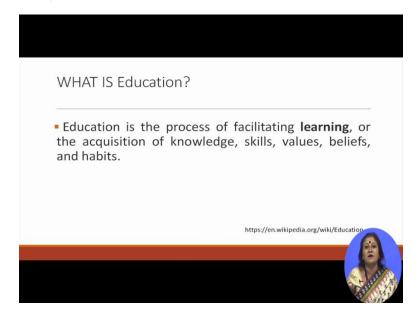
Outcome based education.

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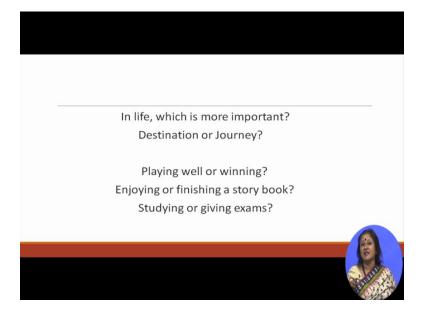
Today what we will do we will do what is that outcome education and I will teach you the OBE pyramid mainly the four principles of OBE.

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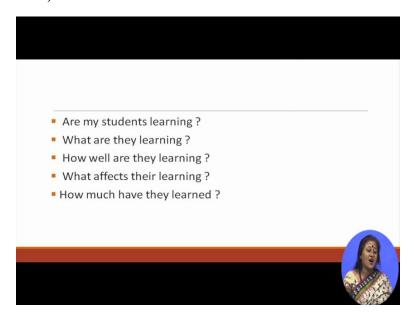
Now, before starting the outcome based education, it is better to learn what is education. Education is the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs and habits according to the Wikipedia. Here, the main component here is learning, rather than the acquisition of knowledge.

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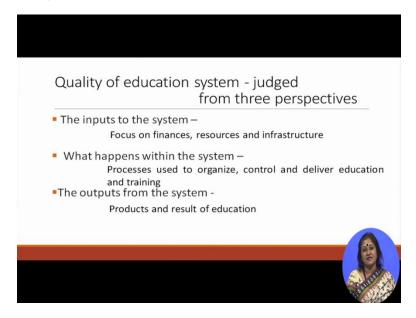
Now, let us come to some philosophical question. In life, which is more important? Destination or journey? Playing well in a game or winning the game which one is important? Enjoying a story book or just finish the story book? Studying it or giving exams?

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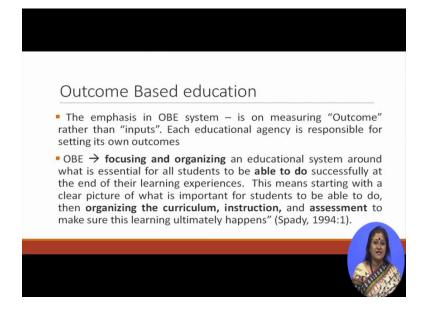
So, nowadays what we notice that the students, they just do not want to come to the class. So, some questions always in the teachers mind that are my students learning? What are they learning? How well are they learning? What affects their learning and how much have they learned? So, all these questions the teachers think and so, the priority of teaching you know the priority now, it moves to the learning rather than the teaching. So, the main focus is on the outcome based learning.

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Now, quality of education system judged from three perspectives what is the one-the inputs to the system, what happens within the system and the outputs from the system. They inputs to the system mainly focus on the finances, resources and infrastructure of the institution and what happens within the system? Processing used to organize, control and deliver education and the training and outputs of the system is the products and the result of education. So, the output is very very important.

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Outcome based education- it emphasis on measuring outcome rather than the inputs and each educational agency is responsible for setting its own outcomes. So, in that case, according to the Spady the definition is focusing and organizing an educational system around what is essential for all students to able to do, the do component is very important.

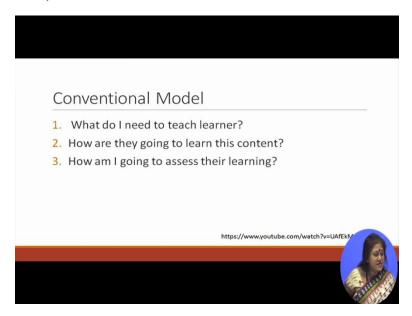
Able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for the students to be able to do and then organizing the curriculum, instruction and assessment to make sure (they) this learning ultimately happens.

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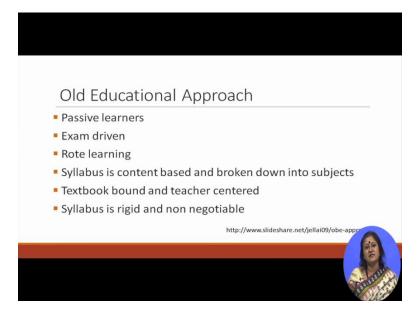
So, different view of OBE is a, as a theory of education, as a systematic structure for education, as a classroom practice and William Spady is regarded as the OBE's leading advocate A PARADIGM PIONEER.

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The conventional mainly we three things that you know questions that what do I need to teach learner, according to the conventional thing and how are they going to learn this content and how am I going to assess this their learning. So, here the main component is the content. What the content and after that what the learning thing right.

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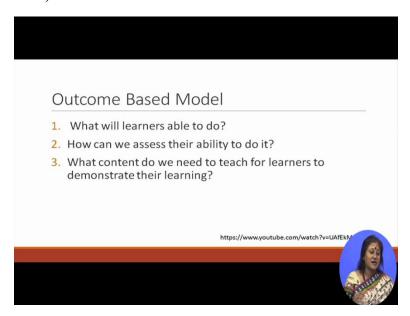


So, in that case in the old educational approach, the learners are the passive learners. So, what the teachers are teaching the learners they are passive learners they are listening. So, an it is mainly the exam driven and whatever they have to toward (())(5:07) the teachers, they follow some textbook and when they are follow the textbook the main importance you know to cover the textbook. So, it is in the not the breadth think but not the depth of the topic. So, mainly it is focusing to the rote learning that means the teachers the students, the learners they are memorize something and give the exam. So, it is the rote learning type.

Syllabus that is why it is content based and Brocken down into subjects. Textbook bound that I already measured and the teacher centers whatever when we were in our child, at that time whatever my teachers is teaching because we do not have any other option, you know just to listen the teachers things and we take the notes and give the exam.

Sometimes we go to the library and take the reference book but we do not have any internet facility. So, we cannot compare that (the) suppose in NPTEL lectures or this is (the) for the mooc lectures, I learn something you know that but that is absent at that time. So, it is totally a textbook bound and teacher centered and syllabus that was rigid and it is non-negotiable.

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Teachers are only responsible for learning, motivation depends upon the personality of the teachers, some they are excellent teachers still you know it is in our mind that how good that teacher is. Emphasis on teacher's hopes to achieve, content placed into rigid time frame, in this

time frame I have to complete this course, curriculum development process is not open to the public comment.

Nowadays you know in the suppose in the mooc if you giving the lecture's the public comment is there that we have to (())(7:13) or we have to know okay and in that way we can improve or teaching method or teaching lectures. So, but at that time, it was absent. So, the focus of attention is now outcome based model.

Outcome based model means it is total what will learners able to do, so the do component is very important that means the able what that is the skillset what they know, knowing thing is important but the thing is that where they can do it? What they can apply it or can they analysis it that is very important.

So, here an how assess the ability to do it and what content do we need to teach for learners to demonstrate their learning's. So, in that case, the thing is that it is the phase the content it comes later. So, what the learner will do it comes fast and then (comp) and each learners are different some are deep learners, some are surface learner according to that how they will teach they can decide on the and they can learn on their own pace.

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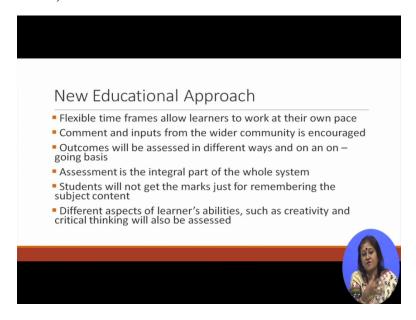


So, the new educational approach used you is a active learners, it is not passive the learner becomes active. Learner are assessed on an ongoing basis after the class some discussion they

and one that the flip teaching is also there. They learn from the internet various sources and then in the class, they can come and they can discuss. So, learners are assessed on ongoing basis. So, there is a scope for critical thinking, reasoning reflection and action. They can they can analyse it, they can synthesize the content.

An integration of knowledge, learning relevant and connected to the real life situation. So, how if they know the subject and if they can apply it or can they analysis, they then only they can solve the real life problem. So, it is a lecture centered, lecturer here is the facilitator. They constantly so the lecture center here, they constantly uses the group work, team work. They can do the lecturer will give them the teachers will give them the case studies and if they can solve the case studies in that case, it is it is easy for them to learn this you know, in on an in the whole life they can learn this one. Emphasis is on outcomes that the what the learner do.

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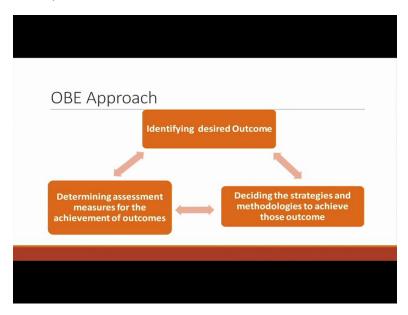
Flexible time frames allow learners to work at their own pace when they have time they can see the content A and they can learn on their own. So, flexible time is a good is a important thing. Comment and inputs from the wider community is encouraged. Of course, if we get the comment and inputs from the community then only the teachers also, we improve ourselves.

Outcomes will be assessed in different ways and on an ongoing basis not you know after only the some or in the mid sem or in end sem always you know the outcome, it will assessed every day

in the discussion method, case study method like that if we discuss then the outcome, it will be already assessed every day. Assessment is the integral part of the whole system.

Students will not get the marks just for remembering the subject content not for the rote learning, students will get the mark if they can analyse it or some creative thing or can they apply it then only they can get the marks. So, from the teacher's point of view we have to change our perspective. So, different aspect of learners abilities such as creativity and critical thinking will be also be assessed. So, students should think you know critical thinking that is really very important.

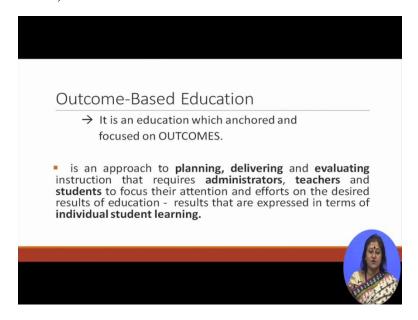
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So, the outcome based approach the first the teacher have to identify or the students also that what is the desired outcome the teacher have to identify that this is the desired outcome from this class I want this. If the desired outcome is fixed then, it is easy to decide the strategies and the methodologies to achieve those outcomes. So, there is a link between this these identifying desired outcome and deciding the strategies and methodologies. There is another component that is the determining assessment measures for achievement of outcome. Of course, so whatever the strategy whatever the methodology the teacher is using with that they can give the assessment thing.

So, if the teacher think that my objective is to give application I will teach up to application level, in that case the assessment also should be up to application level not analysis or synthesis level. So, there is a relation that this is identifying (the) and if the assessment is measures are you know from there, it will go to the desire. So, there is a link between the assessment and the desired outcome.

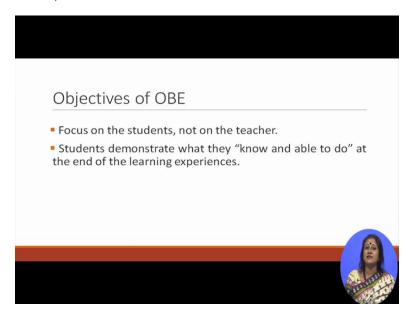
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So, the main thing is outcome based education and it is that education which anchored and focused on outcomes. So, it is an approach to planning, delivering and evaluating instruction that requires administrators, teachers and students to focus their attention and efforts on the desired result of education-results that are expressed in terms of individual student learning. Here, individual student learning each students are different.

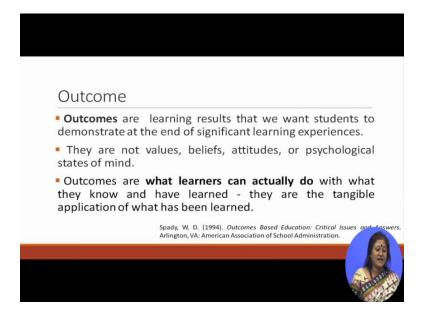
So, it focus the outcome based education focus to the individual learner and there should be a marriage between the industry and the academics and only the outcome based education can solve this problem because whatever the industry they want that thing the academics if it is matched then only there total development of the learner because if they know the learner knows in the they something but if they cannot apply it in the industry, there is no use.

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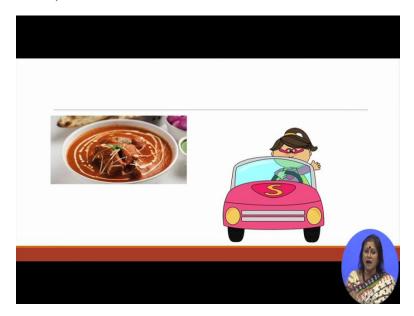
So, the objectives of OBE is focus on the students, not to the teacher. Students demonstrate what they know and able to do at the end of the learning experiences.

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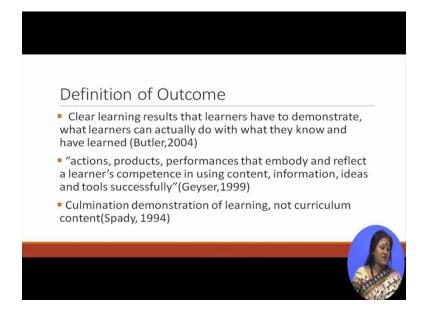
So, outcomes are learning results that we want student to demonstrate at the end significant learning experiences. They are not values, beliefs, attitudes or psychological states of mind. Outcomes are what learners are actually do with what they know and have learned. They are the tangible application of what has been learned.

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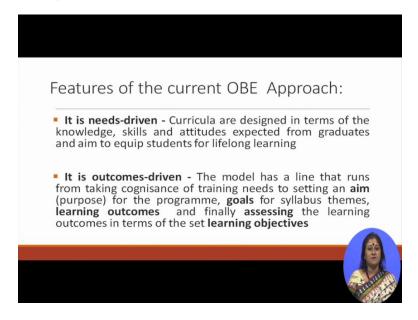
So, here it is a the picture of butter chicken masala if you know only the recepy of the butter chicken masala you learnt it but you cannot make the butter chicken masala then there is no use. So, outcome is to make the butter chicken masala. Suppose you have a driving license but you cannot drive the car you cannot drive the car properly then there is no use, the outcome is you have to drive the car if you have a learning license, it does not imply that the you are you can drive it right. So, (you) that is why the outcome to drive the car is very important.

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So, the definition of outcome is according to Butler clear learning results that learners have to demonstrate what learners can actually do with what they know and have learned. Actions, products, performances that embody and reflect a learners come competence in using content, information, ideas and tools successfully according to Geyser and according to Spady, culmination demonstration of learning, not curriculum content. So, the learning not the curriculum content.

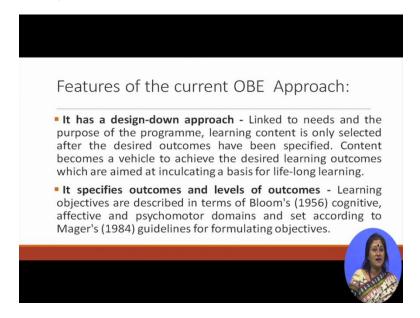
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So, features of the current outcome based education approach is, it is need driven what is that? Curricula are designed in terms of the knowledge, skills, attitudes expected from the graduates and aims to equip students for lifelong learning that means they can learn the on their you know that the whole life, all the curricula it is such design in such a way so that in the life they can apply.

It is outcome driven-the model has a line that runs from talking cognisance of training needs to setting an aim the purpose of the program, goals for the syllabus themes things, the learning outcome and finally assessing and learning outcomes in terms of learning objectives. In the next (())(18:18) lecture I will explain what is these goals learning (of) outcome as the learning objectives various things. So, the but the main thing is it is outcome (())(18:30) what is the learning outcome that is the main features.

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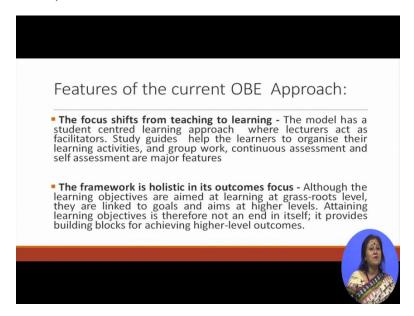


Third is, it is a design-down approach what is that? It links to the needs and the purpose of the programme, learning content is only selected after the desired outcome have been specified if the desired outcome is specified according to that you know, the content or these things we have to learn. So, content becomes it is a just vehicle to achieve the desired learning outcomes which are aimed at including a basis for life-long learning.

The fourth component is, it specifies outcomes and level of outcomes. Learning objectives are described in terms of blooms cognitive, affective and psychomotor domains and set according to Manger's guidelines for formulating the objectives. In the blooms things, there are knowledge level, comprehension level, application level, analysis level, synthesis level and evaluation level from the cognitive point of view.

So, in which level where you know that is very is important that is whether the learner can go to the analysis level or in the synthesis or they can create it or they can you know justify anything that is really very important. So, and they outcome based education only help the learner to get into that steps.

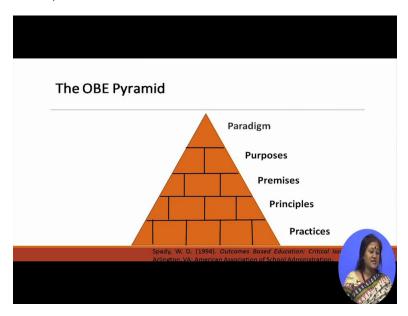
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So, the focus it shifts from teaching to learning. The model has a student centered learning approach where the lecturers act as a facilitator but study guides helps the learners to organize their learning activities and group work, continuous assessment and self-assessment are major features and the frame work is a total is holistic in outcomes focus means although the learning objectives are aimed at learning at grass-root levels, they are linked to the goals and aims at higher level.

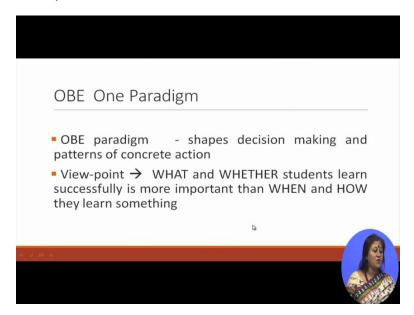
So, attaining learning objective attaining in the analysis, synthesis in that the level, it therefore not an end in it-self; it provides a building blocks for achieving you know higher-level outcome. The main thing is to go to the higher-level outcome.

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Now, this is a OBE's pyramid by Spady. In this OBE outcome based education pyramid, there is one paradigm, two purposes, three premises, four principles and five practices.

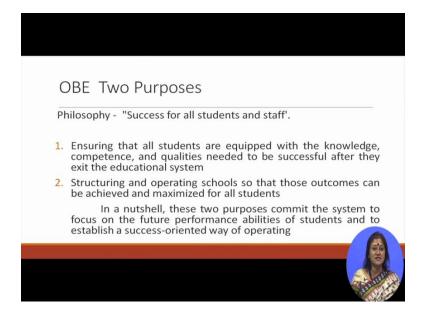
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Now, what is the OBE one paradigm? The paradigm is shapes decision making and patterns of concrete action. The view point is WHAT and the WHETHER students learn successfully is more important than WHEN and HOW they learn something. When they are learning depends

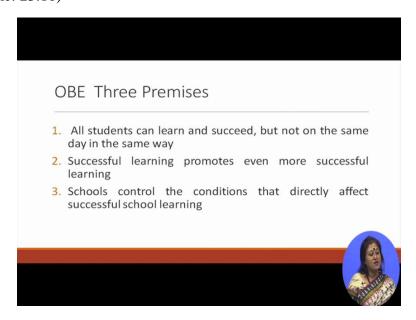
on the learner? How they are learning that is also depends on the learner but what they are learning and whether they are learning is not that is important.

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The OBE has two purposes what. Ensuring that all students are equipped with the knowledge, competence and qualities needed to be successful after they exit the educational system (aft) whether the success (())(22:28) not. Structuring and operating schools so that those outcome can be believed and maximized for all students that means the basic philosophy is success for all students and staff. So, in a nutshell, two purposes commit the system to focus one is the future performance abilities, in the future whatever the learning in the student life, in the future how much they can perform? Future performance abilities of the students and establish a success oriented way of operating.

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An OBE has three premises; all students can learn and succeed, but not at the same day in the same way, some are very very you know in the class only they learn very quickly but some, they have they may take two days like that but they learn. The main thing is all students can learn and succeed but not the same day that the teacher as a teacher we have to remember that.

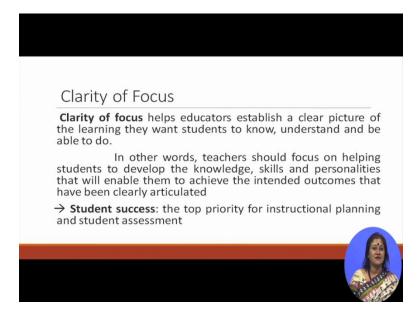
Successful learning promotes even more successful learning if the learner is successful, you know that only encourage them to be more successful learning. So, as a teacher it is always, it is a good to motivate the learners so that they can you know learn more successfully. Schools only control the conditions that directly affect successful school learning. So, three premises are there in the outcome based education.

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OBE has four principles; one is the clarity of focus, expanded opportunity, high expectations and design down. Clarity of focus on culminating outcomes of (signi).

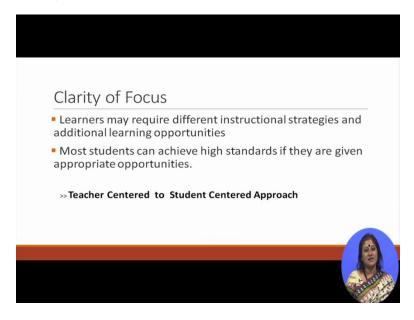
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It is better you know clarity of focus helps educators establish a clear picture of the learning they want students to know, understand and be able to do that means the teacher should know this things my learner should learn.

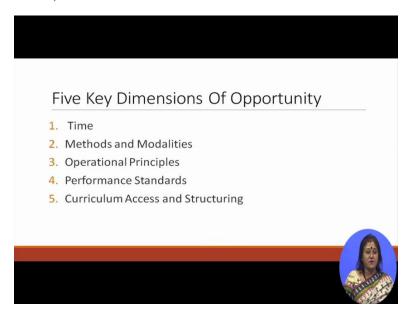
In other words teacher should focus on helping student to develop the knowledge, it is teachers work to help them to develop their knowledge, to develop their skills and not only skills their personalities that will enable them to achieve the intended outcome that have been clearly articulated. So, that focus that clarity of the focus, it should be the focus is the for the teacher point, it is really the clarity should be there. So, the student success the top priority for instructional planning and student assessment.

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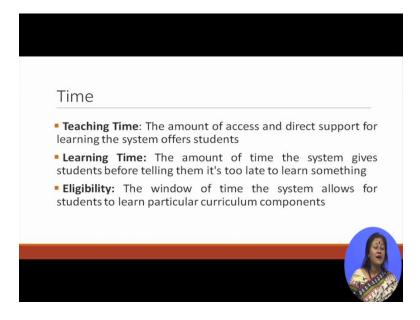
So, the clarity of focus learners may require different instructional strategies and additional learning opportunities. Most students can achieve high standards if they are given appropriate opportunities. So, that means we have to give the appropriate opportunities to the learners. So, the it becomes you know it moves from the teacher centered to the student centered approach.

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Five key dimensions of the opportunity; time, methods and modalities, operational principles, performance standards and curriculum access and structuring.

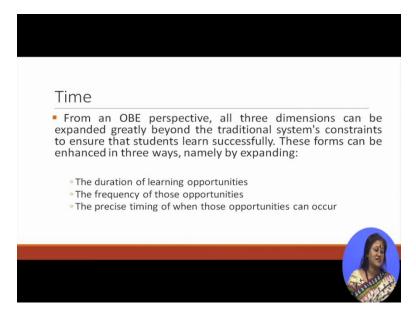
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Time teaching time the amount access and direct support for learning the system offers students. Learning time, the amount of time the systems gives students before telling them, it is too late to learn the okay. In this topic, in two days at least you have to learn. So, that is the learning time.

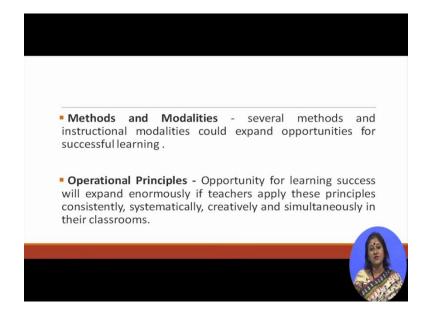
Eligibility the window of time the system allows for students to learn particular curricular components.

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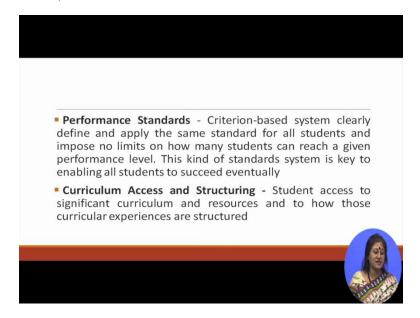
So, from an OBE perspective all three dimensions can be expanded greatly beyond the traditional system constraints to ensure that the students learn successfully. So, these form can be enhance in three ways, namely the duration of learning opportunities, the frequency of those opportunities and the precise timing of when those opportunities can occur.

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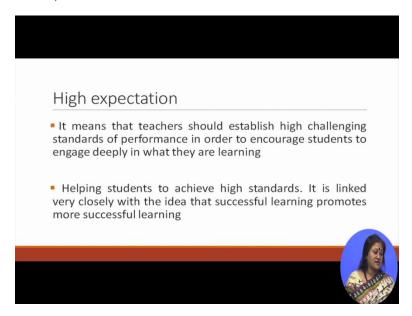
Methods and modalities, several methods and instructional modalities could expand opportunities for successful learning we will explain that operational principles, opportunity for learning success will expand enormously if teachers apply these principles consistently, systematically, creativity and simultaneously in the classroom. So, the teacher have a very great responsibility that the how they to you know to motivate the learners.

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Performance standards, criterion based system is clearly define and apply same standard for all students not you know few students for all students if they use the criterion based approach and impose no limits on how many student can reach in given performance level. So, this kind of standard system is the key to enable all students to succeed eventually. The last component is the curriculum access and structuring that is student access to significant curriculum resources and to how those curricular experiences are structured.

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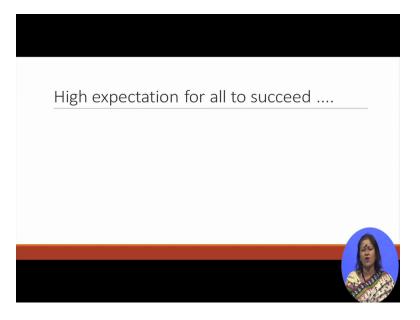
High expectation it means that teacher should establish high challenging standard of performance in order to encourage students to engage deeply what they are learning. So, the expectation should be high then only they can achieve. So, helping and the teacher's job is to helping the students to achieve that high standards. So, it is liked very closely with the idea that successful learning promotes more successful learning.

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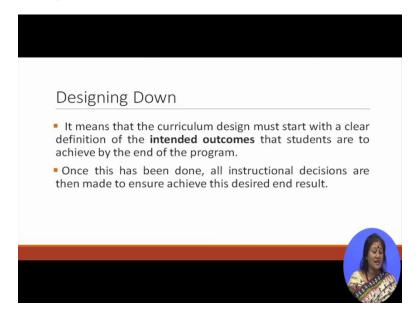
So, key dimensions of high stand expectation, raising students of acceptable performance, eliminating success quotas that means if the teacher thinks in my class my students are very intelligent rest of that it is no. Now, we have to they eliminate that is the all can do very good. So, the outcome based learning promote that. Increasing access to high level curriculum then only they can go to the high level curriculum.

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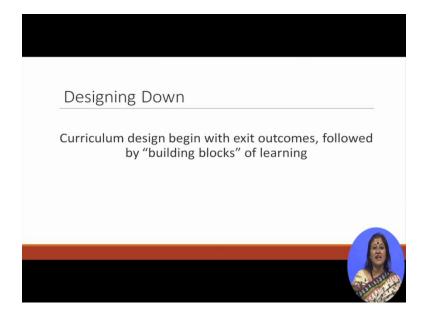
So, high expectation for all succeed. Most students can achieve high standards if they are given appropriate opportunities then only most of the students be feel that they can achieve high standards.

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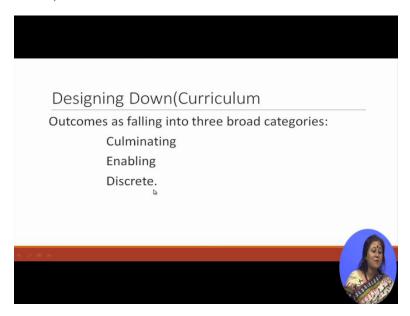
Designing down, the last thing it means that the curriculum design must start with the clear intended outcome. The students are to be achieve by the end of the program. Once this has been done, all instructional decisions are then made to ensure achieve the desired result.

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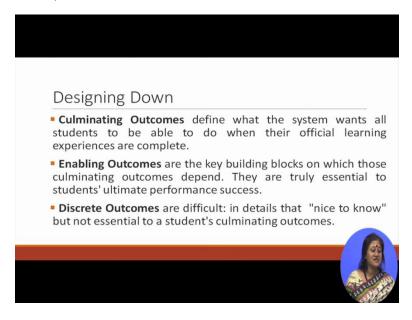
So, designing down means curriculum begin and exit with outcome but followed by the building blocks is nothing but the learning.

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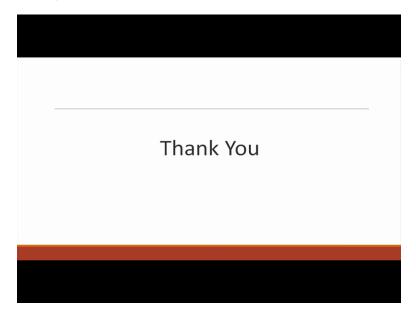
So, the designing it three broad category it is a categories culminating, enabling and discrete.

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Culminating outcomes define what the system wants all students to be able to do when their official learning experiences are complete. Enabling outcomes are the key building blocks on which those culminating outcomes depends they are truly essential ton the students ultimate performance success. So, that is the enabling outcome. The last one is the discrete outcome are difficult; in details that it is nice to know but not essential to a student's culminating outcomes.

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So, in the next day I will teach you all the aims, mission, vision and learning outcome and learning objectives of the outcome based model. Thank you.