

NPTEL
NPTEL ONLINE CERTIFICATION COURSE

Course
on
Educational Leadership

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Lecture 08: Professional Development and
The Reflective Practitioner
(Contd.)

Welcome viewers once again to this NPTEL course on educational leadership in the last class I have already discussed about 21st century learners their characteristic features 21st century educators their characteristic research today we will discuss about 21st century pedagogy in the context of 21st century issues and challenges and globalization size city use and you know open source of learning material etc...

What should be the 21st century pedagogy and what are its frequencies today we will discuss about this.

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21st Century Pedagogy

1. Outcome-Based Learning

- At the end of the academic programme students need to demonstrate the mastery of both the domain-specific learning objectives as well as domain-independent learning outcomes
- How to ensure mastery over 21st Century knowledge, skills and attitudes?

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The first point is you know outcome based learning in 21st century pedagogy where emphasizing more on outcome based learning whatever instructional design whatever curricula wherever academic program we design for our students so we must focus on what is the outcome what would be the learning outcome what would be the performance so that is why so all academic programs instructional designs curricula etc...

We have the one most significant most significant focus is on outcome what would be the learning outcome or our learning whole learning process could be outcome based so the what is the outcome based learning at the end of the academic programme students need to demonstrate the mastery of both the domain specific learning objectives as well as domain independent learning objectives.

So at the end of the academic program all the students they are suppose to and they must demonstrate certain domain specific learning objectives now whichever domain we have taken have been science, engineering humanities or whatever so within that domain within that discipline what they are suppose to learn and they must demonstrate it in terms of their skills in terms of their behavior in terms of their attitude you know competencies etc...

So that is called that is confine to domain specific learning objectives but along with the domain specific learning objectives some of the domain independent learning objectives learning outcomes and learning objectives are to be there are they have to demonstrate some domain specific as well as domain independent learning outcomes so what are the other domain

independent learning outcomes beyond that subject discipline like you know 21st century schemes.

Talk about you know the students before joining employment then must poses certain skills like communication skills collaborative skill, term work skill they must be deeply rooted in the reality and they must be well quanta with the problems social problems economic problems and problems they must develop they must have the problems are being ability to solve some of the problems.

And the communication skill term work leadership skill you know baring the knowledge and that kind of collaborative and cooperative skills are and many other skills are also there that is the domain independent learning outcomes they must also popes and demonstrate second is that how to ensure mastery over 21st century knowledge skills and attitudes. So when we are when design and academic program or curricular or course etc...

So we are not only focusing on the learner domain specific learning outcomes but beyond that like how to again measure how to ensure that the students after are going through this program after passing out then not only learn the domain specific content skills in our knowledge that the extra courses and demonstrate some of the 21st century skills attitude then the behavior then the leadership skills etc....

So we have to emerge we have balm the 21st century skills as along with the domain specific learners learning objectives so we have to design the pedagogy in such a way that so at the end of course and end of the program the students are suppose to not only acquire the knowledge skills aptitude of the particular subject domain etc but they also they have also developed they have also notches and they have also possess 21st centuries skills and competencies so that is why the main focus is your teach less and learn more.

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The slide is titled "Contd..." in red text. It contains a list of teaching strategies under the heading "Teach less and learn more –". The list includes: a) Set learning objectives, b) Promote guided independent learning, c) Ensure close individual monitoring, regular tutorial and feedback by teachers, and d) Use ICT to overcome the problems of large classes. The slide has a yellow background and a blue footer with logos for IIT Madras and NPTEL Online Certification Courses.

Contd...

➤ Teach less and learn more –

- a) Set learning objectives
- b) Promote guided independent learning
- c) Ensure close individual monitoring, regular tutorial and feedback by teachers
- d) Use ICT to overcome the problems of large classes

The teachers are suppose to be the facilitator, the mentor you know the guide the consultant all kinds of so therefore they are suppose to teach less and learn more so for in order to be effective facilitator in order to be a effective mentor guide tutor etc so we need to update our knowledge so we have to continuously learn throughout our life so teach less and learn more and set the learning objectives before starting your program academic program of the course etc.

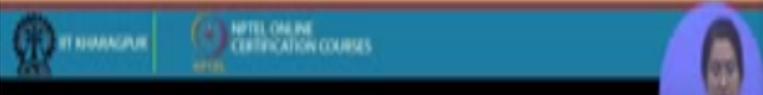
Sets of learning objectives because every like in our now days you are designing the course of the course is suppose or the course where there it is a sigma or semester course or it is a part of that is quarter semester course whether it is a three credit course four credit course or that means how much how many hours you are going to devout for that course, so again so depending on the length of that course.

Then gain we divided in the different modules and each module has in difference topics, topic and sub topics etc. So accordingly for suppose if we are have to divided or course into five module or four module etc. accordingly sub topics, topics etc... then for we have to set the learning objectives instructional objective learning objective in each and every topic and sub topic, so that is that send the learning objectives before and from the very beginning.

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Contd...

- Teach less and learn more –
 - a) Set learning objectives
 - b) Promote guided independent learning
 - c) Ensure close individual monitoring, regular tutorial and feedback by teachers
 - d) Use ICT to overcome the problems of large classes



Second is that promote the guided independent learning so here our again the focus is on how to make the learner independent learner so our focus is had to more to make that learner to motivate the learner to encourage the learner to be a self learner to be an independent learner and for that reason we have to promote in we have to guide in different ways by mentoring by you know by facilitating in the and clarifying the doubts then we by giving him a supports or versus by giving in the needs and the resources learning resources etc... so here again our focus is on promote the guided independent learning.

So for 21st century pedagogy is focused again is to promote the guided independent learning that means teacher are there to guide the learner, but to become independent so self learners, then next is ensure close individual monitoring so close individual monitoring regular tutorial and feedback by the teachers again so even though we want our learner to be independent learner self learner etc... but we have to closely monitoring him monitor his progress, monitor his performance.

And clarify his clarify his doubts whenever he that means you fall back or that is behind so individual monitoring it is very much require, it is again 21st centuries pedagogy is focus is again on personalize instruction personalized learning, so we want to give our every learner personal experience of learning so here personalize instruction personalize and learning is also very much emphasis and learning is also very much emphasize in that context we have to monitor each and every learners.

Progress and for that matter we have to give a regular tutorial regular tutorial come time to in and doubt to clarify his doubts as said but to motivate him but to give him information's about that you know feature topics further how to enhance further this and I know this knowledge and how to apply it in the front context, sort it implications all kinds of information's and resources and feedback by the designer again the students also to strength in their knowledge.

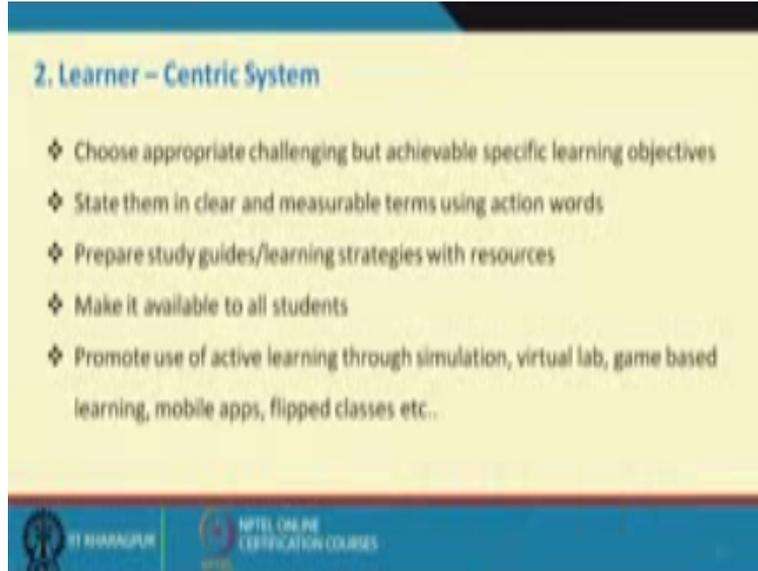
To be motivated and to built up the confidence also they need the constant feedback by the teachers concern to that by the teachers, so next use is ICT to overcome the problems of large classes unlike a traditional class in that present is that today's class rooms you know class consist a huge students like 200, 300, 400 etc... Because we are emphasizing more on the mass of the equation, so more and more students are growing themselves been the higher education etc... so here the classrooms.

Are not restricted to you know teachers student ratio of 15 40 want teachers etc... but it is huge a huge like 200, 300 above so how to deal with how to handle such a large class and then it is a challenge it is challenge for the teachers, so even though online education platform is their what is your learning there and so many things but the blended learning is the most effective one so we have to some often mix our blend phase to phase communication classroom lectures etc... so how to deal with this suppose in my class there are 300 students how to monitor individually how to get the individual.

Feedback how to cut it to the individual needs how to personalize the whole learning experience so which is a it is a huge challenge for the teachers presenting teachers, so in that context we can use ICT to overcomes some of these challenges, so to overcome the problems of large classes but again we have to very innovative in exploring how I can use this tool and that toll or in which context in teaching these topics or that topic which ICT app will be most to be reach in a model of instruction will be in more suitable.

Which kind of lab explores experience will be in more suitable and how can it provide them to make it more lively and more effective etc... so these are all the innovative thoughts that teacher has to peruse to handle not only to deal with the large classes but to individually chattered to the needs of all the students and to make their learning as a power personalize experience. Again the second focus again is.

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A learner centric system as we have already known that today's pedagogy today's focus is under learner centric that means if the learners are key focus of the whole teaching process had learners centric system is not only to promote the independent learner to be independent in self learner but again we have to adapt ourselves to that learning centric system who have to provide the you know resources, facilities to the learners in that context we can say that choose appropriate challenging but achievable specific learning objectives.

So just now as we have discussed we have to divide the whole course into different modules again each module with a to the topics and sub-topics so with each topic and subjects sub topic we have to specify the learning objectives, if I am teaching thermodynamics if I am not teaching you know our constitution if I am teaching the global warming whatever I am teaching I have to divide the whole course into different modules, each module having the topics and sub topics and for each sub topics we have specify the learning objectives.

But again we have to design the learning objective such a way that it is achievable, it could be learn, it could be you know award, it could be achieve by the learners. Suppose you have said heavily you know heavily tuff and difficult learning objectives which is not achievable by the students and it is not worth designing the course.

So choose the appropriate challenge it must be challenging it should be giving some challenge to you know to improve to expand the knowledge base of the students but at the same time it should

be achievable also. Second state them in the clear and measurable terms using action words again, we have said the learning objectives, now how to measure it, how to measure that how much, how far this true civil acquired so then again you have to measure the learning outcomes, how to measure the learning outcomes through different kinds of assessments, test etc, etc.

So we have to design the learning objectives instructional objectives and put it in a deliverable form in such a way that at the end we can measure the learning outcomes in some specific action word like suppose we have put the questions like you know you demonstrated, you desired, you solve it, you calculate it, you explain it, you justify it, you create it in such action oriented words so by it can be properly measured, it can be properly assess and evaluated.

Then prepare the study guide learning strategies with resources again whatever course, module, topics etc we design the lesson plan, we design we must prepare it with sufficient learning material, learning resources and learning strategies with enough of resources matrix from collected from different sources, so we have to enrich your course material as well by giving the different kinds of examples resources open resources, lying etc.

And make it available to all students so whatever we have design the enrich course material learning material for our students it should be shared by all, it should be available, it should be made available to all the students because again at the same time you are also believing in the equality equal opportunity to all, equal access to all sharing the knowledge with all, because here we are focusing on collecting capacity building, we are not focusing these top starts five guys will be the best in the class they should perform no.

When we are dealing with the large classes our focus, our goal is that we have to enhance their abilities and knowledge skills everything of all my students. so then next comes promote the use of active learning again, so when we are focusing on them, making them learner independent more independent learner, self learner, self motivated learner and he must also regulate his or her own academic behavior, he must wanted his own progress, he must improve this performance by getting the feedback.

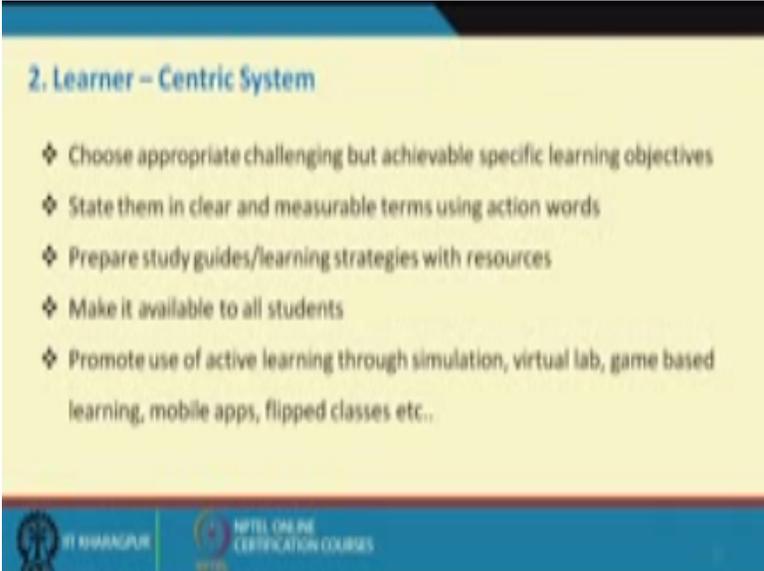
So for all kinds of this you know objectives he need to be very active that means there we have to promote the active learning, active thinking and we have to nurture this kind of this you know temper random among the learners that you start whatever you learn you do not prissily accept it,

you start thinking actively thinking on the content on the process on the logic on the rational on the justifications, so active thinking and active learning has to be in-cooperated and it should be developed among the learners.

So promote the use of active learning through so now it is by using the ICT we can also introduce it in the course material learning situation like stimulation. So when we are suppose we were use to trying to show some problems we can stimulated by creating it artificial in so stimulated learning is also more effective then virtual labs are there where that means the remote areas where the students are they do not have the access to the actual lab laboratory physical lab or chemical lab or sub to engineering lab etc. so they are the virtual labs are also available so that from the remote access itself they can also use it. So virtual lab similarly different kinds of game based design learning tools are there learning materials are there.

So in the online platform the student they can sue this game based learning tools is not only engage them actively and you know keep them motivated sustain their motivation so also sustain their motivation online platform even though they are learning alone doing it alone. So but also promote the knowledge and skills and experiences and the exposes.

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2. Learner – Centric System

- ❖ Choose appropriate challenging but achievable specific learning objectives
- ❖ State them in clear and measurable terms using action words
- ❖ Prepare study guides/learning strategies with resources
- ❖ Make it available to all students
- ❖ Promote use of active learning through simulation, virtual lab, game based learning, mobile apps, flipped classes etc..

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Then mobile also now does the students are also you know there in our team different kinds of apps different kinds of apps for learning effectively the computer science learning effectively maps learning effectively English language the different kinds of subjects. So these are kinds of

this kind of assisted tools we can extensively use for our, for promoting our learning situation for making it more lively more active and making our learner more independent and self-sufficient.

Similarly, instruction modes like the pedagogical modes of instruction must be switched from the traditional mode/classroom mode to the flipped instruction mode. What you know, lecture timing is very less but more kind of self-learning and more kind of discussion/dialogue conversation is there and where the students all the students are actively engaged in the classroom and all kinds of discussion/clarification of the doubt/dialogue communication takes place not only to engage them actively. But you know the learning gearings all improve and almost.

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- ◆ Promote collaboration, communication and problem-solving
- ◆ Monitoring the progress & giving feedback
- ◆ Use both formative and summative evaluation
- ◆ Invite external experts and industry for better participation
- ◆ Reduce lecture hours & increase tutorial hours (Flip teaching, Peer tutoring)
- ◆ https://www.youtube.com/watch?v=B7r7YY_E00A

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Then again we have to promote the collaboration/communication in problem-solving as we have already discussed that 21st century skills also demand for learner to be very communicative to be collaborative to be a problem solver we have to promote this kind of skills and competences among them from the very beginning.

So we can give them some assignments to which they can do it in a group where in the team in a group so they can collaborate/communicate among each other then problem-solving so we can give also assign some realistic problem/social problems/technical problems/economic problems etc. So and they are supposed to solve it so then so now for example that is a nowadays present

days there are new schemes our premises schemes of now make in India stop at India and new India all kind of thing.

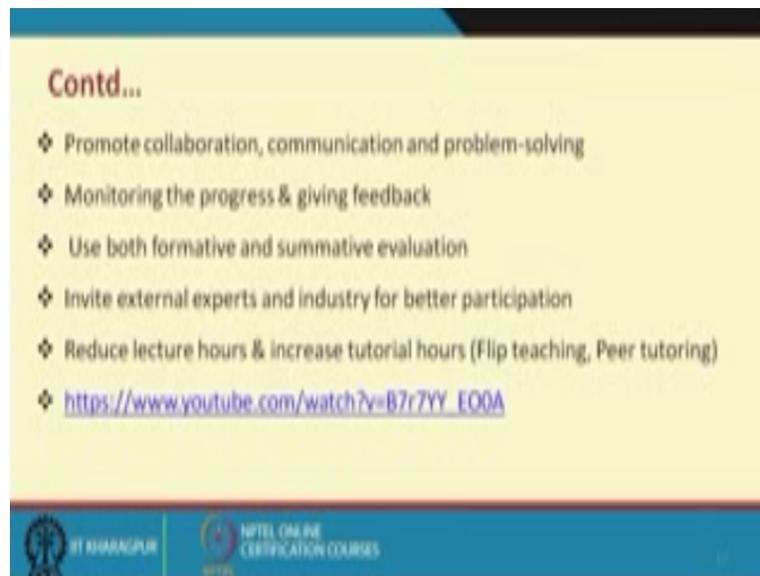
So here are how to solve our problem social problems I mean it is not just for a learning the theoretical concepts or the theoretical but how to implement it in the society how to implement it for those solving the social problems for because ultimately or society should be uplifted or quality life should be enhanced. Then thereafter monitoring the progress and giving the feedback but again as we have already discuss we have to emphasize on the individual monitoring of individual students performance their progress their learning outcomes and giving the constant feedback from time to time.

So they can improve often they can learn re learn and reflect upon their own learning experience and improve a lot so use both the formative and some motive evaluation so when we are dealing with the large classes definitely we have to develop a mechanism, mechanism through Gmail group mails or creating our Google drive or whatever kind of platform where or kind of forum where we can instantly we can instantly give the feed back to each and every students questions their doubts etc.

And their progress and performance individually through the ICT to personalize tools so here a some for that reason we have to use both the formative type of evolution summative type of evolution, summative type of evolution actually focus on the you know at the end of the course to evaluate the students overall performs total performance in the course and grade him like a grade him according to some percentage or the rank or grade wand average or CCP etc.

This at the end of the semester at the end of the course there is the formative evolution is for is being regularly use to give the to monitor and give the feedback of each and every ;learner progress instant progress in each topics in sub topic each course each module etc so we have to very inter changeably very you can say very often we have to mix up this formative and summative evolution partial have an again to make it or flexible in terms of type of question we should pose and how to pose the question such a way that we can measure we can assess their critical thinking and cognitive ability their creative thinking their analytical thinking all kinds of thinking abilities because we are not focusing into suppose they are learn need to apply do not need some situation.

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But they have to go beyond that so by posting some questions how to not only make that understanding applications analytical skills but again how to stimulate how to stimulate that creative thinking processes so then in some in got to the external experts and industry for better participation again outside that this are teacher students relationships that dialogue at the communications of that course extra curriculum etc.

So beyond that you have to go that beyond that often we also we should also involve experts in that disciplines sometimes that the professional experts sometimes that they are the industry experts so invite them they can also provide that direct information about the ground reality like after joining the job, after joining the profession what is the ground reality of particular profession so you have to give that this kind of information to the students so make it a more kind of compute learning process not only the learning above the subject and suppose to develop the skills and competencies of 21st century.

But etc now there also been familiar with the ground realities that organizations that the ground realities of the actual you are places so in that external expose to consult with the consult with for gaining more knowledge and clarifying the doubts regarding the only you know state opportunities and the risk and the hazards or desert backs for particular kind of profession how to prepare what is the probability of success.

Then how to what are the question job opportunities that they can how what can be the propose carrier ladder for that all kinds of personal discussions they have the all kinds of questions because joining to the joining to the particular profession or starting the preparation for that we need better clear clarification explanation about the particular proficiency so we have to very sure and very clear about what they from deciding that there to be take out how the preparing and the moment they land up in the profession.

What they are going to be face so that is the academic industry, academic industry must be that and often also we also send our students to the different kinds of you know on the job experience for internship and the internship all kinds of intensive mandatory part nowadays that is to given the exposure to the real ground reality actual work less situation.

Then reduce the lecture hours and increase tutorial hours so even though lecture is also significant component of teacher learning process but do not educate much lecture hours for this kind of work course curriculum etc where that you been a small piece of think then provide them learning go through at home then discuss it how the dialogue and clarify the doubts and go beyond that thinking of the more creative and critical questions on that.

So gradually you should teacher should be reduce the lecture hours and increase the tutorial hours and we can expose the students to new topic by giving some pre-learning materials and by giving some you know video clips by giving them some clues and ask them to go through in details so the internet and come back to the class well preparation for more discussion and personal question so clip teaching is the nowadays as been very effective in the learning stages so there are also trained to work it try it in the school level also.

Now again another effective methods is peer team that is why you are promoting were advocating for group learning collaborative learning team learning because in team learning its is not only that students very good in subject but students not weak, weak students so they also learn equally well.

And not only the learn they also develop other kinds of skills a social skills like they can build up their confidence they can build up the communication skill they can build up their you know self actualization so group learning peer groups the students any learn better from that peers from

that class mates it is they do not have innovation they do not have you know they do not have any kind of innovation hesitate to ask questions like unlike the teachers.

So in peer group you can clarify all your doubts you can post many questions you can ask very critical question, so puttering as now have become very effective method also, surplate teaching and puttering are prompt to be very effective now with the 21st century learning. So we must encourages all kind of these numerical practices in our class, be it as science subject, be it arts subject whatever, so now we will go through a YouTube video, we can see it.

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The following video is from
the end of one of my seminars
in December 2009

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The purpose was to summarize
what I had been teaching that day . . .
how to
"Create Your Best Year Ever in 2010"

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The audience was so moved by the video,
many asked if they could have a copy.

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I hope this video
encourages you as well.

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**John Von Achen
has a question
for you...**

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What will you do
with your future?

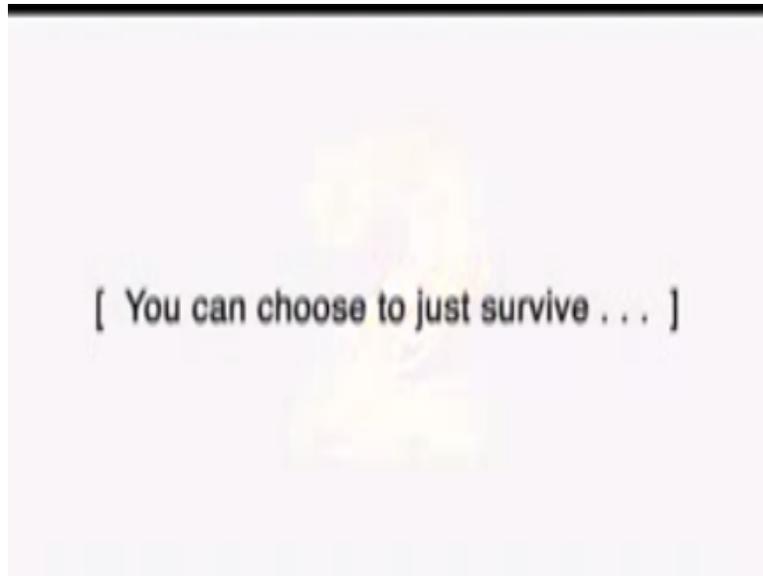
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[You have two choices really . . .]

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[You can choose to succeed]

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[But Know This]

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[If you choose to succeed]

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[And decide to prosper]

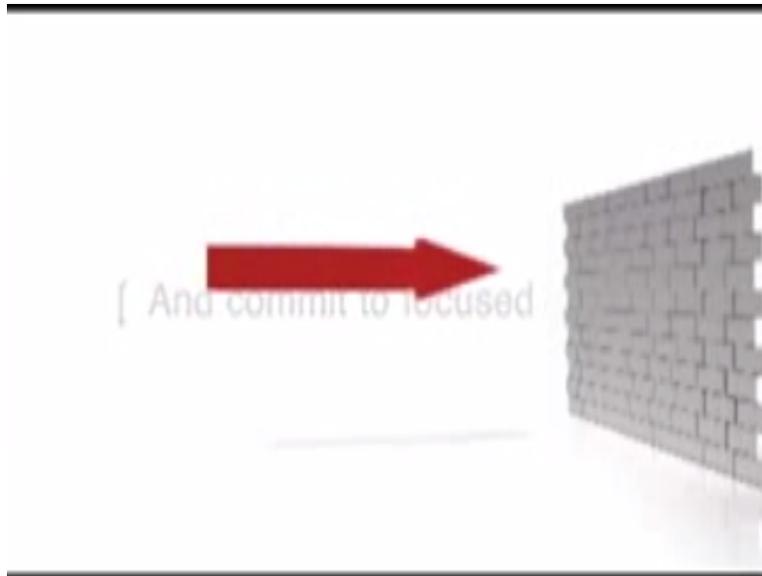
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[And commit to focused goals]

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[ANYTHING IS POSSIBLE!]

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Watch John's NEW SHOW
CLICK HERE

[Because...]

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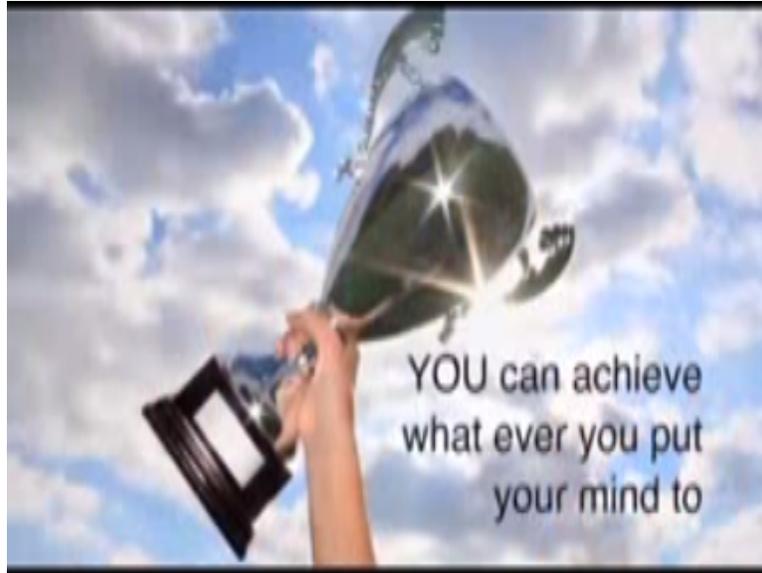
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[So CHOOSE TO...]

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Retrain
Your Brain

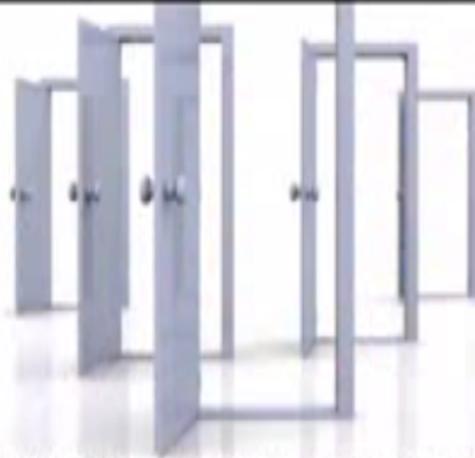
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Seize the Profitable Opportunities in Your Path

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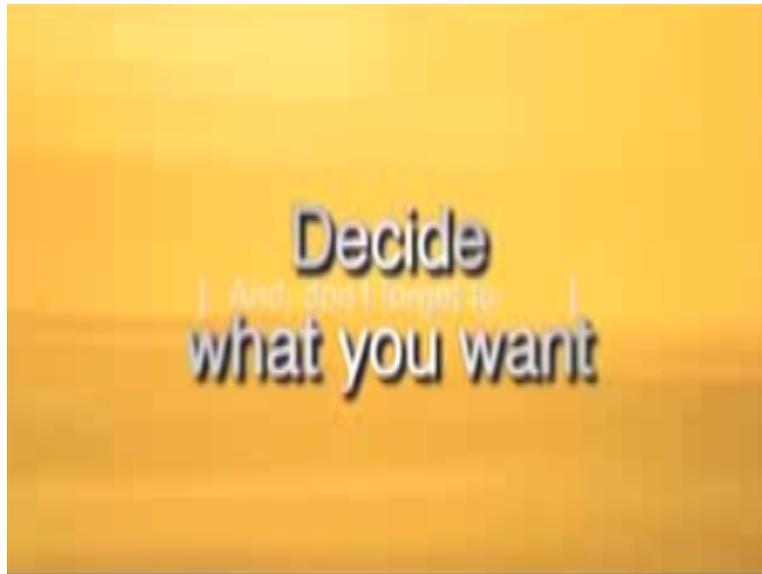
Unleash You Maximum Wealth



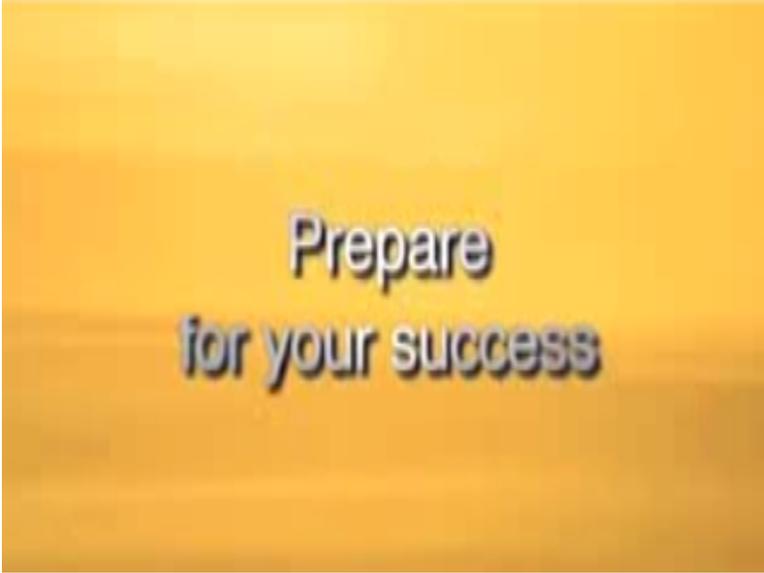
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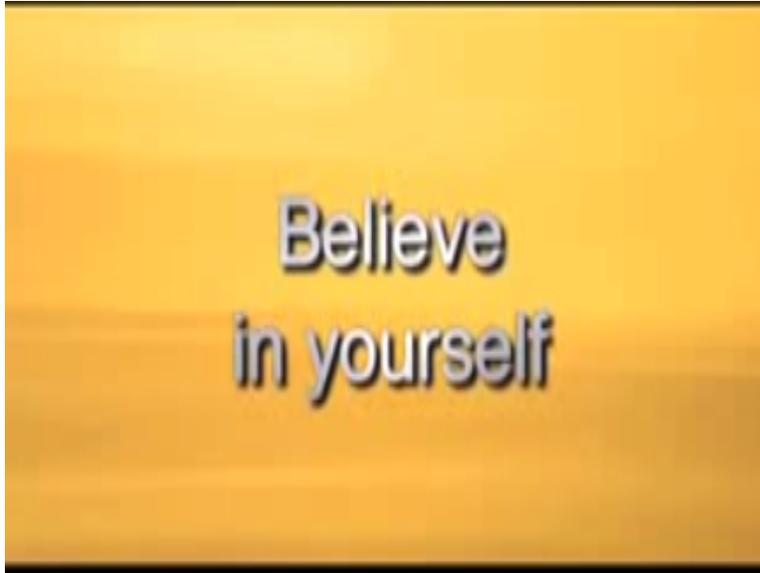
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Ask questions
and
question everything

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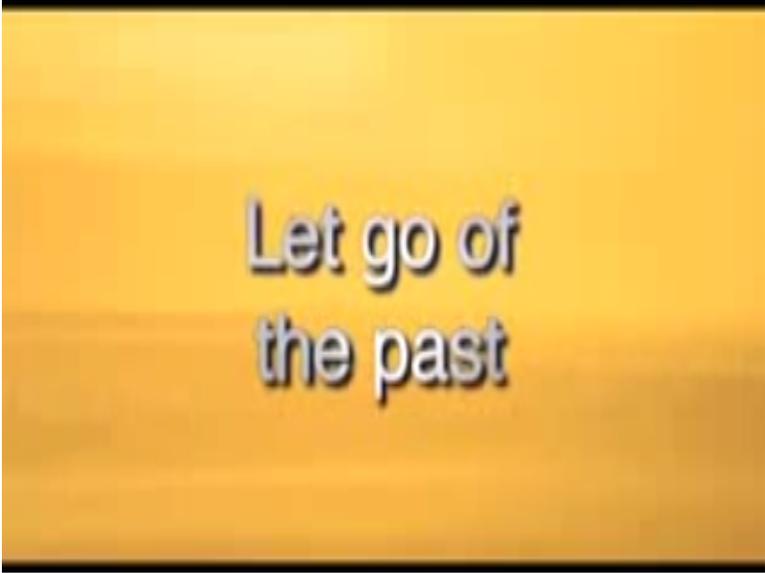


**Avoid
the negative**

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Move outside
of your comfort zone

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Let go of
the past

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Follow John on



So just now as you have seen the video we have the prove for the whole life, as we started with the professional developments in order to be very good professional and you know to excel in the succeeding life, you know we must engage ourselves in continuous learning, continuous development, their eyes and ears open for the practices. Be it teaching, be it medical profession, be it engineering whatever profession we take out, it does not matter whether we are the students, are teachers or senior teachers does not matter at what level we are.

But learning is whole life it is the continuous process, because it can only bring sustainability in enrichment in our professional carrier. So all of us should be engage, active learning, continuous learning for our professional development, thank you very much.