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NPTEL ONLINE CERTIFICATION COURSE

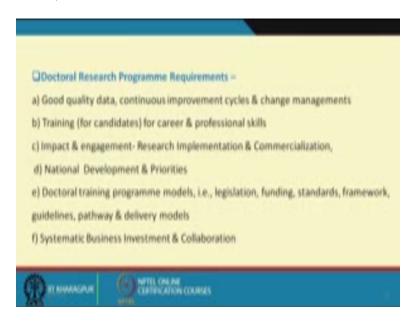
Course on Educational Leadership

by
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Lecture 25: Educational Research and Pedagogy (Contd.)

Welcome viewers once again to this course on educational leadership so in the lat class we are discussing about the educational research in it is various components dimensions various issues involved in this and how to promote education research in universities etc so we will also continue the same thing here.

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So doctor researchers program requirements so in order to make an effective and efficient doctor research program with the bench marking with the quality etc, then what are the basic requirements let us see so first is a good quality data so if you have selected a particular kind research problem so it must give us an opportunity to collect the good data and it must and then

it must bring some continues improvement cycle and this research program also gradually improves our learning cycle performance and cycle etc...

And carnage management if you are conducting any research term study on work place situation work place behavior management organizational topic or educational topic, so in terms of not only getting the good quality data it also brings reform and improvement in our learning cycle performance cycle and also at the end subsequently brings change innovative change in the environment in the work place that is the change management.

So it also requires training for the candidates for the carrier in the professional skills so good doctor research program again effective training for the carrier development of it of the research scholars and they are professional skills and there feature there setting the carrier goals and how to achieve it attain it so these kind of training and orientation are also required for the doctor research program then again we have to evaluate it is impact and engagement like for example even though we have engaged our student have engaged in the good research studies and programs etc...

But at from time to time we need to evaluate it is impact it is efficacious it is influence in bring change in bring improvement in enhancing the performance in bring them good job employment skills job opportunities and you know academic positions etc we have to evaluate it is impact and you also it also constructible positivity bring some kind of engagement to our students to our scholars.

So as a research implementation and the commercialization that means through what extent we have been successful in implementing it is findings and it has brought us not only finical or the commercial successes but also you can say educational success educational improvement behavioral improvement and social improvement in return when selecting research problem also while defining our research policies etc...

In a an educational institution we need to look into the geo national development agenda or we can see we need to look into the priories said by our government or what are the issues and the challenges our country is phasing our government has set for reserving the issues etc, so we need to consider the national development parameters programs and as well as the priorities at bank of government also.

Our people our society, our government and from that areas from that areas we can also select the research problems so the next doctoral training program models so how to set up a set up an ideal doctoral research training program research program in terms of you know it is in terms of it is policies practices principles so we have to like it is a domo we have to give a domo kind of a model kind of doctoral research program.

When we compare that though university that university that institution they have a very good research programs so how do we as a say that there reputation of that particular universities or research program is very good quality of are very you know they have the high standard of quality they send a in terms of the some of the thing so of the criteria's they have said themselves, like in terms of legislation they have also specified that the what are the requirements eligibility criteria selection criteria etc...

Funding if you get into that institution or enroll into that how much of follow for this scholarship will be getting in terms of what are the funding sources weather it is being sponsored by the government or some industries ort some organization serve under funding resources then standard and quality of work in terms of you know criteria bench marking criteria then frame work what is the research frame work.

The time frame work the resources frame work and then course work frame work what is the frame work of that research programs and what are the guidelines up you know fixing the stipulated time within the stipulated time you have to deliver certain things then the path ways delivering models I will set a so if all these training programs have clearly specified not only specified they have demonstrated in terms of all this categories and specifications they we say that he had doctoral training program.

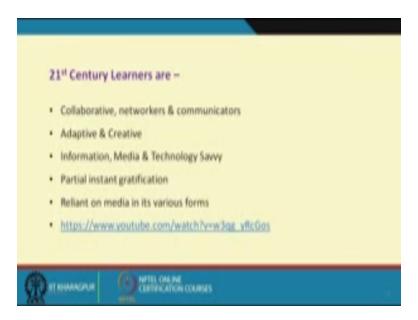
Is really authentic is really useful and really I mean valid for conducting the feature research then systematic business investment and collaboration often you also invite industry people and some other organizations also like some NGO's sector some social sectors social enterprisers we also invite them to invest to invest in the research programs as a part of the calibration as the part of the business investment.

Because when we analysis it is applications is it is utility and use ability so we can look into the social spheres economic spheres like it has a social economic implications it has the finical benefits it has the commercial benefits it that means how to what extent it caters to the new

suffer people weather it caters to the new serve industry people organizational people aware common man aware educational institutional instructions are the student generations categories.

So what in terms of it is applications implications and the benefits we also map the research problem and often we invite the other agencies people from others sectors also to invest and collaborate in this case.

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So these are the some of the basic things we have already discussed about the educational research how to select a as a good research problem and how to identity it How to map the different kinds methods population then the techniques etc how to select a scientific research problem and how to run a successful PhD or the doctoral program in our institution by formulating certain policies principles, practices etc..

Now we have to learn now we will look into the present generation like now the when we compare the pedagogy the content the practices of today's learning, teaching, learning situation is completely different from the traditional are the traditional teaching learning environment now with the technology exploration and evaluation of the ICT it is resend that the hole nature of the class room learning the hole nature teaching process the hole nature of learners.

There characteristics features they educators characteristic features there competencies their job responsibilities the hole satiation area of the research the pedagogy itself all these aspects have been dramatically changed now we will just look into these aspects individually and we will just find out how that particular context how to select a valid research problem and how it can enhance our pedagogy or practices and class room learning so let us discuss about the 21st century learners.

So we are in the 21st century and with the technology evaluation and with high city exploration with the globalization with the you know with the you know free band width of free internet access or easy access with the Vergil virtual learning environment with all kinds of facilities e learning facilities and packages so what are the characteristics features of the 21st century learners.

So the 21st century learners are collaborative they work collaboratively cooperatively the work in a team we also encourage them to be a part of the term work in terms of projects assignments so portfolio making so they are collaborative they are good networks they are not only busy in social networking etc they are also highly engaged in a professional networking research networking academic networking and they are also very good communicators they instantly promptly respond to different kinds of questions queries asked by their pries there term meets their groups the teachers etc...

So they are very prompt and proactive in collaborative work there are very good networks and the communicators they are also very adoptive they did not only the techno serving there are also quite adopted to different kind learning institutions so they are feasible is very high that adopt it and they are also highly creative they always they have been savvy also try to discover in hart something new or something different or something original, something novel.

So they are highly creative similarly they are only there information and media and techno service so they are you know they are open to a different sources of information enhance their information storage or you can say their information awareness is very large they are media savvy they are techno savvy and they have the lot of huge amount of information sources, so again but however the partial instant gratification.

That means partial instant gratification that means whatever they do they engage themselves they want some kind of instant feedback they want some kind of success they want some kind of unknown gratification of success like so they whatever they are engaging they want immediate

feedback and result and the so that is called the partial instant gratification so and they are two relent on the media nets various forms as because the techno savvy and with the free access to technology and with the availability of the social networking sites smart phones internets.

And tab tablets and all then you know all kinds of gadgets so they are very much reliant on the media it needs various forms the they can easily access they can easily use it they can easily adopt to that and they are also use it for their education purpose also so in this context we will just have look on this YouTube video it is better explains this.

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Hi I am 21st century school and I am 20th century school my educational theory is try and true service mind I have been preparing students to work for over a 100 years with foraged Taylors model. I have been using the model form early 1800's foraged Taylors based his educational model on factories in assembling lines, how is men by states on people, Taylor was an infection sea except focused on preparing students to work in factories because fine jobs what available. Like the factory jobs today and his influence came rise to documentation of teacher's activities in eventually standardized class.

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If you can type, you can make movies.

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So we discussing about the 21st century learners are then so similarly the21st century educators have also are also having different characteristics and competence they have also developed a lot have improved a lot and they have also learnt so many other concept competences as well like 21st century educators are more students centric and holistic, so earlier in the traditional days the pedagogy or the teachers where are the educators have more teacher centric the pedagogy or more was more teacher centric that the teacher prescribes teacher was prescribing everything teacher was prescribing not only in terms of curriculum content but what is available where and terms of books matters etc.

It is more teacher centric but now in 21st century the teachers are educators are more students centric and they do not only focus on only domain knowledge development are content knowledge that the particular kind of academic behavior only but rather they focus on the holistic development all round development of the learners so and again they are also adopters to the curriculum requirement so now they have also updated themselves they have also improved their professional skills and competencies.

So they quickly adapt to the different curriculum requirements and ICT they are also ICT savvy techno savvy they are gradually learning so different kinds tools and techniques how to use ICT for the teaching situation and also they are also making them familiar with the students learning styles and because they have to adapt they have to customize they teaching style teaching approach according to the learning style of the students.

So they are also the are also quite feasible in adapting and Improving them themselves and carting to the needs of the students so and more over there also the visionary teachers they will not only focus on the holistic development of the learners of the students mark but also they have the feature reason and machine and the goals of goals for the not for the students generations are for the educational institutional but for the country as well.

So they are visionary teachers so imagination and adoptability are the key components so in order to be a very good visionary educational leader or dedicated teacher etc you needs two components one is then imagination and another is add up ability so you have to improve your adoptability feasibility dynamicity at the onetime one point of time and another thing you have to have the future goals you have to the feature goals.

You have to imagine you have to visualize what would be the feature like what would be the feature of our educational function what would be the future of our students etc you have to visionary leaders so imagination and adoptive at the key components that you can see the potential in emerging tools and wave technology so now with every with every day every week now we are rather technology as exploring the new kinds of apps learning management tools and you know different kinds of wave technology etc..

And at the teachers to be you know visionary leader they have to visualize they have to imagine they have to think of head how to utilize this technology or how utilize this latest apps how to utilize this LMS system you know for our benefits for teaching learning progress for improvement for academic for research so how to utilize this technology they have to be very adoptable visionary leadership they have to be very imaginary leaders. So we can see here we can also see an example in this context.

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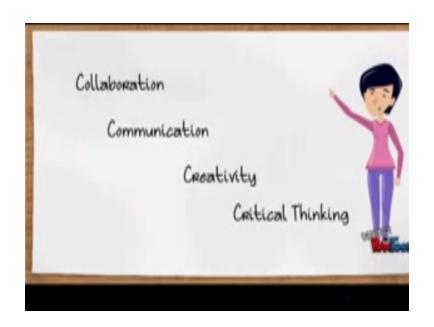
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1. Pedagogies which personalise
learning

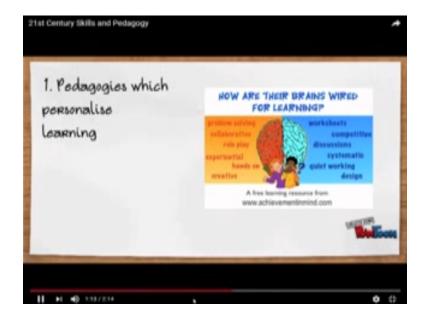
2. Pedagogies which enable the learner

3. Pedagogies which highlight
4. Pedagogies which the interpersonal nature of contribute to learning

learning

building the learning community

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1. Pedagogies which personalise
Learning

3. Pedagogies which highlight
The interpersonal nature of contribute to learning

Learning

4. Pedagogies which the interpersonal nature of contribute to building the learning community

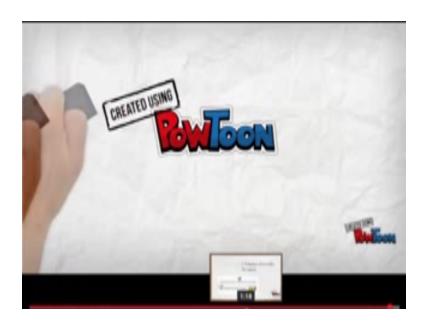
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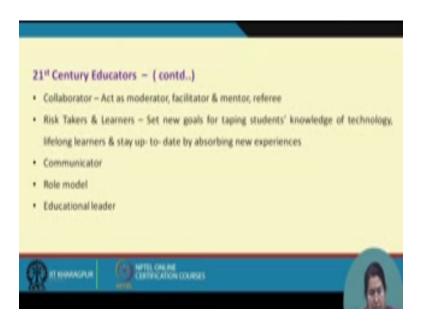
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So 21st century educators are also themselves are the collaborators they act as a moderator, facilitator and mentor and referee so they not just teach you typical face to face class room learning but also they also act as a moderator in modifying the you knowledge process are adopting a new method or introducing new to a new kind of a learning collaborative learning so they are the facilitators they are at the facilitator to guide you they are the mentors they are the referee they are coach.

You can say this they act they play multiple rolls the rolls and act as a partner in the teaching learning process so they are the collaborators similarly they are the risk takers and the leaner's they themselves are engaged in the, continues learning for their professional development for their domain updating their domain knowledge etc.

So they are the continues learners lifelong learners and they are the risk takers often they take the risk in you know introducing some new concepts new approach new tool techniques so they are the risk takers also they set the new goals for tapping the students knowledge of technology so how to tape the students present generation students knowledge of technology because that techno savvy how to tap their knowledge and for that matter he also he can also set some times new goals.

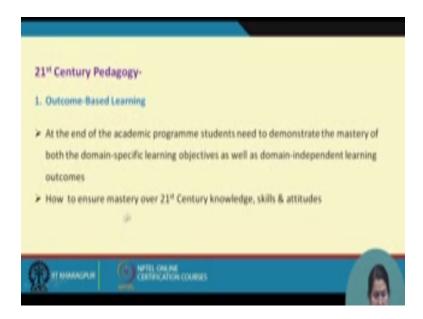
And how to engage not only the students in the teaching learning process make them active learns or participative learners but how to engage them and how to engage themselves has the lifelong learns and stay up-to-date in by absorbing to the new experiences so they adopt that kind

of approach and attitude to update themselves to be the continues learns to act as a collaborative and partner with the students in getting them some engaged in collaborative learning.

So they are also the good communicator they need to communicate you know communicate very clearly you knew they transparently and on impiously so they are the good communicators thy cat as a role model they act as role model like you can say they have to very effect in the academic environment so bring the fitness in terms of academic mind academic behavior academic attitude.

And so they have to be role model and they are also the educational leaders because they are expected to play multiple rolls not only as a academic mission researcher etc.. But the educational leader who is going to lead the initiation who is going to lead the organization and who is going to lead the feather generation of learners.

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So similarly so 21st centuries pedagogy to 21st century pedagogy as primary focused on 1, 2, 3 concepts we will be disusing on these concepts have see that outcome based learning 21st century pedagogy primarily euphonize on the outcome based learning whenever we are designing any curriculum any program any course we must focus on it is outcome learning outcomes like if we have designed a particular course design a particular program or curricular whatever.

So what it is going to yield after the completion of that program so we have to very much focus on outcome based learning so any academic program must focus on it is outcome the result ands in which way it is going to full for us so outcome based learning primary advocate soil at the end of the academic program the students need to demonstrate the mastery of both the domains specific learning objective as well as domain independent learning outcomes.

Like the outcome is learning focus on that after the completion of a particular academic program it must ensure that the students after going to through that academic program must demonstrate must expect certain kind of mastery certain kind of expertise in there domain may be it is physics, chemistry or that means in their own discipline in their own domain like which they were studying in not only domains specific learning objectives like if they are learning physics, mechanical engineering or every space engineering or chemistry or whatever subject domain they have studied.

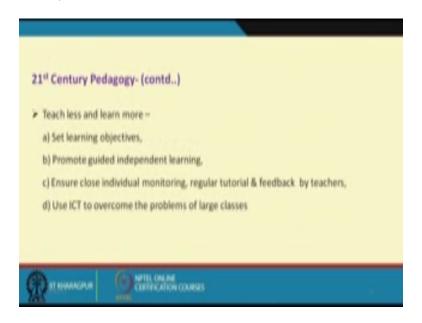
Not only they have secured they have acquired the mastery in that domain specific learning objective but also some domain independent learning outcomes what are these domain independent learning outcomes like yes they have to be very that means they have to also learn some 21st century generate skills like they have to be very good communicator they have to very good collaborator they are very comfortable in working in the terms they have to be problem solvers.

They can easily graph the problem and try to solve a solve the problem every centric way so problem solvers the term leaders they are the similar they have to demonstrate leaderships skills then the term works skills then the communication skills collaborative skills they have to demonstrate the you know ability to negotiate with others to be culturally sensitive cultural develop the cultural awareness and to be able to work in a divers work place.

So they have to distrait some certain other independent kind of learning outcomes also so as a result of the academic problem hence all the academic programs they just not only constitute set ups the content and the curriculum and the topic but also must open the wanes or must keep the platform open for learning these kind of independent learning skills as a result of that academic program.

So then again how to ensure the mastery of mastery over 21st century knowledge skills and attitude so these are 21st century organizations 21st century employers they need etc others skills also generate also besides your domain knowledge so how to ensure that the our learners our students our present generation youngsters they are actually also accruing these 21st century knowledge not only domain knowledge but also other independent abilities knowledge proper knowledge skills and attitude to work with other to be open minded attitude to be democratic in your approach attitude so all the kinds of positive attitude, how to ensure that.

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Similarly 21st century pedagogy also advocate like you teach less and learn more so pedagogy empathizes that you that being the educator or the teachers you need not have to teach more teach less and but learn more so you phasilitate the learning process you give them the opportunity to learn to explore or sometimes collaborate explore the new learning platforms new learning new concepts discovering the new aspects innovate the new ideas.

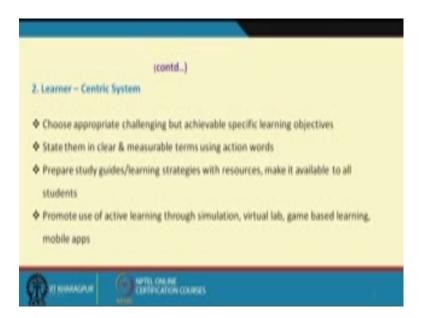
So teach less and they learn more said the learning objectives so the pedagogy advocates for both the teachers and the learners to set their learning objectives so before any academic programs we have to specify the learning objectives prompt with the guided independent learning so the teachers role here is facilitator a mentor a coach hence you prompt the guided independent learning you are their guide the students at the learners. To show the path but make them self sufficient and independent so there is called the guided independent learning.

So ensure the close individual monitoring regular tutorial and feedback by the teachers ,so this promoted also ensure that teacher should focus more all catering to the needs of individual learners that is why by making the learning more personalize so he needs to monitor their progress give them the regular feedback and you know then they are regular feedback as well as clarify that doubt while conducting regular tutorials engaging them in some kind of practical assignments, so to ensure that each and every individual learner has actually learn and acquire those skills and knowledge and attitudes.

So use ICT to overcome the problems of large classes, now with the 21st century or with the exploration of the ICT with revolution of ICT also our long generations or the students aspirations for higher education expectations from the higher education has also enormously increased. So the enrollment admission in different academic performance also we have increased enormously.

So in earlier in traditional days when we are getting early 50's, 40, 50's students in the masters program classroom etc, now we are getting the 1000's students so how to chattered to the needs of these large classrooms or students so here we have used ICT as a tool to individually monitored to individually give the feedback to individually assigned different kinds of you know assignments and the tasks to into personalize the learning here we have use the ICT gazettes. So like we have they also learning management tools like the model is there and the blackboard is there by using this ICT tools we can not only personalize the learning for each and every student and we can manage the large classrooms we can give them the assignments, we can engage them in active learning and we can monitor and evaluate their progress as well.

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So and second is the, so 21st century pedagogy again advocates for the learners centric system whatever you design you prepare, you know you want to deliver it must be primarily learner centric so choose the appropriate challenging but achievable specific learning objectives even if you're designing a new course contained program whatever, so you choose the appropriate challenging but achievable specific object like the research problem you should not be too ambitious, you should not be very philosophical and you know highly you know abstract in your ideas but you select such a topic and the program or the model which we can specifically, categorically spell out the specific learning objectives.

State tem in the clear and measurable terms again in terms of learning outcomes, in terms of the skills the students they have merged have they, they have acquired, they have learned etc how it can be measure, how to measure the learning outcomes in terms of behavior, in terms of the performance, in terms of skills so this should be in a measurable term. So use the action words or a measurable terminologies in order to assess the learning outcomes, in order to map the learning

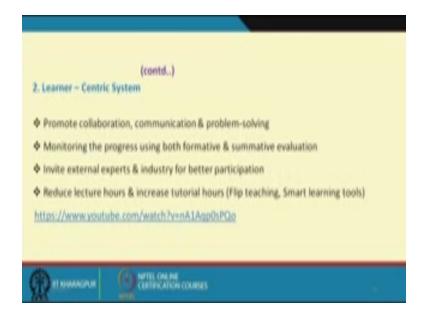
outcomes. So prepare the study guides and learning strategies with the resources and make it available to students.

Here you need not have to prescribing the sources are available so you take the help of these ICT openings ICT tools and learning resources, you prepare the study guides, you set certain innovative learning strategies and you also search and find out the resources and make it available to all the students in terms of giving them the information that these are the sources, these are the strategies, these are the you know websites you go through it you will get it from there and you give them some kind of guidelines to go through in a particular directions.

So promote the use of active learning through stimulation virtual lab, game based learning and mobile apps, so you have to very innovative yourself in blending all kinds of you know techniques and ICT tools like sometimes stimulation will be very, very essential how to use it in different context, so flexibly the use it stimulation virtual labs where giving them the more kind of concrete kind of physical experience.

Game based learning to engage them, motivate them and similarly mobile apps so how to promote active learning through blending all kinds of ICT tools and techniques and being innovative in your pedagogical approach.

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So similarly promote the collaborative learning communication and problem solving so whatever

assignments you are giving them it try to engage the students in all kinds of collaboration to

enhance their communication ability and problem solving ability. So monitoring their progress

using both the formative and summative evaluation so every now and then, every moment you

give them the feedback because from their feedback only they can also map their improvement.

So give them the formative and so adopt the formative and summative kind of assessment mode

evaluation mode and give them the feedback from time to time. So invite the external express

and the industry for the better participation in case of any specialized area, in case of any job

related in employment opportunity area you can also invite the industry experts or the you know

statements on some CEO's on mange in your managers or even from the grassroots level you

know factory workers to give them the, you know to express them to give them the knowledge

concrete knowledge, situation knowledge, contextual knowledge and explain about that tactic

knowledge into job experience and you can also invite the industry people for better

participations.

So nowadays that is why everybody, every student group from starting from the beginning from

the schools itself, so they should keep some kind of exposure to the concrete situation like

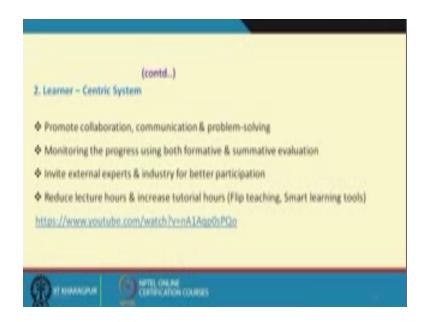
student intensive program excess in studies to etc, etc and reduce the lecture hours and increase

the tutorial hours so like nowadays the 21st century educated must adopt in innovative approach

in not only flexible and innovatively utilizing the tools and techniques but also reduce the lecture

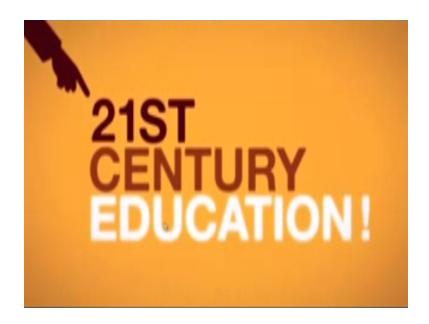
hours and increase the tutorial hours.

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So collaborative working hours so that the student engagement will be high so in that context they can use smart learning toward they can reverse the in old teaching learning process to the flip more like classroom we can discus and clarify the doubts and think of in terms of innovative ideas etc, etc.

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So you can totally reverse the classroom practices and reduce the lecture hours and increase the tutorial hours so in this context we can also see a, you tube video in the 21st century education.

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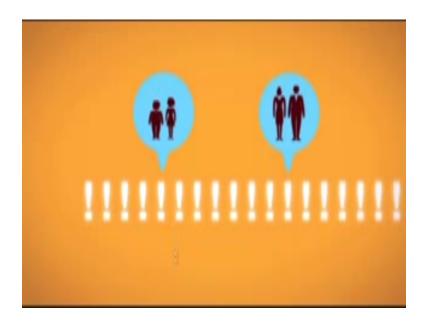
We look into education revolution the prices changes.

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In schools, regions, entire countries attaining education

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And find experience to the students and of teachers they have lot to choose and then it is run about.

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But in which the life evoke the sun as large in antirust

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People according 2000 websites every hour

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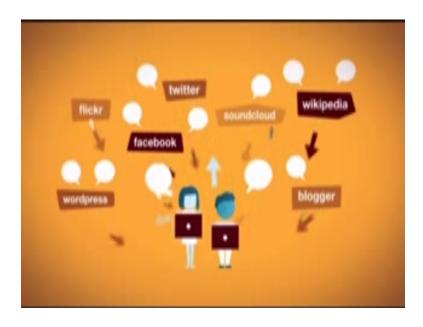
By applying 35 hours in every minute and working 2 billion you tube viewers every day

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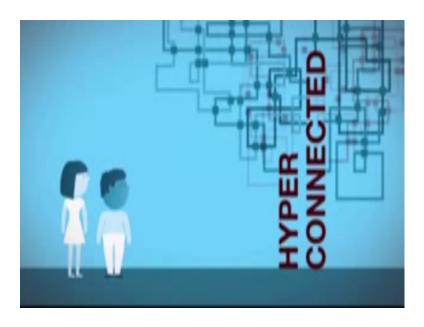
On the eternally explored 290 average in one thousand faces book friends like connected people thousand of way.

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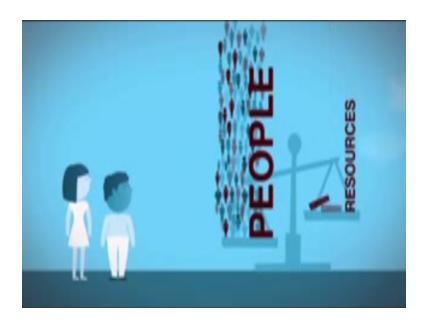
Like introduce produce and communicated information previously in number of ways literally connects to the globalised world.

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To hyper connected world.

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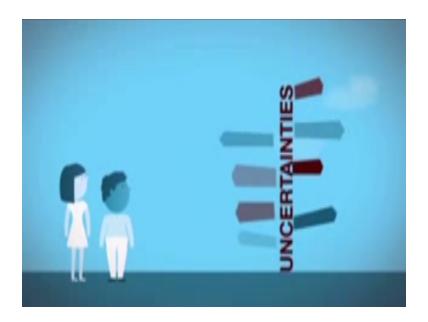
With more people resources.

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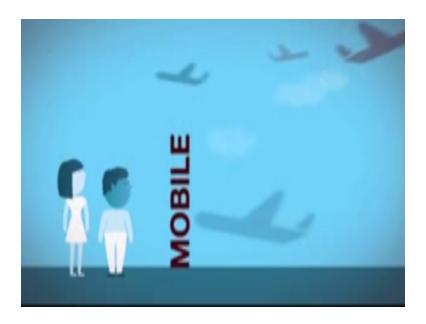
Busy in competitive world.

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Full of uncertainties.

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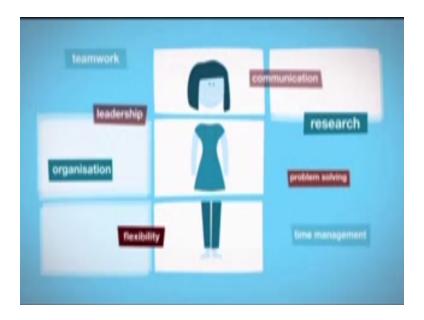
The web for cities move by mobile.

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And qualified.

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Increase the span of multiple jobs positions some of which have been invented here.

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In response education leaders making big changes you think 21^{st} century skills reasoning enable in technologies.

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And personalizing learning to students and in creative ways.

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In South Korea switching to text books.

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So students can study any time in anywhere.

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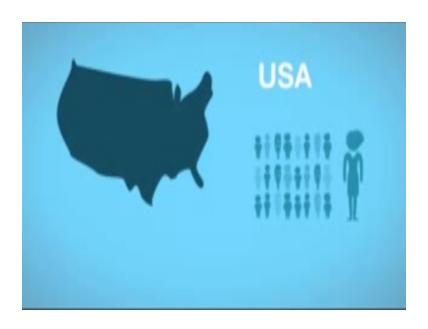
In Denmark.

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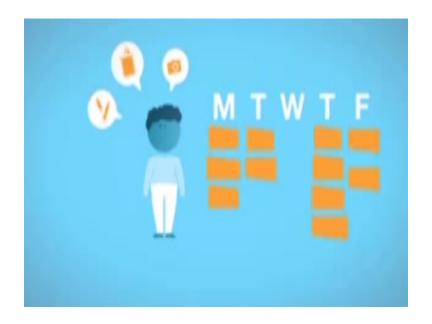
Students can access any sort of like even face book is longest in message each other.

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In USA.

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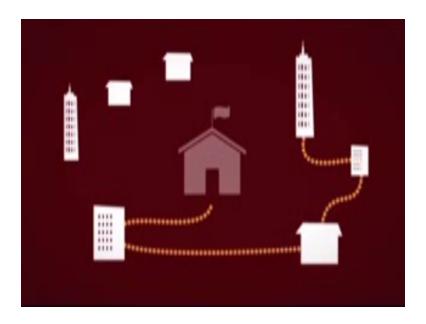
Learning and creatures our lasting students to create an individual's their performance to generate each and every students.

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Learning can happen in anyway and everywhere.

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That is why some of the students go learning beyond school hour's way internship with work organizations and fundamental per week of students learning implied.

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Distance learning programs or connecting engaged the students with the open mind communities and personal mental discovered about the learning.

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In 21st century education basic examples to ensure the workers citizens more creative problem solvers they can communicate and lifelong learners to make sure that changes can happen on message Skype we need to make big changes so that is the beginning.

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Join us is an important to connect the education implies in across the world.

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For further information, contact Australian members of the Global Education Leaders Program:

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So thank you very much now we stopped here and the next class will come to know the same topic thank you very much.