

Applied Linguistics.
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Lecture 26.
Language Development and Specific Difficulties.

We are going to look at language development and certain specific difficulties in the process of language development. Let me contextualise it. In the context of 2 specific aspects of applied linguistics and 2 specific aspects which we have looked at by now namely language teaching and language difficulties. We have looked at language teaching in relatively detailed way.

We have looked at what are the theoretical perspectives in language teaching, namely behaviourist perspective and mentalist perspective. We have looked at a critique of both in terms of what works and what are potential areas where we still need to develop theoretical modules to understand language teaching. We have also looked that the relationship between second language acquisition in language teaching and some of the specific teaching methods.

Some of these methods were based on behaviourist model of understanding in order to teach language and some have a combination of both in terms of behaviourist and mentalist perspective. At the same time we have looked at some of the difficulties, some of the ways in which learners deal with difficulties. These difficulties have been studied in terms of disorder. Now, today we have invited Dr Menon to talk to us about specific difficulties in particular deafness in the process of language development in learners.

Through the issues about policies and curriculum design in terms of what, how curriculum design is developed and how language development is looked at vis-a-vis specific difficulties is what she is going to be telling us today. In order to understand specific difficulties, it will be significant for us to keep in mind the process of language speaking in particular the processes involved in language teaching methods and then compare and contrast with a discussion on specific difficulties.

(Dr Namita Jacob starts her lecture.)

Was always a site to my life and I think if I knew, if I know, if I have some direction in what I choose to do, it is because I have always worked. Since I was a student in WCC, my interest was really in public health. It was not in education, in fact couple of years later when I started as a teacher and went back to my school to pick up something, my teacher asked me what

you are doing in ISRO, I teach and they could not stop laughing because I was the worst student they ever had.

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I was the last person they would imagine who would become a teacher. And it kind of shocks me as well, it is the last profession I would associate with myself. But special education was incredibly interesting. I happened upon it in the course of my work and continued to stay engaged with active teaching even when I was studying. So, I always worked after-school, I always worked through my holidays as long as I was a student and then every degree had an in between of always taking a break to work.

A lot of work I come across and my work today is into 2 sort of parallel fields, one, I do a lot of work in teacher education, curriculum development and so on in response to specific requests. So, for example our country now has a policy or has had for certain time a policy of every child in school and the fallout is that every child with or without the disability. And the fallout of that is how are you supposed to educate them and the fallout of that is what does a teacher education program look like.

In special education specifically, in disability itself, I started kind of jumping all over the place, I was not really interested in one specific disability but rather in the concept of what is interrupted if you have a particular impairment. How is learning interrupted and what can I as an individual do to enable that that gap. My first, it initially started with several policies but my first sort of love affair with this whole idea was with children with learning disabilities.

At that time no one had heard these terms dyslexia and dyscalculia, basically you were the dumb kid in class who could not spell right, who could not read, who never passed exams, etc. etc. We will understanding what it meant to have something that did not allow letters to just stay on a page. And what does it take for me to help that happen. That was really cool because then it is no longer a question of are you smart, are you dumb, it is a question of how does your brain work and can I figure out as an educator, well at that time did not see myself as an educator.

But whatever, as an educator how do I figure out that appropriate pathway. My next sort of big, complete engagement, that just, that was... I still you know through those early years still wanted to do public health, Village development, these were all sort of my my areas. And it so happened that I was lucky enough to get invited to spend just a couple of months with the school for the deaf blind.

It was the only school in our country and as I learnt much later, the only school in the entire region, Asia Pacific region and it was a school for children who were deaf blind. Very particularly amazing combination of disability. If you go to any school for the deaf, you will see how visually oriented the deaf kids are. If you go to schools for visual impairment, you will see how ordinarily focused visually impaired kids are.

So, if you were to imagine that I remove your primary way of accessing the world after your impairment, what am I supposed to leave you with? That is just an incredible situation. If you are totally blind and profoundly deaf, your access to the world is completely through your hands but you do not know the world exists, so how do you get there? So, when actually engage with the kids, it was mind-boggling.

It was really amazing, what what it took to explain a concept, what it took to give them a sense of the world and what it meant if they got it, where we went with it was, this was just amazing. So, we could put them on a normal curriculum once and this is the key and this is the correct with your class, once good a good language structure was given.

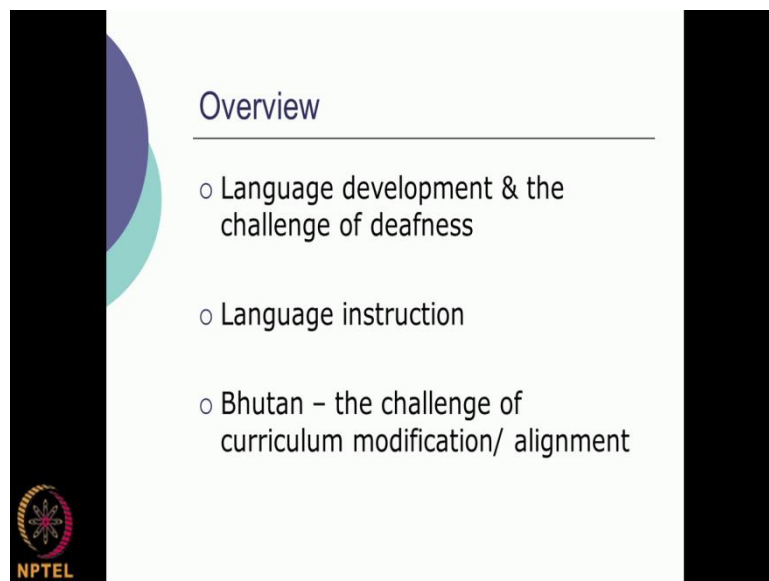
So, deaf kids and language development is pretty hard to start with but deaf blind kids and language development is a completely different lecture, not going to go there. But what I did learn in those years was really a deep respect for language. Language is a primary way of engaging a child to move beyond a sort of receptive, reception of experience to a child who can construct, know who can use his mind to construct.

Who cannot just learned by watching or copying or a simple experiencing but learned by kind of actively thinking things through. And this is if you, I mean you must have spent the first part of this course really understanding how does language develop. And that sort of, you know I want to think of think of it in the context of a deaf child.

I wanted because you said curriculum, I wanted also to places within this idea of what drives the way we think when we set up a curriculum, what limits it. Because often this is what we face, when you look at curriculum, when you look at curriculum of anything, of your own course, teacher development courses of our state curriculum, of our centre curriculum.

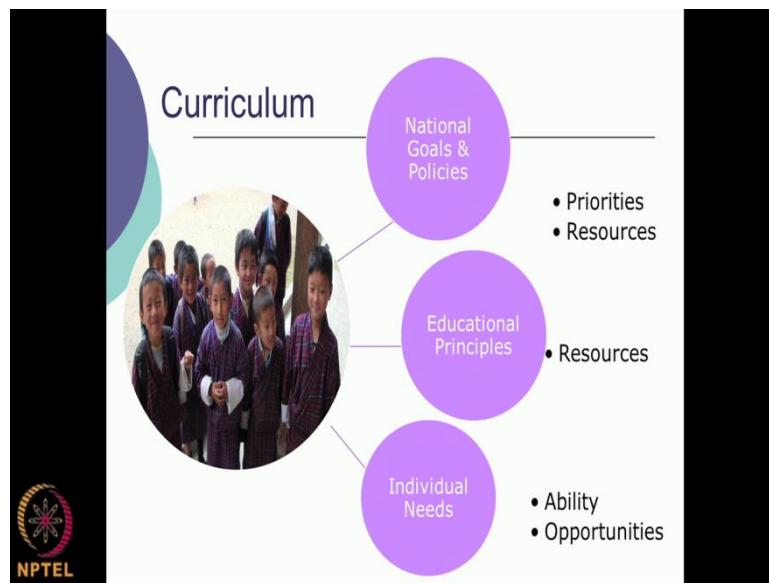
There are always question marks about what did we leave out, why did we leave without, what did we choose to teach, why and why did we choose to teach it in that particular way. So, when it comes to language instruction, this is, this in itself is a very heavy topics. When you add in the filter of disability, when you add in the filter particularly of deafness, then the complexities just expanded hugely.

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So, today only talk a little bit about language development and the specific challenge of deafness, sort of how do we view language development in deaf children, how do we think about, what are the theories around, poses a very interesting question. So, I would I would end, sort of giving you the problem and unfortunately unless I have an aha, not a solution.

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So, broadly when we look at curriculum development, we are asking, curriculum development always ask the questions what are you going to teach, why are you going to teach it, wonder what theoretical framework, so there is always an evaluation component in curriculum development, there should be, right. Not, it seems like you can just start with something like this and end it there, and that as it is has its own set of numerous ways of viewing teaching of history for example and certainly teaching of language.

But a curriculum is never designed in isolation, it is always within a philosophy, it is within a larger system and that larger system is in the case that we are going to discuss is Bhutan, it is going to be their national policy, their national goals because education of their children leads towards, it fits within that larger vision of what is good for the people of Bhutan, where does Bhutan wants to be 10 years down the road, where is Bhutan today and how are we going to get there and so on.

So, there is this big things of national goals, national policies and what is their priority over the next so many years. We will of course look at educational principles, what makes for good education and we will have to consider what are the individual needs. In each of these areas, you are going to have to think about what is the real resources, right. So, it is always in the end, Bhutan may want to be the engineering tech centre of the world but if they do not have a single engineering college, that is not a ten-year plan, is it?

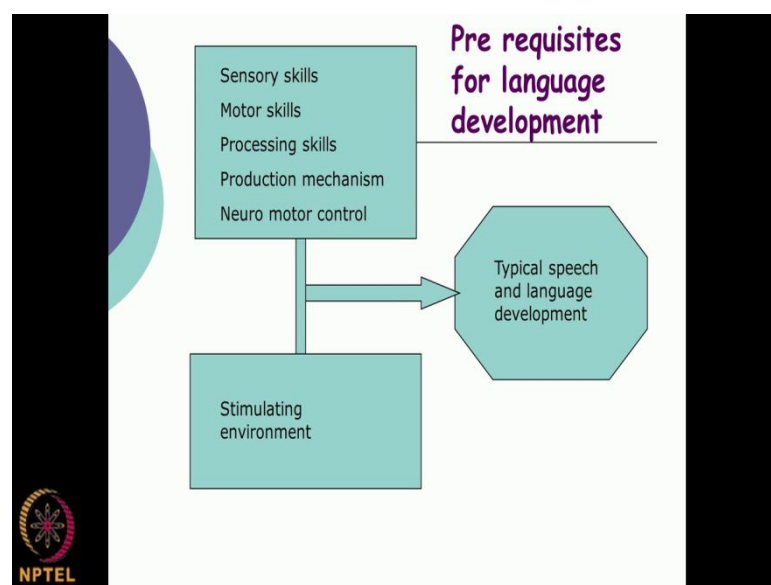
So, there is the reality of where are your students today in an international setting, where are your students, are those top students of yours coming back, if they are coming back, what is

available for them, how are they feeding back into educational system and all these questions have to then you know guide when you look, go back to your national goals and policies, you go back to your curriculum, you say, well, this batch for the next 10 years, we are going to look at people who have good science, maths and English standards, who will therefore be able to go out and study because we do not have colleges.

And we are going to have to have some policy to bring them all back and resource it to set up a college because otherwise we do not get top-class engineering students, right. So, you can see immediately that initial goal of we want to lead the world in technology is limited very strongly by available resources and then defines the next ten-year priorities which then defines your curriculum.

So, there is a feedback feed forward, it has to keep short of going in that endless circle. And when you come back to this, once we have understood what does it mean to give language instruction good, solid development to deaf kids and then we need to come back and look at where does that fit inside the national policy, where does that fit under the broad education principles that they have and where does that fit within an individual's capacity and all the resources that are available to Bhutan and Bhutanese children.

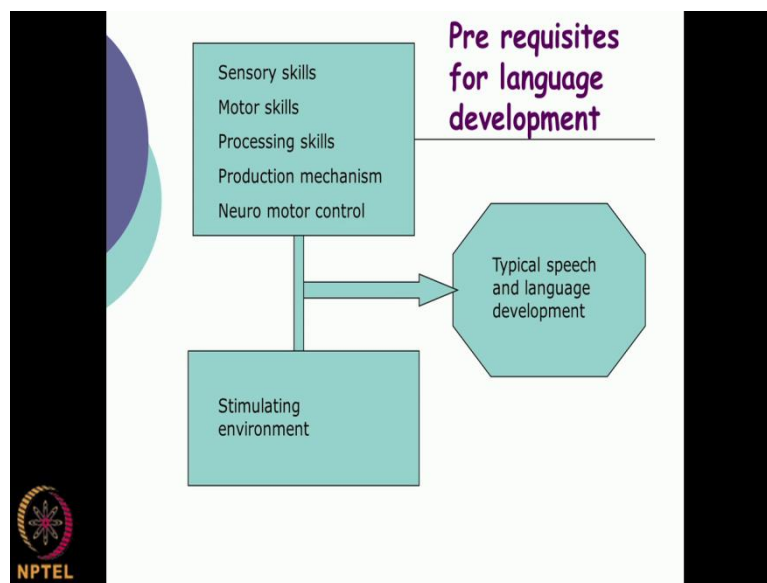
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Okay, so when we look at language development, we look at 2 broad areas, we look at one which is your, what is within the child. What are the sensory skills that the child has in specially vision and hearing and movement. These 3 are strong basis for any language development, these 3 are strong predictors.

So, you are sensory skills, your motor skills, you are processing skills, right, which does not mean your intelligent, it means you are processing skills, your production mechanisms, your ability for speech, neuromuscular control which is your overall, your ability for everything to talk to each other efficiently. Plus we also know that by itself an individual's capacity may be primed but without a social environment and a communicative environment, a child is not going to develop good language. We know this very well, right from our literature and presumably from your studies. Yes. Okay.

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And again think, you know I want you to remember this, I am sure these are things you have covered but I want you to, want to sort of remind you about this because I want you to think about this in the context of deaf kids and what is appropriate language for them. So, if you have these 2 things in place at least you will have speech and language development that is normative. And if it is normative, then when you enter the school curriculum and you enter a preschool curriculum and you just have let us say dips in vocabulary, levels of fluency, clarity of speech, general stuffs like this, the general population, that is a fixable dealable problem.

And a country like ours would build that into a good preschool curriculum and a good primary school curriculum, right. By age 12 we would expect our children to have adult like competence in language skills, right. So, between 10 and 14, if you give yourself a good sort of wiggle room, you would expect all children who have normal, you know, sensory, motor, etc. etc. skills and a good stimulating environment, either at home or at least at school would

result in age-appropriate by that age gap 10 to 10 to 14. So, by the time they enter the high school level, we should be assured of adult processing levels of language, right, of all kinds.

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Language development & deafness



"Before my teacher came to me, I did not know that I am. I lived in a world that was a no-world. I cannot hope to describe adequately that unconscious, yet conscious time of nothingness. (...) Since I had no power of thought, I did not compare one mental state with another." Hellen Keller, 1908: quoted by Daniel Dennett, 1991, Consciousness Explained. London, The Penguin Press. pg 227

NPTEL

Okay, so language development and deafness, if you are born deaf, obviously you are going to lose access to sound. Right.

“Professor-student conversation starts”.

So, you think of normal language development at which point, at which point does it start?

Normal language development. What is your first clue that it, that language is developing?

(())(17:09) some application they also respond...

“Professor-student conversation ends”.

There is a maintenance of ideas, the response to all these quirky noises you make and these big funny faces you make and you can get a baby to smile at you. Right. And that is the beginning of that communication and it does not depend on hearing. When it starts to become little bit dicey if you do not hear is as children grow older and they start imitation.

Right. So, they babble, babies babble, they coo and gurgle when they are very small and then starts moving into babble babble and when they are around 6 months, you will start getting all those intonations that you are using. Right. So, you get a lot of the intonations, you do not get any meaningful words or even approximation of words but you get a lot of those intonations of speech. So, a baby will do buk buk buk buk if they talk about something and

they will point at, they will giggle, they will do all these things in a nice sort of that intonation is clear. Right.

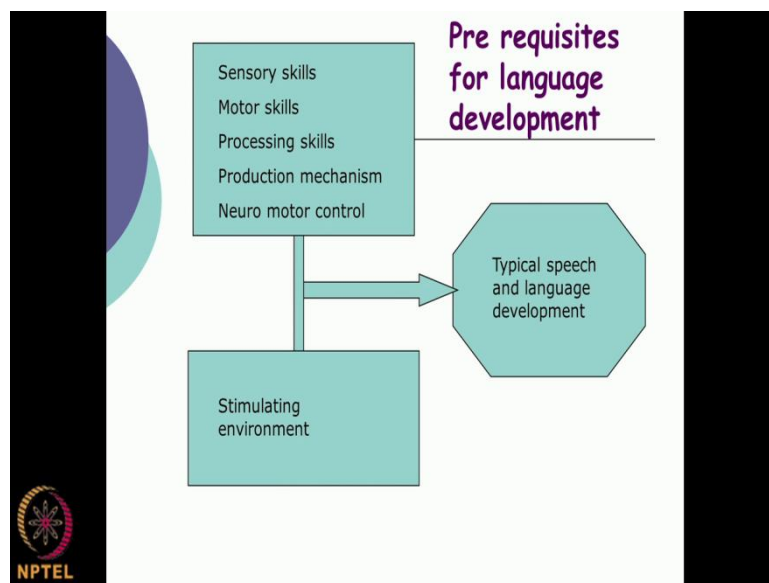
We also know from our research that the sounds that babies respond to and the sounds that babies make start to approximate the language that they are hearing. Right. And around 6 months, they start to dropout responsiveness to those sounds, language sounds people speech sounds that do not occur in their language.

So, your Japanese baby and your little bong baby who cannot hear the difference between ba and ra and pa and all these ra la ba pa, all these standard sort of joke that we make about all these people in all these languages, right. If I take a 4-month-old baby, a 4-month-old Japanese baby will respond to a series of ra ra ra la ra ra ra sound, will show me surprise or notice of difference when she hears the la. At 6 ½ months, there will be no acknowledgement, right. So, if there spent the first 6 ½ months listening only to Japanese, it is gone. It can be trained in adulthood but it is gone as a natural capacity.

Your Malyali baby will hear all the las and the nas and your North Indian baby will not hear those sounds but after 6 months, right. It will not, before that we are all, we all come with all possibilities, so what happens to your deaf kids is that at that point, whether the children start sounding more and more and more like the language group they grow up in, they will start sounding a toner.

So, they will not increase complexity of babbling, they will not respond to your voice and sound and remember, 6 months, 8 months, 10 months, this is a moving baby now. So, the result is the adult who used to come to you because you were not a moving baby has stopped coming to you and stand there and says wah wah wah, is not it. The adult who is standing cooking here is going to tell you something and your hearing baby is going to respond but your deaf baby, unless they happen to be looking this way is not. Right. So, what happens is that nice stimulating environment that we talk about is not so stimulating on numerous grounds.

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One, they do not get language, they do not get language, they have no way, there is no speech that is going in. Right. So, all they are getting is expressions, body language, gestures which we still use at that age group with babies. Right. What could support them to develop language at that time? It can only be these things or it could be early identification and Cochlear implants so that they can then hear sounds. Right. Otherwise they are going to miss this entire early period and they will get to their age 3, so when is the first word...? Come on.

“Professor-student conversation starts”.

Okay, if you say so.

“Professor-student conversation ends”.

When do you expect your first word? You get a lot of imaginary words and made up words before that but your first word is around 2. Okay, 1 to walk and 2 to talk, remember that. Right. So, round 2 is when you will start getting words, by 2 ½ you will get this massive, wonderful increase in vocabulary which is also cultural. It is very cultural, we know that the first 50 words, the first 150 words that are spoken in for example in Upper-middle-class white community versus a Japanese middle-class community, completely different words.

They belong to different groups, right. Because a lot of what we say to our babies, what we talk about those children is very different. So, your white American baby is going to say and your Brit your Brit babies, your American babies, Upper-middle-class white kids will get a whole bunch, the first 50 words will have a great percentage of nouns, naming things.

They will have names and they will have descriptors. Go to Japanese baby and they will have relationships and they will have emotions. Right. They will also have a few nouns but not not in, if you look at the proportion, that is how its wings. Its wings with cultural sort of what what do we say to our babies, what do we think babies need to know, right, that is where vocabulary comes from.


So, you understand this idea of stimulating environment is so many things, it is so many things, right. So, it is not just availability of books, it is not it is not just adult beings around, it is not just good hearing, it is not just good vision, it is all these things. Right. It is everything that we do, how we talk, who talks, what you talk about, all these things really make that definition of stimulating environment.

So, come back to the deaf kids in normal development, normal language development, by about 4, a child has gone through most of the ups and downs and has a pretty stable vocabulary, a good understanding of grammar, good usage of grammar, still errors, usually tense and you know agreements, these kinds of very standard sort of predictable errors. There are all kinds of fix-themselves so that by the time you are 6, you are not bad.


After that it is all about learning the insights of language, learning language structures and so on and so on and lot of literacy starts happening at that point. But by that time, actually it is done, education is about so much more, about expanding vocabulary and developing good literacy and presentation and written skills and decoding language and all those things. The base language structure it is there, right.

And as I said, by the time you are 12 or 14, you are done, now you are adult level, assuming you are pretty normal, not like a stimulating environment, but a pretty normal environment, you should be fine. So, when you come to deaf kids, and they think of their universe, that is a very very difficult universe then.

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Language development & deafness



"Before my teacher came to me, I did not know that I am. I lived in a world that was a no-world. I cannot hope to describe adequately that unconscious, yet conscious time of nothingness. (...) Since I had no power of thought, I did not compare one mental state with another." Hellen Keller, 1908: quoted by Daniel Dennett, 1991, Consciousness Explained. London, The Penguin Press. pg 227

If your access to language in a normal household is that your parents speak and you cannot hear, what really happens is a lot of pointing, a lot of taking, a lot of a lot more of pointing and a lot of gesturing, right. So, kids, if you see kids who have never had access to deaf communities, deaf education, oral or sign or whatever. What you will see is kids who seemed really smart at some level and really not able to cross like this unseen barrier.

We are able to increase the vocabulary but we are unable to really take them over this block. So, if they come to us really late, it becomes exceedingly difficult to give them a solid language foundation. So, this is where we see the difference if you have had, it depends a lot on the kind of environment you have had, the range of experiences you have had. We have greater and less success as a result, I have had 15-year-old coming for the first time and have a pretty decent language at the end of all the training.

And I have had kids who have come in at 8 and 9 and just never crossed that, never crossed that, very standard 3, standard 4 level of language. They can learn a bunch of stuff, they can sort of string a sentence together and make, you know give you basic answers and so on and so on but it does not, you know the language does not quite fly. What we find is, what we have understood, if you read, I have put a quote from Helen Keller here.

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Language development & deafness



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NPTEL

Before my teacher came to me, Helen Keller you all know, deaf blind.... She, she started her education with Anne Sullivan when she was a little girl. So, she really was lucky, she has she was deaf blind but she was still quite young when Anne Sullivan went to her and she had this massive luxury of Anne Sullivan being with her full time interpreting the universe for her. Just one person, one child following her through the day everyday everywhere.

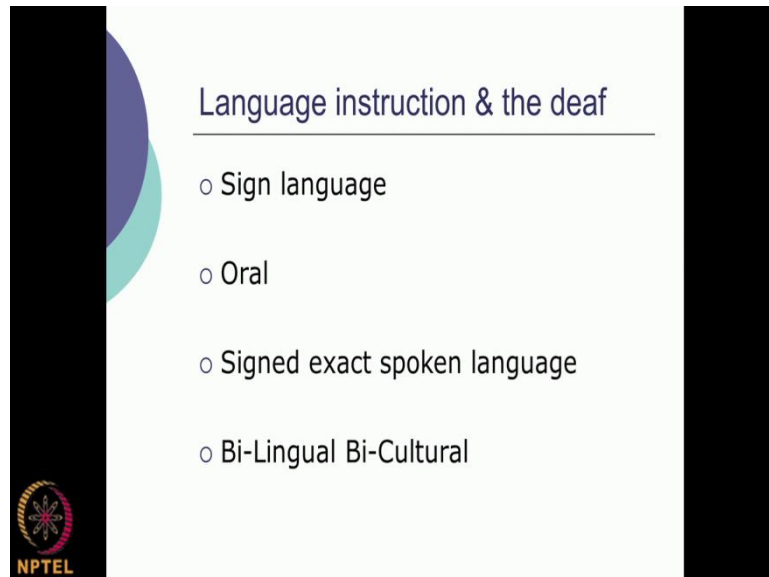
And constantly telling her what she was feeling, what she came across, how it was spelt, what is its nature, blah blah blah, so Anne was like that with her, she was her bridge to the world. Helen says "Before my teacher came to me, I did not know that I am, that sense of your own self, I lived in a world that was a no-world, I cannot hope to describe adequately that unconscious, yet conscious time of nothingness. Since I had no power of thought, did not compare one mental state to the other."

So, this is really a very profound and very clear way of explaining exactly what happens. Without language the ability to compare your own experience, to put it into words, to hold it up and to weigh it against each other, this does not exist. So, a child for example who is deaf can find his way through this maze of IIT with no problem and come back the next day and find this way again.

But if I am going to ask him to relate his experience of the process, to think about how he may help somebody else get there, he can draw map, but he cannot really imagine for another person what is it like. You know, there are these these lags, so they they have competence but

they do not have a shared, they cannot move beyond that. So, what are the ways which we really worked with children.

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Historically education for the deaf started in France, it started with a priest who recognised capacity and used sign as the most logical way to enable children. And he had marvelous success, he had these very competent, able boys with whom he could, he could just communicate freely, they could do a lot of things, they were until then considered stupid, unable to learn and suddenly he was able to demonstrate they were competent, they were able to learn, to laugh, to tell jokes, to follow orders, to participate, to problem solve, all kinds of stuff.

And his success spread and people from all over the world started coming there, learning from him, going back and creating their own little schools. Somewhere in the 1800s, there was a certain move to right to say, it was like the beginning of this whole inclusion idea and they said, well, if deaf kids only learn how to sign, then we are ensuring that they are separate from the hearing world.

And so deaf kids must be taught speech and sign suddenly just disappeared, in almost, in most places it was considered a sort of a branding thing to do, you do not teach these kids to sign, you can reach them to speak, so why would not you teach them to speak. And for a 100 years after that, we have done just that, we have largely focused on developing ways to enable hearing, ways to teach speech even to the deaf blind mind you. And really focused on building a spoken vocabulary.

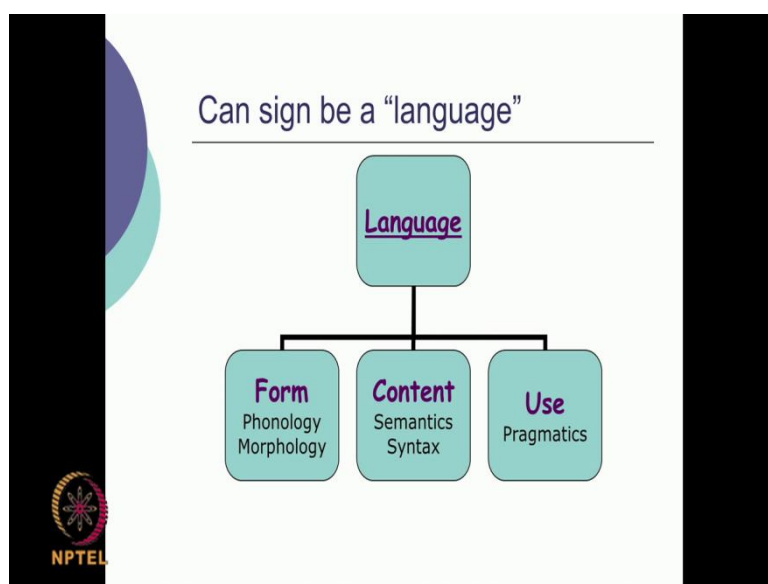
Research today really looks at this, really looks at the adults that we produced as the results of all these years of teaching and so on and really questions this as an effective educational approach. What we are finding is that children are able to move up in reading levels, in writing levels and language levels, but only the very brightest and very specifically certain way oriented children are able to actually progress beyond and be free and be good competent able language users in a hearing world.

What has, what also happened is the few schools for the deaf and the few colleges for the deaf have started really pushing for their own, for recognition of themselves, what they see integral to themselves and that is sign language. And so we have sort of comeback full circle, there was that interim period where they signed exact English or signed exact French or whatever it is where every word has a sign and every, those that do not have a sign are finger spelt and every tense marker and every article and everything that is otherwise typically left out in sign is put in.

So, I will say I am, so I will sign every word I am a teacher and I will sign each of those words. But otherwise if I were to just sign in sign language, I would say teacher me and that is that said, so there is no I am, there is no a, there is no role does have no value in sign. So, the sign was over these 100 and 150 years sort of looked down as an language as a pidgin version of everything.

What we realise, there was again a very beautiful research that were linguists came to look at sign language and do an analysis to understand what it is, what is it, because there is a difference between deaf kids growing up in deaf families and how they sign and how they interact with each other and deaf kids who are educated using signed exact English or signed exact whatever and the way they use sign and the way they use language and really in inspecting this difference, it certainly emerged wonderfully clearly that sign is in fact a language.

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Why would you say that sign, what makes any language a language, a language is usually defined in terms of form, its content and its use. And if you look at, are similar with this phonology, morphology, blah blah blah, okay. So, if you really look, I will give an example

“Professor-student conversation starts”.

What is a phoneme? Oh come on, the end of the linguistic codes, do not tell me. What is a phoneme?

It is the smallest unit of sound.

“Professor-student conversation ends”.

Okay, it is the smallest unit of sound. Okay. For example like go, I go, right and it tells you, it starts, it is a single finger, it is a closed fist with a single finger pointed downward and moving out. If I just point downwards, it means today. So, I change meaning by the 3 things. So, when you look today at a definition of phoneme, it used to be defined as the smallest unit of sound, we no longer use the word sound.

We know the smallest unit of language on language construction or something to allow us to remind people that it could, it is the smallest unit within that language, whatever it is. Right. So, I can, if I do this without movement, it is today, if I do this, if I do this and point outwards, so location, that, this and that, go, it has all the basic handshape is pretty much the

same, it is where it is placed and how it is moved or not moved, that make the actual difference, right.

Now think of morpheme, of course there are standalones, right, there are standalones like anything and a lot of them tend to be nouns, so I will say book. So, I will say book is, your hands, palms together opening outward is a book, okay. It looks like a book, so it is not not have to understand. But I can form something by saying, if I do this twice, if I do the same movement twice, it means open book, right.

So, what I am able to do or if I say cat, I sign cat, the whiskers, if I do twice, it means that, absolutely. Right. So, it is its wonderful, the S which is a morpheme also in English for example, cat and cats, that give the plural, the idea of plural, for us it is a repeat but repeat by itself is always tied and it gives a different meaning to a different word root.

So, for example if I say 1 and into the other again, if I say again, again, again, the way I repeat it tells you whether it is... You know as we do with a tone in intonation. If I say oh, she is back again or I had to do it again and again and again, right, so I can tell you the tone of my voice tells you that I am really frustrated if I am, if it was a long time and whatever it is.

So, I can carry so much of meaning, I can do the same thing with the way I do my sign. Right. So, I can say a long way, I can say a long way, I can say along way and now I add, I also told you and this is where you come into your use, right. If I am doing this, I am also telling you what the way was. So, if I translate this into English, there is the starting point, there is a circular movement and it comes back to the starting point.

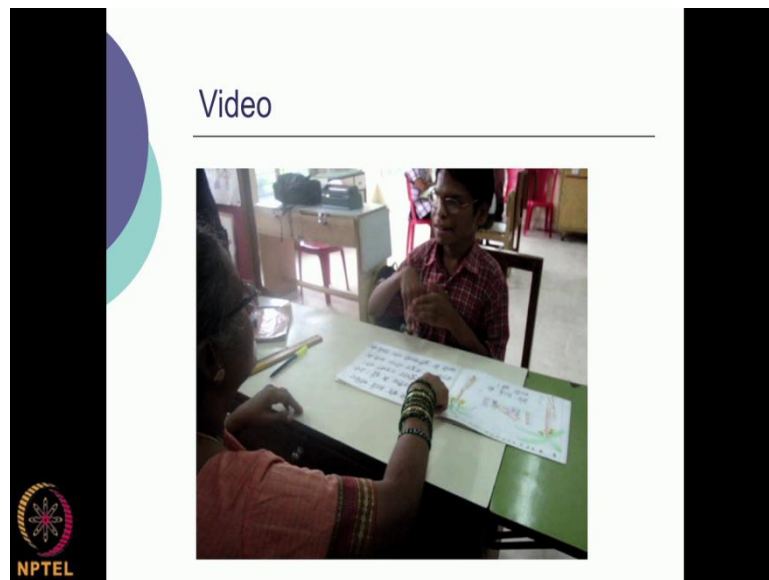
So, the English sentence will be he went all the way around and came back to the same place. And the way you will get that information is by watching my face. I might say he or I might say he, I place the person in space and this is a beautiful thing in in language, in sign language that I create the scene.

So, I can say mountain and he fell. Or I can say fell, so I can I place a person somewhere in space and then I tell you what he does, right. So, there is always I can say, he hits him, I setup and this man stood here and the car was here and he was dreaming and you will see what happens is my body will keep moving from person to person.

So, what you say as he and it and she and that becomes done through my body movement. Right. So, what you what you see is this really dynamic language that that carries everything, it has what order rules, it has expression rules, it has intonation, it adds emphasis, it has irony, it can do everything any language can do very beautifully. Right.

So, once we recognise it as a language, then one of those primary things about language development and I am sure this is something else you have studied is the idea of developing a language is best achieved when you have your base language well inside you. Right. Now, if you are deaf and your base language is sign language, where are you going to get it from? Unless your mom and dad are deaf or someone in your family is there is and signs natural sign, where are you going to get that language instruction from?

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So, the reality for us is that most kids come to us without that those first 3 years, 4 years when you should have achieved your competence because you had these great models and this nice stream leading environment, it is gone. It does not exist because we spend those first so many years searching for solutions and we do not really typically have access to adult deaf natural sign language people. They are not part of our environment, right.

You also look at the reality of your country, India is better off than most countries, we have a very vibrant deaf community and we have numerous sign language, Indian sign language, you will hear the word Indian sign language but in reality you have a Delhi sign language, Chennai sign language, Bombay sign language and it is all about as equal as Marathi versus

Hindi versus, you know there are a lot of similarities and there is a lot of very different very much, you know like very separate words signs, signs used, very different.

Typically what happens in the ideal world is that your child will have access to strong sign language base, have this language structure internally well in place and then in school, the language gets introduced.

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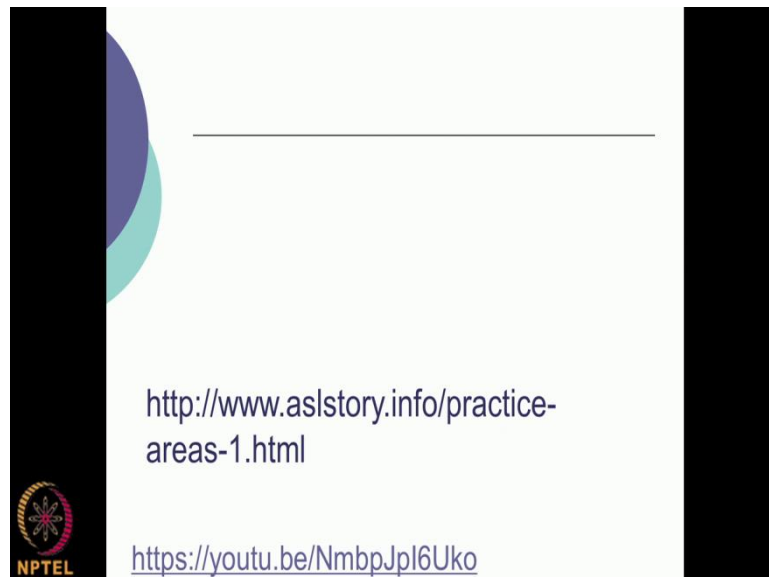
So, this is a little about and I am really sorry that I do not, I did not catch him, when I when I thought to take out my camera, he had already finished the first part. He had gone for a Shaadi, for a wedding and so he has come back to school and he is talking to his teacher about it and that is actually in natural sign. And then he draws that and then she helps him and he writes it and now she is getting into practice it and now this sign that he uses, he is using signed exact Hindi or Marathi, I cannot see, I do not remember.

So, what he is doing, he has.net, she is telling him look look your sisters, so she is, it is word by word Shaadi and he is learning and practising each sign completely and you will see when he comes to the end, he will say stop, full stop because there is no real concept of full stop. So, this is full stop, Shaadi may, can you read, I cannot read. Full stop. Khane ko something Mila, khane ko whatever mila, right.

So, basically what happens is every single word and every tense marker and every whatever it is that you can think of is signed. So, ING, the full stop, the coma, the apostrophe S, right, everything is put in whatever the language is and it helps the child get another way apart from

writing, apart from copying from the board, it gets him another way of sort of having that motor memory as well. And it really works well because the child already uses language, uses sign as a way of, you know of expressing himself, has that base fluency, has that base grammatical acquisition and then it is easier for us to build.

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We all know this, there is very good I have just put up 2 links because I doubt very much it is going to actually work now because I had it hooked up on my computer. But if you just go in and say A self story, if you Google A self story or YouTube A self story, children's story, deaf story, whatever, you get some absolutely Fabulous, some of them a little bit wonky but a lot that a native deaf speakers go in and sign stories and this is truly wonderful, there is also this absolutely marvelous project where kids are requesting certain...

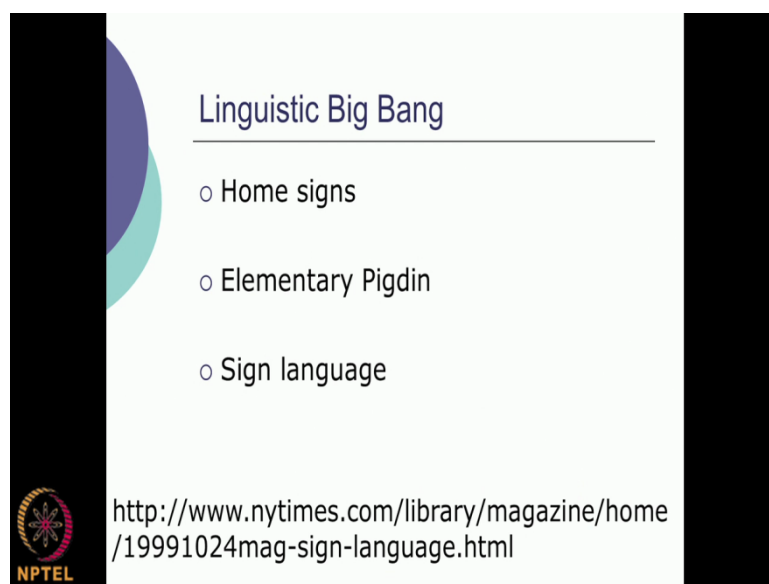
Can you ask him to tell my story, like the stories you tell at home. And they are right, the parents write these stories and send it in to these adult deaf signers who sign the story. And it allows the parents to learn and sign with their kids. And parents who are uncomfortable signing, who do not like to sign, who just do not have the body, you know it just does not come naturally to them, this is really marvelous because you know you have all the stories and videos and conversations and all kinds of stuff, all by adult deaf. That you can then, India is doing it as well, so you can at least have it available to your deaf kids to watch.

Instead of watching just Chhota Bhim on cartoon, they could all, and this is truly engage, I mean I wish I could show it to you now because you will watch with your jaw dropped, it is so engaging. The first time I saw a deaf guy tell a story, I just, it was amazing, it is amazing

because the whole story comes alive and you realise with the with the view of a linguist or someone who understands language, you can see that all the, it is not like he is acting out the story, he is signing the story and it is beautiful, how much of instruction happens...

As it does when we tell the story to little children when we point and emphasise certain things, where you show them connections, where you come back and you repeat, you know, these are all things that we do without even thinking when we tell stories to kids and that is what supports the early literacy and strong language. And these guys are doing this so naturally and so beautifully in sign, it is truly marvelous.

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So, another place that I will, another thing that I will suggest to you is if you Google Linguistic Big Bang, it is a New York Times article on its, it is easiest to read version, there are lot, there is a lot of research published but if you want to quick read, it talks of this marvelous experiment that sort of happened by chance in Nicaragua. After their big regime change, the country decided they wanted to help out the deaf kids and pick them all up and put them into schools, the older ones went into a vocational program, the younger ones went into schools.

And they tried to bring in some teachers to teach them sign, there was lot of confusion, they did not, they were trying to do oral based sign and so on and so on. So, essentially what happened is, the kids stopped themselves. So, all the kids came from all over Nicaragua, from the hills, from the forests, from the ocean, from all the corners and came in in this war-torn miserable country and all of them had little home signs.

So, sort of, it is wonderful as an experiment because it gives you these 3 levels. As the home signs were very basic and they were usually around things and they were usually around needs drink water, hungry, give, take, hot, you know, just like little gestures, not much more. What would happen was, as the kids got together, they could not communicate at all with the teachers and the teachers could not get them to understand anything but they started figuring out with each other and their conversations.

Remember again this enabling, stimulating environment, the conversation that was happening kid to kid seemed a lot more successful than the teacher to kid, kid to teacher and the teachers watching the children could not quite understand what they were saying. So, they could pick up one or 2 words but they just could not understand what what else was happening.

When the researchers came in, so they called the linguist to come in and see what are the kids saying because we really do not know what what it could be and what is going on, we do not know what to do. And they started breaking, by the time it had got to the next generation as well and what they realised was kids who came in really early to the deaf schools took this pidgin level language and made it just beautiful.

So, in a matter of not even quite 3 generations but sort of 3 different age groups we could see children moving, we could see a language being born basically. Right. So, from very basic book a table, water, hungry, sleep, wake up, come, go it became these sort of staccato sentences and from there it became very complete language with language rules, with, you know, with with all the elements of language. With morphing, with phonemes, the whole works, right. So that that documentation was amazing that you could see it actually taking place. And sort of supporting that theory of having an internal drive to create a grammatical structure in language.

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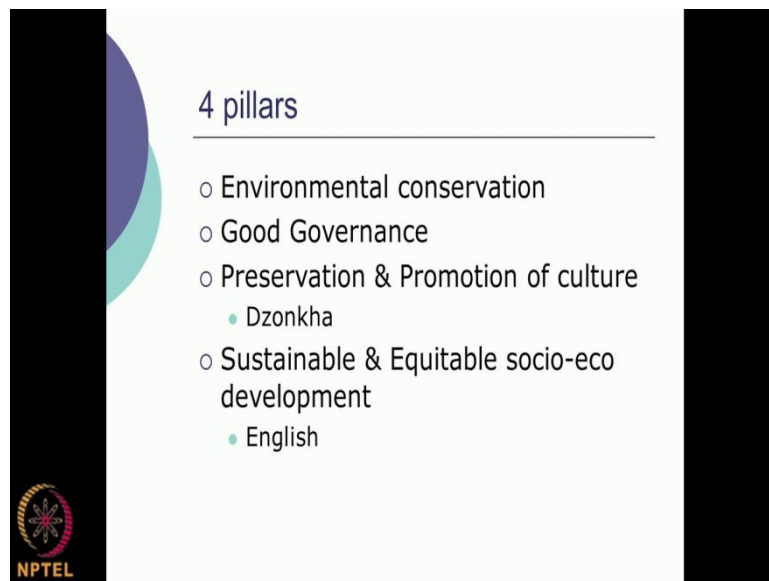


So the context of wooden is this, Bhutan is you may or may not know in about the early 70s started these sort of cautious touch with the external world and the 4th king Wanchuk had a very strong policy. We came back, he went... And they are all highly educated, they are very highly, all Harvard's and what not, Sandhurst and Harvard and everything is their background.

So he came back and he said there is no way in hell we are never going to be do well on gross national product because we have no products but what I would like to ensure is that we have gross national happiness and is it possible to actually define that. So, you will see in all the schools that they have this, the 4 pillars of Gross National happiness in the 9 domains through which these pillars are going to be achieved and the 9 domains are then broken into 50 something or the other indicators and so on and so on.

But essentially this drives everything in Bhutan. So, the equivalent of the planning commission that sometimes functions in our country, we have the Gross National GMC, it is Gross National committee something, right, that was headquartered, so Gross National happiness committee, every policy, everything that is discussed has to finally be approved by this committee that asks the question does it promote happiness of my people. Right.

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Now, happiness is apparently ensured in these 4 ways, it is ensured through environmental conservation, it is ensured through good governance, it is ensured through preservation and promotion of culture and this is extremely extremely important to them. And it is and also through sustainable, equitable socio economic development. Now the 3rd one, the preservation and promotion of culture is almost religion there.

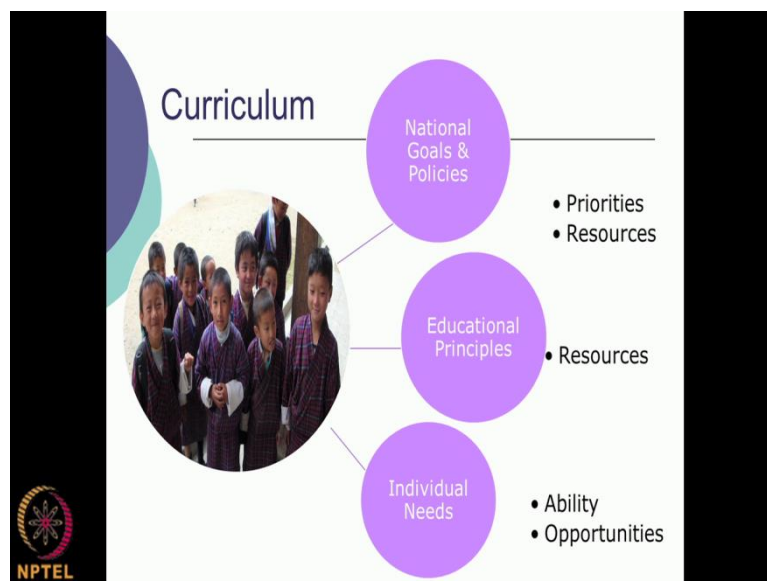
It is also because they are surrounded by the large aggressive and occasionally suspiciously behaving India and they have the prime example of Sikkim and rather nasty way we took it over and so they have reason to be scared and a reason to preserve and celebrate and remind themselves that they are them and not us and not anybody else. And that they belong together and that they respect each other and that they will help each other and all the rest of those things that make a nation, make a nation feel like a nation. Right.

They do this in, there is also another angle, it is related to the next one, the sustainable equitable socio economic development and that logic is for the longest time, their only access to income was tourism. So, they had to have something to market, they did not have much in terms of anything, even roads, right, the roads came later, the buildings came later, they did not.

India gives them everything from fuel to pretty much everything, food, everything comes from us. So, they are entirely dependent and their way of income is to be different, to be unique and so this becomes a very very, tourism still stands as their biggest, strongest industry. How that translates into the educational system is as follows.

They have 2 very strong no discussion nonnegotiable things. One Dzongkha is talked, it is their national language, every school, every child in the country, whatever age they join have to learn Dzongkha. The second is they have to learn English because the medium of instruction is English and this is because they feel they can never compete with the external world without having good English competence with this kind of true.

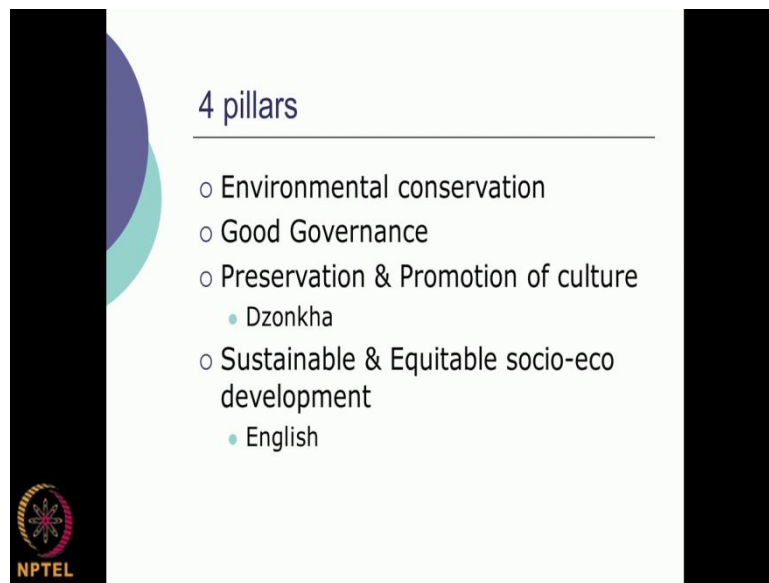
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So, what does that mean for your deaf kids? Under the national policy and under the national goals Dzongkha and English have to be taught. Under education principles, you should start with sign language which in reality means we are saying the deaf child who in most countries in the world have to do one language is now obliged to learn 3. Right. So, this becomes, this presents us with an enormous challenge.

A second very big challenge is the context of education. It is a small country, there are 7 lakh people, 7 and half lakh people now, right, so 7 and half lakh people is nothing yeah. The number of deaf kids is, I do not know what but it is not much at all. In reality and effective way to educate the deaf and a recognised way world over is to have them as a community.

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But it then conflicts with their, part of their their whole preservation and promotion of culture is also the idea that no one leave their community, they do not want kids to leave their community. It, I mean it happens all the time, even all the well-to-do families in Bhutan, the children come and study in India, in England, in Europe and in the US. So, it is not like it does not happen but as a government policy it should not happen.

So, the longest time they did not have a a solution, they had one school for the blind, that was put inside, in the 1970s they develop the school for the blind, that was connected to the lower, middle and higher School of one area and the children were, everyone said at least they should grow up within the community. So, they start out in the school for the blind, they stay on in the school for the blind, they get all their special instructions from the school for the blind, but they all attend the regular school when they are ready for the regular school because there is no idea of accommodating the child.

There is the idea that the child needs to reach school level to be able to get into the school. So, there is, you know there is sort of already in the system a lot of wiggles and woggles and the challenge is really going to be how do we actually make this happen. When we first looked at their situation, their national goals, their existing curricular priorities and their resources, well, before we really looked at their resources, the idea was to really push, they were recommended I think by the Dutch to really put push oral education. And go in for very good hearing aids and so on.

The reality is about, it has been more than 10 years but they still do not have, their ear moulds happened when the National Institute for hearing handicap here sends a team there and they can fix their ear moulds. Their batteries come from India, their you know their hearing aids come from India. So, the reality is most of the kids have the dabba, the hearing aid dabba or the behind the ear dabba and there are no batteries in it. So, oral education is a bit challenging under those circumstances. There are still children who can and do get it but you can imagine that it is not particularly effective.

The situation and I mean I am not giving you a solution, I am just telling you this, with this reality, when we ultimately come to the question of how do you design an appropriate curriculum for a country, you might completely have to do what is not educationally in the best interests of the child, until the country catches up. So, it is sort of almost like when 10 years down the road, when you have all these good engineering programs and you have all these good, you have developed your ITIs, so we can actually get ear moulds and hearing aids done, we can think about that generation of deaf kids having an oral education but until then can we connect you with, I mean can we can we consider alternatives.

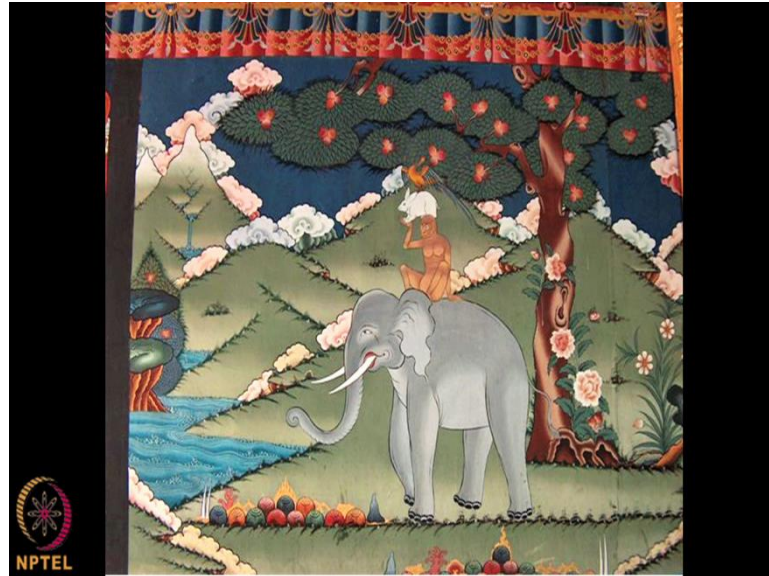
So, I guess where I want to end is this. I really do not know what I am going to recommend, I really do not know, I went there in 2016 and did a review and analysis and recommendations for them and I have gone back, just back 4 years later and some things have changed and a lot of things have not and it is very worrying, it is really worrying. I am seeing another you know almost another generation of kids who will not progress in life because they have not been given an appropriate education, even a semblance of an appropriate education.

So, now I do not know what I am going to say this time but I sort of see myself leaning more and more towards, I do not, I do not know what I am leading towards but I have to find the way to break this every language is essentially because otherwise you look into a curriculum, the reality of a day is that it has only so many hours. Right. You are going to have to cover all the subjects and are going to put 3 languages into this kid's life, I really do not know how it is going to work.

Now, most of them come to school late, most of them will stay in school until it is too late to do anything else and then we will start a vocational career, it is just killing me, deaf kids, I mean a lot of my friends are deaf, for me they are, like going home going home to my deaf friends. They are the most enjoyable group to hang out with and I, it kills me, every time I go

back to the school and I see all the kids who have been identified and sent there know that there is just nothing happening with the best intentions.

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So, I have to find a way and this time you know, everytime I go to Bhutan, the one thing that you will see everywhere and you go into any of their monuments and so on, there will be this picture of the 4 friends. And if you ask anyone what are these, what is it, so, in the picture has mountains, it has a river, it has the big tree with some funky fruit flower on it and it has the 4 friends, the elephant on whom sits a monkey on whom sits a rabbit on whom sits a bird. And I asked them so what is it, I when I first saw it I thought it was some version of musicians of Brahmin kind of thing but apparently no, they said oh, this is the 4 harmonious friends, it is all about community and working together and living together and helping each other.

You know, that is lovely, so what is the story? You know it is about how they make the tree grow, I said really, so how do they make the tree grow? What is the story basically? He said it is very famous, everyone in Bhutan learns, in fact it is in our textbooks, that is great. What is the story? No one knows the story, no one, I went to the, I was at, this time I asked everybody I could think of, I asked school kids, I asked teachers.

I asked the gross national happiness committee chair, I asked and either they give you some vague story which is just bunkum because everyone has a different story, so it cannot possibly be, I mean really. Until finally I was in a bookstore and every time I go to the bookstores I asked them to you have this story, they have books of fables, they have stories of the Yeti, but no, they do not have this because it is a very common story madam.

Really, what does it mean, what is the story, tell me this, till today no one has told me this, no Bhutanese have told me this story. But when I was complaining about this and I was talking to this lady who runs a book store and she said, well you know one way to think about it is this. I said every Bhutanese, every single one of you either gives me this vague murkiness or creates your own nonsense story but no one has convinced me that they really know the story.

And she said, well one way to think about it is this. You keep looking at this picture and you think about what problem is bugging you, what is it that is not working, what is it that is really not happening and you get your answer from this story. And in a way that is the story. You make a story as a result of what you are feeling. You know you are at home and your, you know your parents are telling you to get married and it is making you crazy, you will find the answer here.

You are at work and your colleagues are being asses, you will find your answer here, you know. And that is actually true. So, every day when I, since I have come, my report is due on Monday and you can see I am very far from it, so I keep looking at this picture and saying Bhagwan... Somebody tell me, somehow the monkey, the rabbit, the elephant, they will tell me what to do and somehow I am going to grow a pomegranate tree or whatever tree it is, somebody told me to pomegranate, it does not look like it but whatever it is, the tree will grow I hope but I, I guess what I really wanted to leave you all with is this.

That in the end, the unfortunate reality about curriculum development is it is a series of compromise. You compromise on everything, you compromise on the educational principle, you compromise on the political dream, you compromise on the social dream, you compromise on the child's future, you compromise on pretty much everything. And the best curriculum development really looks at the end-users. It looks that how much you enable that person to be the best he or she can, whether you are doing a teacher education program, whether you are doing a community worker program, whether you are doing a programme for deaf kids, that is what it needs to do.

And in the end you take all your theories and put them aside and you look at the kid and you say what is going to make this work for him. That is how you develop a curriculum. His reality and his universe and its future, what is going to enable that? And then you kind of find 4 friends and make it all work I think. So, I am going to stop here, you have 5 minutes to the end of your class and I can open it to any questions.

“Professor-students conversation starts here”.

Student:

(())(65:38) sign language in general, so how are or abstract (())(65:45) so how does that work?

Dr Namita Jacob:

I think it works differently from how does going to be, once you have a language based, then any abstract concept is conveyed the same way. What is what is required to be able to convey an abstract concept... Gravity for example, right, that which you cannot visibly demonstrate has to be explained with language. So, once you have a language base, be it sign language or be it spoken language, it does not really matter, is not it? It explains the exactly the same way the words that you use, or in this case the signs that you use will vary but otherwise it is the same.

Student:

It does differently with (())(66:35) or it does correspond exactly to the spoken language?

Dr Namita Jacob:

I do not know how it develops really, I do not know the research behind that but do they use it and do they have irony and humour and all the things? Yes, very much. They do not directly translate though. So, you really do have to be in the community to get it, just as you have to be comfortable in our finer language to understand really to get a metaphor. When we do, when you do a direct translation of metaphor, this is the hardest.

If I have even for a deaf child who has good language use to do a direct translation of a metaphor, I will have to bracket it for them and say it is like saying, but otherwise it is really hard because the sentence itself, the metaphor by itself makes no sense. So, they would even know where to cut the sentence, to to know which phrase to consider but the same is true if they were in sign when they use these things for someone who is not a natural sign user, not not fluent, you are just like what is he saying?

Why was that funny or why is that clever or whatever, just do not get it. I think it is very revealing if you watch and I would really say, go and watch a story. To me again, I loved so many of the techniques they use in telling stories that are very appropriate for language

development for young children but it is also just the beauty of seeing a story signed, it is lovely, it is truly lovely. Every disability does place its own challenge to language development and a specially challenging is obviously deafness.

Student:

You mentioned that this (68:41) even deaf blind students are trained in speech and I mean I cannot fathom how the input goes in and how they are trained and speech output, how that works?

Dr Namita Jacob:

It is very labourious, you need to be very sure you want to spend time doing it. What it actually entails, if you are deaf blind, if you are profoundly deaf, totally blind, let us just take the extreme, then your only access to any information is through your hands, right. So, what it really entails is teaching sound production through what we call Tadoma, it is very similar to how you teach speech to a deaf child, you really draw emphasis on the speech and sound production mechanisms because they have to understand things like loud sound, soft sound, high sound, low sound without hearing it.

Right. And then they have to figure out, like the visible part of anything is what you do with your lips. And in fact a lot of what you actually get around to saying is what you do with your tongue inside. So, there is this whole structure inside that they cannot see that we have to guide them with. So, we do a lot of, there are a lot of tricks, we, you actually sit there and show them and you have signs for tongue behind teeth, tongue at here, tongue at the back, tongue folded, etc. etc.

And also we have a cue system. For example the sound ga, ga is different, you will feel it here, appear, right here where your throat and neck begin, I mean your throat and chin begin, right. So, ga is signed here, so I will cue the child and say not ka but ga, right. So, to show him the difference between ka and ga, I point here. To show him the difference between all the nasal sounds, so I remind him like na and ma, pa and ma, right. On the lip it looks exactly the same pa is said the same way ma is said the same way and this is the sound.

Now, if you are deaf blind, you cannot watch me but you have to feel me. So, actually what happens is I teach the children to put their hand on the face like this, so the hand actually

touches all the key points, one finger on the nose, one finger on the upper lip, one on the lower lip, one on the Chin or throat and one here at the jaw.

So, this is, this is the move, the position, it is very annoying for the teacher and they, they do this to the teacher and they do the same thing to themselves, so they can feel whether the movements are similar and start to learn that way. It is very laborious, the child has to be very motivated and the teacher has to be very tolerant and that is the limitation also, here in India do not randomly go and put your hand on people's face, you get wacked.

So, I mean even people you know, it is really a level of tolerance that is pretty high. So, without sign, we teach our children to write on the Palm, we teach our children, they all use the computer, they all do braille, so they have multiple ways and that is a reality of India. We all get around our country because we use every possible way, 3 words in some language, a lot of gestures, something close to that language, you know, it works. And that is, often that is enough to get you through a large part of life. If you want to have a deep proper conversation, you have to have a shared language base.

Student:

There are also braille gadgetry that can help them to converse with?

Dr Namita Jacob:

Yes, yes and they use this amazingly. I mean, today the technology that is available and because they have the fluency in braille as well as typing, they really have tremendous access. They all use cell phones, they all use WhatsApp for God's sake, they send me messages, they are much more connected than I am.

Student:

Deaf blind children, they can express (72:56) getting input and how far is it working, you said to speak as others do, you said it is laborious, so how far is that used for them rather than end up being a language (73:09)?

Dr Namita Jacob:

It is a, it really depends, I mean it is the same base question we ask with the curriculum, what do you come with, what do you want to do and what resources do I have available. If you come to me at 15 and have and have very limited level and I have to teach you independence

in walking, dressing, you know if I have to do the whole gamut, I will not choose to do this because it just eats a lot of time. I might do as I did with these boys, I pick key things. To say excuse me, to say my name, just his name and he can point to himself and say his name, that is fine, that is helpful, nothing more than that. Everything else I teach them the ways to do. Okay, thank you.

“Professor-students conversation ends”.