



Video Programme Transcripts – International Edition

This document contains transcripts of some of the videos of early child development programmes in The Science of Early Child Development, AKDN Edition. Transcripts are listed alphabetically by the name of the video, as found online.

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Catch them young

Growing up can be dangerous in Brazil. If you avoid prison, illness and getting kicked out of school, there's still the shocking truth that every 15 minutes someone dies from gunshot wounds and that most are under 25. Around the world, the links between underachievement and crime are well documented. And its estimated 200 million children under 5 will not reach their potential due to poor health, lack of education and nurturing. The first years of a child's life can make or break their future.

18 month old Caroline is taking part in the programme aimed at developing all her skills. By catching them young, can children like Caroline have a better future?

Caroline and her mother Denise have a visitor. Maria Seleche is one of 29 home visitors who work with the Better Early Childhood Programme or PIM for short. Once a week, she visits Denise and Caroline and brings a new activity to teach them. Today, it's all about animals.

For mothers like Denise, who can't afford many toys, being shown how to make them from simple and recycled objects is cheap and useful. Maria Seleche doesn't only show Denise how to make the toys but also how to use it to help Caroline learn.

This is learning through play. Looks like Caroline has a way to go before she can run a pet shop. But there's one animal that Caroline should recognize.

Denise is 26 years old. She and her family live in Caxias do Sul one of the poorest parts of Rio Grande do Sul, a town in southern Brazil. Denise and her husband have 4 children. Leticia who is 9, Alexandra who is 7, Giovane who is 3, and Caroline.

Denise joined the programme 2 years ago when Giovane was one and a half. Through it she learned to give her children attention and stimulation through play.

Leticia was the first and I didn't have the slightest idea of what to do. I just thought you went for a stroll and that was it. Now, I have completely changed because I pay more attention to the children. I don't spank them, I talk to them. I talk to the older ones a lot more than I did. I'm not an enemy of the children, but a friend.

Caxias has nearly 650 families in the scheme. Across the region, it's 40,000. Vulnerable families with children from newborns to three are the target as this period sees the development of 80% of a child's brain capacity.

The aim of the programme is give a child all around development – physical, intellectual and social. The family, community and government work together, coordinated by the state health department.

These are critical moments. It's much more difficult to make an impact afterwards. An investment made at the beginning of children's lives has a strong effect on their future, on their ability to learn, to deal with stress, to control their violence. They have a better quality of life, better health. All this are results of what happens in the child's first years of life.

Denise has brought Caroline for a check-up at the regional health centre, where the programme has a medical team.

The programme claims their medical advice has helped to reduce the child mortality rate in Rio Grande do Sul by nearly a quarter in five years. But Caroline doesn't seem to quite grasp the importance of this right now.

Working on the child's development starts even before they are born. The first part of the brain develops during the first 3 months of pregnancy. The programme gives these expectant mothers regular support and medical care.

There are mothers who are ignorant about how to prevent illness during this period. We are all here to support them. It's very important to guide pregnant mothers. A baby that is born healthier will be a healthier child and will develop better.

It's no surprise that there are some young future moms here. Nearly 1/5th of newborn babies in Rio Grande do Sul are born to mothers under 19 years old.

When she was 16, Denise also got accidentally pregnant with Leticia but at that time, there was no programme to help her.

I was studying at the time and I had to stop studying to take care of the family. We started to live together and had the child. But it wasn't easy because I didn't know how to deal with the baby. I had to learn. I had to ask my Mom. But I was practically alone with her.

When 8 years later she had another unplanned pregnancy, this time with Caroline, there was help on hand. Denise was worried about the responsibility of bringing up a fourth child. But the programme nurses reassured her.

The way they treat us was fantastic. They support us in everything. It was a very special pregnancy. I talk to her a lot. There are lots of things I did with Caroline that I didn't do with the others. I followed her since she was in the womb and she could feel I was giving a lot of love waiting for her.

The affection is something I'll never forget.

Breakfast time and the family get ready for the day. Jair is off to his job as a carpenter, the older children to school. Their mother says the younger ones have definitely benefited from the extra support they have been given and wishes the programme had been there for the older ones.

Debora Pontalti has taught 8 year olds at Madre Imilda school for 6 years. She notices a clear difference in the capacity for learning between the children in her class who have taken part in the programme and those who haven't.

It definitely makes a difference. It's not the speed of learning but the way they assimilate knowledge and transmit it. What they do with the learning. For kids that have had these opportunities learning is a much more natural thing.

Several studies have shown that early childhood development programmes can result in lower drop out rates and a higher possibility of finishing secondary school.

Education starts as soon as you are born. It is important in the first 3 years, as a child develops, to get education right. Parents must understand how important it is and for the rest of the child's life. We want to create the conditions where children can learn, acquire information, and face challenges of the world.

Back at home, Caroline seems to be getting to grips with the animal world.

She likes this game a lot. It grabs her attention because of the animals and the noise. I think she really responds to this activity.

When Caroline goes to school, it's likely she will perform as well as children from a wealthier background. Programmes like this could help break the poverty trap. A World Bank survey showed that one year of preschool development could mean earning 6% higher wages later in life.

She's learning to identify a cow and say "cow". But she can't do a pig yet. Every time I show her more her ability grows. I'm very proud of her.

Creating confidence

A Madrasa school in central Uganda. Children here are taught quite differently. Their exercise books are toys. Their lessons, playing with sticks.

Childhood is the foundation upon which all other things are built. It's at this age that you have to put everything in order.

In a country where around sixty percent of children drop out of school early, the people here are desperate for a solution. They might just have found it.

Now this child who has been to a Madrasa school will never think of remaining home when other kids are at school because he or she knows they are missing out.

Sharon and Tauwfiki are best friends. They are both five years old. This is their last year at Anoonya preschool. Head teacher, Mariam Jjuko Is teaching them about shapes and colour, a style of learning seldom seen in Africa. Sharon has chosen to use these blocks of wood to build a house. Tauwfiki is using painted seeds to draw a picture of his mother.

Sharon is learning about space but she's also learning about the different colours, shapes and number of sides that different objects have and this makes her creative. Out of the different materials, she picks what goes where and then she understands how shapes feel and work together.

This triangle is yellow and all its sides are equal. It's a square.

We believe in this Madrasa approach to education. That young children learn more through touch and feel than by seeing things written on a board. Rather than writing now she will come more into writing later and by that time she'll be writing about the things that she knows about.

These schools are very unlike traditional Madrasas. They are not just for Muslims. In fact, over a quarter of the children are Christian. Regardless of their faith, they all join in with religious education. Sharon and Tauwfiki are being taught about the different actions during prayer. But as with everything else, they are learning through play.

How we incorporate religious teachings depends on the activity that we are doing. Generally we try to redirect their behaviour. For example, we've got a teaching from the Qur'an and the Hadith if a child beats another and this teaches them to practice religion.

Although active learning is nothing unusual for preschools in the West, for Uganda this approach is certainly different.

Government schools inspector, William Mutashaba believes it is a big improvement.

Well, one thing I have noted when you move to traditional schools when it comes to classroom arrangement you may think that a child is in a lecture room.

In traditional preschools young children are expected to learn in much the same way as older peoples.

You find a chalkboard is there. The teacher stands in front teaching. The children are supposed to respond some of who cannot even respond because they don't know what the teacher is teaching.

A recent education study reveals children at Madrasa preschool classes did significantly better than children in non-Madrasa classes. The study, which involved experts from Oxford University's Department of Education, concluded attendance at a Madrasa class had a much stronger impact on a child's development. In Uganda, only forty percent of children who start school will go on to complete their education. William believes Madrasa schools like this could make a difference.

A school is not something one should fear. In the Madrasa schools, the children are in a home set-up. It's like a home away from home and this motivates them to continue liking school.

It's a week before the end of term and for Sharon and Taufiki, Mariam has some big news. Next week, they will spend a morning at the local primary school to experience what life after Anoonya will be like. It's a daunting prospect.

I know I will miss Sharon and Taufiki so much when they leave. Of course, others will come here to replace them but it is always hard to say goodbye to pupils who you have known so long.

For now though, it's time for playing and this afternoon the children are preparing for the end of term sports day. Taufiki's older brother Ashirafu watches on. Unfortunately for him, this Madrasa school wasn't here when he was growing up. Instead, he attended a traditional preschool which was nothing like this.

It hurts me because Taufiki knows all the things which I struggled to learn during primary school, because I was not taught them at nursery. I see him being so bright already at this age. Unlike how I was.

When Ashirafu joined primary school at age 6 he was completely unprepared. He finished school at 16 and since then has been the caretaker here at Anoonya.

This start in life will help Tauwfiki because he has learned a lot that I didn't have in my nursery school. Tauwfiki can now tell all the different colours unlike I could when I was his age.

Thirty-five percent of the population in Uganda live below the poverty line. Here in Gombe Kitasa village, just outside the capital of Kampala, the average household income is just 50 dollars a month. Tauwfiki is from a Muslim family. Like most families in this community, his father is a subsistence farmer. He was educated in a traditional Madrasa. For him, school was a different place all together.

My kind of education was the Qur'an and the Qur'an alone. For us, the teacher would write on the blackboard and we would follow what he wrote. We would take a break, pray a bit then come back for another lesson. Tauwfiki's education is different. He learns using the environment around him. Things are fun and free for Tauwfiki. This was not the case for us.

East Africa is where the modern Madrasa preschool programme has been established. It started 25 years ago when local Muslim leaders launched a campaign to improve education. Working with the Aga Khan Foundation, they designed a preschool education programme combining best practice with local tradition. The Madrasa Resource Centre was set up in Kampala in 1993. They believe providing 3 – 6 year olds with a solid preschool education is critical.

Early childhood is the foundation upon which all other things are built. It is at this age that you have to put everything in order.

Although primary school is free in Uganda, preschool education has to be paid for. Forty percent of children won't go and those that do often drop out after a year. The Madrasa Resource Centre aims to make preschools available for all children, particularly those from the most marginalized communities. So far, it has helped establish 53 different schools and trained around 300 teachers across the country.

When we are looking for a community, we are really targeting the marginalized communities. The communities that don't have opportunity, or children have no chance of accessing quality early child development.

Once the Madrasa Resource Centre has trained the teachers, it is entirely the responsibility of the parents and the community to cover all the running costs and keep the school going.

The Madrasa Preschool Programme does not own any school. These schools are owned by the communities. They belong to them.

Today, Shafique has come to visit Sharon and Tauwfiki's school, Anoonya pre-primary in Gombe, Kitasa. This is one of the poorest communities where the Madrasa programme is in place. But like all other Madrasa schools, the parents are the ones paying to keep the school up and running. It's crucial therefore, to keep costs to the minimum.

Most of the things we use do not need money. Just getting sticks like this, these are the materials children use to learn. Getting these sticks from the forest just to cut and then turn them into what you want the children to learn. And then there are other things like if you want to teach about children nutrition, this is a pawpaw but this pawpaw is made out of paper. And these are scrap papers that we turn into good use for materials. This kind of education is not about money; it's about how can you turn waste into wealth. How can you turn a paper into wealth of knowledge.

Early learning in the summer pastures

For 55 years, mountainous Kyrgyzstan was a secretive Soviet Republic. Even today, some remote peaks are unnamed. Farming here is still squarely based on moving livestock between summer and winter pastures. This environmentally sensitive shifting lifestyle is vanishing fast with schooling and economic development that demands a settled lifestyle. In Kyrgyzstan, the policy is to preserve their ancient culture while providing Kindergartens, quite literary, on the hoof.

At the height of its power, the Soviet Union invested heavily in a standardized education system based on the Russian language across all of the cultures it encompassed. The Soviet era saw the introduction of kindergartens but the children up in the summer pastures missed out on a vital part of their education. When the Soviet system collapsed, so did the central funding for the preschool system, leaving only 7% of the preschool population with access to kindergartens. Now it's being rebuilt but this time taking account of the traditional lifestyle and culture of the Kyrgyz people.

"I was always thinking about preparation groups as I was a primary school teacher and it always hurt me when I saw children coming to Grade 1 without preparation."

Summer in Kyrgyzstan's mountain pastures, known as the jailoo. Families with livestock live in yurts and spend 4 to 5 months in these high pastures each year. For their children, it is like a summer holiday. But, it puts them at a disadvantage with the settled population in the towns. For these children who couldn't go to school, the Yurt Kindergarten Project is now taking the school to them with mobile preschools based in yurts, traditional tent-like structures that provide accommodation on the annual migration.

Set up by the Aga Khan Foundation's Mountain Societies Development Support Programme, it's designed to balance traditional with modern. The schools are part of a network of satellite kindergartens and take place three hours each day in the teacher's own yurt. Uulcha Dosueva is the teacher in this jailoo. She has a class of 15 children from 11 families.

"I like my job. I love working with children and that's why I'm carrying on. I'm inspired by my love of children and wanting to share my knowledge. When the children move to the jailoo, they had a break in their education and if I didn't come here then there would be a gap in their knowledge and development. It would have a negative affect."

There are currently 45 satellite Kindergartens serving almost 800 children.

"They learn how to build their character and work together in a team, develop speech skills and learn to share and support each other as well as general development."

The Kyrgyz culture, suppressed under the Soviet education system, is now flourishing. The people have great pride in their way of life. Traditional pastimes are deeply tied to their land and their animals. To reinforce this newfound pride in Kyrgyz identity, each Kindergarten is provided with a library of books and reading materials in the Kyrgyz language. Most of these have been developed by the project. The children are taught using both modern and traditional materials. This abacus is made of painted sheep bones and field trips are organized to restore knowledge of the fragile mountain environment. First indications are that the approach respecting Kyrgyz traditions is working.

“Let us be healthy and happy and if an enemy looks at us with the evil eye then let the needles from this fir tree sting their eyes. If they say bad words then let the needles sting their tongue. Let our table be full of bread and let our nation be safe. Let the Aga Khan Foundation be our friends.”

The Aga Khan Foundation found that children from the kindergarten programme out perform other children when they enter primary school in areas like reading, writing and mathematics. The sustainability of the project is helped by all the kindergartens both in the jailoo and in the villages, with the means to support themselves.

“In order to support income generation activities we help keep cows and goats and pay the farmer for this. We also allocate land for haymaking, vegetable and potato growing. This is used for children’s food and extra harvest they can sell and use the money for kindergarten needs.”

There is support too, for a restoration of the permanent kindergartens in the villages, giving the Kyrgyz people a choice. The common link is using learning materials produced locally.

“So we encourage teachers and parents to use in the lessons low-cost and no-cost materials and for example, these things are made from the felt, from wool, from felt, usually the women sew headdresses out of this and left pieces are used to make some toys to make some learning materials for children.”

Some of these village preschools, abandoned since the collapse of the Soviet Union, are now being renovated with the help of the community. The sustainable model has already resulted in improvements to the kindergarten infrastructure.

“Since the government began working with the Aga Khan Foundation, thirteen satellite kindergartens and six more satellite kindergartens in the primary schools have been established. In 2000, there were only three central kindergartens in the region. Now there are thirteen. In 2000, only 622 children had access to preschool, now 1,300 children have this.”

Despite the progress in providing yurt kindergartens, the project currently only provides for around 2,000 rural children. Many more still have no opportunity for preschooling when their families make the trek to the high pastures. But the approach looks set to spread.

“When this model was introduced here in this area, it soon proved its advantages because of the flexibility and its very affordable for vulnerable families. The satellite kindergartens are located in places that make them very convenient for families in remote areas because then the children don’t have to travel far. I’m sure these models will work if they are replicated in other regions and I’m sure it will grow in other regions of Kyrgyzstan and even in other countries of the former Soviet Union where people live in similar circumstances.”

Education for all

Baghlán province lies on the main trade route connecting the capital Kabul with the north of the country. Just behind the magnificent Hindu Kush mountain range, is the administrative centre of the region Pol-e Khomri.

The Aga Khan Foundation has been operating here and in two other provinces in northern Afghanistan since 2002. AKF supports a broad range of long term development programmes including infrastructure projects, community, civil society and enterprise development, natural resource management, health and the focus of this film, education.

AKF Afghanistan has a range of education interventions including working with two types of schools. Firstly, with funds from USAID and the Swiss Development Corporation, support is given to government schools to improve the quality of education.

Secondly, AKF has helped communities establish a number of community-based classes to provide access to education for children in more remote areas that were beyond the reach of government institutions. These are now being integrated into the national education system.

Atiqullah Ludin: AKF Education Baghlán currently works with forty-five government schools. There are 48,000 students and 1,600 teachers. And also we work with 81 community-based education classes in five districts, with more than 2,000 students and 81 teachers. Thirty percent of these teachers are family. We don't have enough educated women or women teachers in the schools.

Around 70 percent of the population in Baghlán Province live in remote rural communities. Here, roads are poor and transport infrequent.

Atiqullah Ludin: Children in the rural areas they walk more than one hour to the government schools. For this reason, the Ministry of Education planned to provide community-based education. Classes for these students - who are about 3 kilometers from the government schools.

But it is not only distance that prevents children attending school. Seasonal factors such as heavy snow, extremely low temperatures, and swollen rivers conspire to keep children at home. And in particular, for women and girls here there are also cultural and security barriers to overcome.

AKF has introduced a scaffolding approach to support children's effective acquisition of language and mathematic skills. It provides a systematic step-by-step approach to teaching students of all levels to read and write.

Professor David Rose and his colleagues at the University of Sydney originally developed the programme to help Aboriginal children succeed at school. It has proved so successful that it has been widely adopted in many schools across the globe.

The scaffolding approach changed the traditional patterns of teachers and the students in the classroom. Learning is context-based, taking the subject of the lesson from what is around the children.

Schools everywhere work fine for children who are from well-off families with educated parents who read to their children and have plenty of books at home. But what about disadvantaged, remote rural areas in a country like Afghanistan? There is often no one in the family who is literate. The teachers themselves have had very limited education opportunities and there are few resources in the classroom.

The systematic and explicit scaffolding approach known as *Reading to Learn*, which is at the heart of AKF's work in the classrooms, was deliberately designed to break the complex tasks of reading and writing into manageable components. It does not make any assumptions that children come to classroom with pre-existing literacy related knowledge. The structured step-by-step approach accelerates students learning at twice to four times expected rates across students from all backgrounds.

So what is Reading to Learn and its scaffolding technique? The approach teaches all the components of reading including phonics, systematically from the meaning down. It starts with the complete text and the ideas, and words down to sentences, phrases, words and spellings. Stories work best for young readers.

The video has been divided into discrete stages for clarity and this explanation. Although the method has special predictable steps that must be followed, it is not rigid but fluid in the way it is implemented.

The approach for young children starts with shared book reading and follows a series of structured, predictable steps. These are: STEP 1 – focus and prepare before reading.

The teacher provides background knowledge of the text or story and the meanings in the text. Here the children are shown a picture and individually asked to describe in their own words the things they see in it. She relates this to the children's world and gets their ideas.

STEP 2 – reading the story, listening and familiarization.

The teacher reads the story or text to the children while they listen. She checks that the children can understand and say each word.

The teacher asks students to read aloud together the sentences.

STEP 3 – sentence making. Each sentence of the story is written on a paper strip. The teacher shows the sentence strip to all the students and asks them to read it out loud with her.

The teacher asks the pupil to find a particular word and point to it. Once children can point to the words and say them, they help cut up the sentences into their component parts and then put them back together again.

This student then matches the word to the space in the sentence in front of the class. Students are also asked to find where this word occurs in other sentences.

Now all the sentences are cut into individual words. Students are divided into groups and asked to reassemble the sentences from the group of words they are given.

Social interaction and games are used to reinforce student's understanding. Here, the cut out words are arranged into sentences with one word missing. The children read out the sentence and clap when they come to the missing word. They then find which word is missing and insert it in the gap. Finally, they read the whole sentence out loud together.

STEP 4 – writing, spelling and phonics. The teacher shows children how to spell the key words of the story. The pupils pick a word from the text and memorize how it is written. They then hide the word and write it down. After they have finished, they reveal the word and see if they wrote it correctly. They continue to do this until they get it right. Scaffolding is equally appropriate in the teaching of mathematics classes. The same techniques are used. Here, Grade 2 children from the community-based school in Qarzaghan, a mountainous region in the Dushi district. Today's class concerns division. Firstly, the word is explained and a card with the symbol is shown to the learners. They are singled out to write their exam on the board and say aloud.

For children in lower primary, to internalize mathematical concepts, it is vital they have real objects to handle, to sort, count and used as props to calculate.

The children learn faster this may be because they can actually see the topics, identify the topics that they are learning about.

The scaffolding approach is not only effective in teaching children. Adult moms from the same village have formed their own class to gain literacy skills.

Why the scaffolding approach is important and have implication beyond Afghanistan. Firstly, it is important quite simply because it works. School systems around the world have been failing too many children for too long.

Success in learning to read in the early years of school is fundamental to ensuring a student's progress through the formal education process. An education system, the consequences of children failing to learn to read independently by the end of Grade 3 are likely to continue throughout their schooling.

Secondly because it follows a sequence of predictable, structured steps, it is quite easy for teachers, many of whom have had little education opportunities themselves.

Thirdly, it only requires basic stationary supplies. Lastly, the scaffolding approach works for everyone without cultural bias and includes children from disadvantaged homes. It really is education for all and it works!

Learning is Discovery

This is Loltong, local government headquarters on Pentecost, one of Vanuatu's remote outer islands. Today, members of the Wan Smol Bag Theatre Company are arriving to perform at the ten-year independent celebrations.

Recognizing the importance of early childhood education the local government council has invited them specially to perform their play. As usual, they have attracted a big crowd and the play generates a lot of discussion afterwards.

And one of the early childhood programme Coordinators responds to some of the questions from the audience. Most of Wan Smol Bag's performances are in villages and here in Agabe they help with preparations for the new preschool before performing their preschool play. And the villages are completely absorbed for they have faced many of the problems discussed in the play.

Discussion always follows straight on from the play and can go on a long time with plenty of different opinions. Wan Smol Bag's play raises many issues and we're going to take a look now at how this village is finding effective ways to address these.

As Jonas says, by the time children go to school... *"by then, they have passed the stage which they learn the fastest."*

Up to six years old children learn faster than at any other time and this is why it is important to provide them with a stimulating environment and encourage their exploration and discovery. Believing the need for good care and learning opportunities for young children is grounded in the recognition that children are the next generation and we need to give them the best start possible. Early childhood education programmes bring many benefits for the children and their families, also for society. These benefits include higher levels of achievement in the school system and greater productivity in the later years.

However, we might not agree with Jonas' ideas on teaching methods.

Jonas: "And school is not for playing, it's for learning."

Now we know that play is learning. Children learn about themselves and their world through doing. The more stimulating the environment the more opportunities for play, the more the child will learn. Through play children practice skills they have already acquired and learn new ones.

Skills in using big and small muscles. Skills in relating with other people. Skills in expressing thoughts and feelings. And understanding their environment.

Singing: "Learning is discovery. Learning is discovery. We must learn to use our hands, stretch our muscles... Learning is discovery. Learning is discovery. Look around and tell me what you see...trees!...birds! Closes your eyes and tell me what you feel....my heart beating!...the wind blowing! Take a stick and draw a sand drawing on the floor. You must learn to control your hands and fingers in this way. Learning is finding out the languages of our trees, shells, animals and plants hearing all the stories that old people have to tell before they disappear and die as well. Learning should be an endless skill for you and me. Learning through activities, each day a new discovery. Each day a new discovery. Each day a new discovery."

We can see what a rich learning environment can be created just using materials available locally. As Sera says in the play, the shells have endless different uses and there are many other materials available too. Seeds. Sago palm. Bamboo. Matchboxes. Pandanas. Old plastic bottles. The list goes on and on.

If the preschool provides a well organized interesting environment where the children can work together in small groups you certainly won't need the sort of discipline that Jonas advocates.

Jonas: "I said stop. "

Sera: "I can stop them but I don't have to scream at them."

The way the teacher interacts with the children is of key importance in supporting their overall development and learning. The teacher needs to build the children's confidence by showing them that she cares about them and is interested in what they are doing and appreciates their achievements. Children who feel good about themselves get on with others, do better in school and contribute more to their families and society.

One of the most important things a teacher does is to encourage children's language development by making sure there are plenty of opportunities to talk and share ideas as well as listen.

According to Jonas,... *"They must learn English. English from the first!"*

However, we now know that it is important that children gain confidence in their own language before introducing another one.

Here the teacher is telling them a story in their own language.

The cardboard box video is a big hit. The preschool teacher does one of the most important jobs in the community. She is concerned with children's social and emotional, cognitive and physical development. She will help children to become enthusiastic learners. Learning how to learn and how to get on with others and this affects them, not only during preschool but all through their lives. And yet all too often preschool teachers are undervalued.

Sera: "But if you want me to teach these children properly you can't expect me to do it for nothing."

We expect the preschool teacher to take her work seriously and work in a professional way, making equipment and preparing activities each day before the children arrive. She must work hard to ensure the preschool provides an attractive learning environment.

She must therefore be offered a proper salary and be given the respect merited by her responsibilities for our children. In this rural community, it was hard in the beginning to raise enough funds to pay what everyone felt was an adequate salary. So the committee got together to decide what could be done and arranged to tend the teacher's gardens on a rotational basis.

But like Jonas, the committee came to realize the importance of regular fundraising to provide both for the teacher's salary and a few basic materials like crayons and paper for the preschool. They started to organize fundraising, weaving the famous Pentacost baskets, mats, fans and various other items for sale at local fairs and markets. They started up a school garden selling some of the fruits and vegetables to raise funds for the preschool. They also make and sell Laplap. Here the grated mixture is poured into banana leaves and wrapped up ready for cooking.

One of the Early Childhood Education Coordinators is talking with a group of mothers about good nutrition for young children. They go on to discuss together the importance of the early years in the formation of intelligence, personality, social behaviour and physical development. As this mother says, 'our children are God's most precious gift. Let us give them the best start so that they may be strong'. And they talk about how they, as their children's first initial teachers, can best support their children's optimal development.

There are many important ways that the community can support the teacher and that parents and other community members can contribute to their children's overall development. This grandfather and Chief is teaching the children a custom dance. He sure shows them a thing or two about sand drawing too.

This mother is at the preschool teaching the children to wash their hands carefully before eating. And the parents provide the children with nutritious local foods for snacks. And if someone has forgotten theirs, they are very good at sharing. This sort of day-to-day support to the programme from families is important. As important in its own way as the vital assistance communities often give in providing a building for the preschool. At Agabe, the community, under the Chairman's leadership, has now decided that they need a bigger building for their preschool.

Sera: "And together we'll make it a beautiful community and I know we will."

And in this village, everyone gets involved. One of the walls is getting put together and there is a lot to do in the preparation of the bamboo for the walls.

Often we learn from the old people. This old man is instructing some of the younger men in the finer points of thatch preparation.

The old toilets have been getting a bit dilapidated. So, it's time to dig a new one, which until it is finished, is proving the favourite play spot.

And it's not just the buildings; parents can help with equipment too.

Sera: "Some toys, someone can make those."

At this workshop, parents and teachers are working together to make equipment for their preschool. They also spend time playing with the toys themselves, discussing the many skills each toy helps to build.

The Ministry of Education promotes the use of local materials in producing toys and equipment for preschools nationwide.

"Coconuts. ...shell of coconuts. Everything local coconuts we use them...Bamboos, coral, shells."

They recognize the crucial importance of preschools strong family and community-based in Vanuatu. Thus, the Preschool Advisor emphasizes it's also really important that the committee supports the teacher to participate in any training opportunities available.

Sera: "I want to go to go to the preschool course in Fila."

Training is important, whether it's short local workshops, or USP's [University of the South Pacific] Preschool Certificate course, or the Early Childhood Education Diploma course both offered through [Continuing Education] Extension. Teacher training is of vital importance to the quality of the programme that preschools can offer our children.

This representative of the Vanuatu Preschool Association of the Pacific Preschool Council, reminds us that if we can really build children's self-esteem, their curiosity and their love of learning, this will have an impact way beyond the preschool years, indeed throughout their lives.

"We must work together hand-in-hand..."

Singing: Learning should be an endless skill for you and me. Learning through activities, each day a new discovery. Each day a new discovery. Each day a new discovery."

Listening to baby (17:05)

Narrator: Humans are social beings. From the time we are born we need to be with other people. We cannot survive alone. Parents love their children and want the very best for them. The bond between children and parents is perhaps the deepest and most powerful human relationship.

Parent: I think I fell in love with him as soon as I saw him. He's my little angel.

Parent: Jakyri smiled when he was two weeks old, melted my heart.

Parent: I feel like of course I'll do anything for him and he's I have to say the most important thing in the world right now and I think he will always be.

Narrator: Every baby needs to be loved in order to thrive. Charlize is only two weeks old. She already knows her mother's voice from within the womb and works hard to look at and focus on her mother's face. Isaac at five weeks is able to hold his gaze a little longer. He looks deeply into his mother's eyes letting her know how important she is to him.

If we look carefully we can see that from the time they are born babies are ready to develop an attachment to someone. Isaac and Charlize are working on this with the abilities they have and the sensitive, loving responses of their mothers are vitally important. But what is attachment and why is it so important?

Laurie Marcella, Post-Natal Coordinator: Some people kind of wonder what all this fuss about attachment is. And so it's important to really understand what attachment is for an infant. And it is the infant who does the attaching. So an attachment is really the infant's first emotional relationship with a caregiver and the kind of relationship that they develop over the course of that first year can have very large implications for the pattern of relationships that that person, that child will have for the rest of their lives.

Narrator: Attachment develops gradually over the first year as babies learn to trust that their needs will be met. Watching a baby, noticing their signals, their cues and responding sensitively is the most important thing parents can do to support baby's secure attachment.

Mary Warmbrod, Family Therapist: In some ways you've got to guess because babies don't come with language. They're going to be picking it up from us. And so it really is a process of guessing what's going on for them. I mean obviously the newborns got the cry and they've got their whole body movement and the face movements, but other than that you're guessing. And so what's going on for this baby? What is the baby saying? And feeling comfortable with that and you know gradually learning what your own baby's cues are...the cry for the hunger. And then if they're

sick of course most parents are distressed, they pick up on the cues. But then also sometimes messages that say “Hey I need a break, please let me not have quite so much talk or quite so much activity. I need to take a break and need to go to sleep”, stuff like that.

Narrator: Sometimes it’s hard to read a baby’s signals, to know what a baby is trying to say. For many parents learning their baby’s signals is like learning to dance with a new partner. The baby leads with expressions, movements and sounds.

Parent: I do feel like our communication is like a dance but I’d have to say its more like a slow one because you need to learn each other but it doesn’t come right away. It comes every day; you learn something every day with each other. So I’d have to say it’s a slow dance. It’s easier now than when he was a newborn to know what he wants because now he can give me signals and before he’d just cry and cry and you’re just frustrated and you don’t now what they want, especially as a new parent you’re still trying and you give him everything and you still don’t know. And he’s screaming and now it’s a bit easier I’d say.

Parent: I think the communication takes a lot of work and it’s a two-sided thing. I think sometimes it takes patience, you just have to kind of pay attention and look closely to kind of pick up on the thing because you don’t always notice ...it’s very subtle because they don’t talk. They don’t just say mom, I’m hungry, mom I need a diaper change, mom, I’m tired. It’s very subtle so you have to be very patient and just look, really look. And I think it will change, it will change as they get older. You get used to it. You can understand faster.

Narrator: Attachment is built on love and the little interactions that happen every day. Josh, at 5 months leads the way as he and his mom explore a book. He’s being held and his mom helps him notice things and uses words to explain the pictures.

Seven month old Lucy and her mother know each other well. Breakfast is fun for both of them, a time for smiles and conversation as they look into each other’s eyes.

Laurie Marcella: During the first three years of life in particular and especially well from pre-birth right through the first year, the baby’s brain is developing in astronomically big way. Billions of connections are being made. Every experience the baby has either makes new connections or practices the connections and enhances the connections that have already been made. So if a baby is in a state of fear or a state of stress that part of the mind kind of shuts down.

Narrator: Isaac is so upset he can’t enjoy being t the park. Later when he’s calm he can focus and interact.

Laurie Marcella: So if a baby is comfortable and safe and knows that their needs are going to be met, they won't have to worry about that. Their brain can just get on with all that amazing growth and development that it's meant to make. So a child can then reach its full capacity.

Narrator: Securely attached babies use their parents as anchors as they explore their world. Twelve month old Jakyri sees everything with fresh eyes. Mom stays close by but doesn't interfere unless it's necessary.

Laurie Marcella: The infant gets to know through all those experiences over that first year that their parent is somebody that they can depend on, somebody who is going to protect them. And so the child then feels secure. When a child feels secure they can just get on with the business of developing. They just can do all those wonderful little things that babies need to do to develop their brain, to learn all those tasks that parents take such pride in. And it's easier for the child because they just don't have to worry. They know their mom or their dad, the person that's very special to them, is there for them and they can just accept that and move on.

Narrator: By the time a baby has grown into a toddler with secure attachment the communication dance has evolved to a point where both partners know the steps well.

Fourteen month old Gilad and his mom know each other's signals well. They are in tune with each other.

At 16 months Jakyri has a strong attachment with his dad. He knows he can count on his dad to understand and to help.

Parent: Why he was taking me around the corner was that he had his little pillow here and he was playing with it and he throw it over the railing so he want me to go get it for him. So he drags me to go get the pillow. So there we go, a sign of he needs something but he can't say, "daddy I need my pillow". So yeah, that's something that you have to pay attention to. Kids normally need attention and affection and you have to be there for them.

Csilla Przibislawsky, Drama Therapist: So if they receive within that first year of life information that they are worthwhile, that they are important, that in fact will translate for them into meaning that the world is a safe place, that they can trust people and that they can form healthy relationships, not just with their primary caregivers but with all relationships throughout their life.

Narrator: It's not about money or toys, it's about love and the little things that parents do every day that helps the baby develop.

Knowing someone is there for you is the key to feeling safe, happy and at home in the world.

Parent: I think that just as she is learning how to communicate I'm learning at the same time to understand her. Like with my other kids, it was a little bit different. So each month it's exciting, it's different, it's challenging but it's all worth it.

Parent: Yes I ask a thousand questions of the nurses, I ask a thousand questions to my mother but I'd have to say the questions, yeah, it gave you an idea but as a mother and you grow together, that you learn on your own and you learn each other and its hard, I have to say its really hard as a young mother, but its worth everything at the end.

Long Reach of Early Childhood

Science tells us that the foundation of adult health and productivity begins before conception and takes shape very early in life.

All over the world, there is an increasing awareness of the vital role of early child development.

Dr. Fraser Mustard (1927-2011), Director, Founders Network

An important question for this century, with the increasing population growth and age distribution of populations in different countries, is how do we ensure that the quality of the next generation, in terms of health and competence, is at the very best that we can achieve?

(Mustard): The challenge is, if you really want to set that goal, and if you want to create democratic, stable, pluralistic, prosperous societies you have to do this. The only way that you can get reasonable assurance that your next generations will have greater equity in health and competence is by investing in early child development.

People everywhere are working together to help ensure that all children have the opportunity to reach their potential.

Najma Rashid, ECD Technical Advisor, Aga Khan Foundation, East Africa

When you work with children, and you invest well in them, then you know you are going to reap the benefits over the next 50 or 60 years.

(Rashid): Most people would like to see benefits immediately. They are not able to see that because this is something like a plant; you nurture it well and it takes a while to give you the beautiful roses that you want.

Megan Gunnar, Director, Institute of Child Development, University of Minnesota

Science is now, I think, in a much better position of being able to help people understand that the early years are not just important for an individual's development. The early years are important for a society's development.

(Gunnar): It's an old saying that, you know, our children are the nation's future, but we're beginning to understand what that really, really means on a biological and scientific level. We're beginning to understand that our concerns about health care for the older generation, the seeds of those problems are sewn in early development.

Brain development begins soon after conception and continues well beyond birth.

Lifelong physical and mental health, as well as academic achievement are directly tied to this early brain development.

Research tells us that when caregivers are supported to stimulate their babies through playful interactions the effects can be long lasting.

Aisha Yousafzai, Associate Professor, Department of Paediatrics and Child Health, Aga Khan University
She doesn't need to have a University level of education, she doesn't need expensive toys, but using these very simple activities, she can learn to understand her child and respond to her child's needs.

(Yousafzai): And when she does that the relationship between, mostly we're working with mothers but the family and the child get stronger and the attachment process starts to develop more strongly and this is really important because we are working in communities where there are so many challenges, there is poverty, there is twenty-five percent to thirty percent maternal depression or risk of maternal depression, there is malnutrition. And so within all of that you are giving the mother a way of being able to say that despite these challenges she can still give her child so much.

Investing in early child development yields social and economic returns.

Sayed Shah Langaur, Religious Leader, Wakhan Valley, Badakshan, Afghanistan

"The benefit is that tomorrow these children grow up and become someone who has a job, honour, and a position. Educated children will bring honour to their parents. Everyone believes that their children will become something good in the future, that is why they send them to school and kindergarten. We want good future for our people. When children go to school day by day they learn new things. Their brain develops and their teachers work hard to help them learn. One day they graduate and become engineers, journalists or something else, and it will benefit the people and benefit the society."

More than 200 million children under five years fail to reach their potential in cognitive development because of poverty, poor health and nutrition, and lack of early stimulation.

Zulfiqar A. Bhutta, Director, Centre of Excellence in Women and Child Health, Aga Khan University and Chair in Global Child Health at the Hospital for Sick Children, Toronto

So, we are now beginning to discover that it is not only to saving lives it is also the net contribution of the so called missed opportunities for child development that contribute to the health and wealth of nations.

I believe that we need to very strongly advocate for the importance of investing in health and development as a major trajectory through which countries can pull themselves up from the bottom of the development rung and rise up.

Children all over the world need the same things....

Loving caregivers

Nutrition and clean water

Healthcare

Opportunities to play and learn

....and safe, supportive communities.

Children who are healthy, nurtured and ready to learn will give back to their communities.

(Mustard): So that evidence is pretty hard if you want to have stable communities to build tolerant, democratic prosperous, reasonably equitable societies for the future, you have no choice but to put in high quality programs for early child development beginning certainly at birth, preferably when women become pregnant, but certainly you can begin at birth which is hugely important to improve the future quality of your populations.

“There can be no keener revelation of a society's soul than the way in which it treats its children.” - Nelson Mandela

Mathematics in the early years

Like language and literacy, mathematical experiences and learning is a key component in the early years that contributes to children's future success in school.

Young children's mathematical competence is often underestimated. Yet, they use and explore mathematical concepts in many different ways throughout their early years.

Hearing and using everyday words such as big, little, round, square, more and less are examples of the language of mathematics.

Exploring shapes, sizes and quantity through hands-on experiences helps children build their mathematical understanding. Early Childhood Programmes can offer many ways to support their learning.

Teachers and parents working together can gather a variety of interesting local materials for children to sort, match, compare and count such as bottle caps and seeds.

Other local materials such as painted sea shells can be used to sort or count. Simple stones used to match. Or painted sheep bones to use individually, or in an abacus.

In Madrasa preschool programmes, teacher training includes developing active learning materials for children to use.

Creative materials are also developed for teachers to use. Here the teacher has developed cards about different shapes and shares them with the children.

Young children need repeated opportunities to explore shape, size and classification of materials including concepts of short, long, in, out, over and under.

Patterns play an important role in mathematics and there are many different ways for young children to identify, create and extend patterns in their environments.

Young children learn about mathematical concepts every day in their play and when helping with family tasks.

With the support from caring adults around them a good foundation of mathematical understanding will set the stage for their future success.

Stepping stones to school

Moldova is an ex-Soviet state on the eastern edge of Europe. It is making progress but a third of its people still live below the poverty line.

At home, children often don't have access to books and toys. Primary schools too are often under-resourced and ill equipped. Even the teachers are leaving put off by a salary which is second lowest in the country after agricultural labourers. But more children are attending pre-school education. Over three quarters of 6 to 7 year olds attend at least a year of preschool. School No.152 and others like it are at the vanguard of change.

In 2006, the government launched a project to improve early education with the support of organizations like UNICEF and the World Bank.

"The whole of Moldova is in transition, and its education system is in transition too, and the new system is really encouraging. You see much more interactive education where children participate. There is more involvement from parents and from the community."

Since 1994, the Step-by-Step initiative launched by the Open Society Institute has focused on improving the education of young children. It operates in 28 countries in central and Eastern Europe including Moldova.

"What happens to children in the first years of their life has a disproportionate effect on their later development. Class distinctions, the disadvantaged, those who are left behind, can be brought into the mainstream only if you give them a chance."

The hope is schemes like this can even out the chances between rich and poor. Studies show that if children from disadvantaged backgrounds are given a good preschool education they can go on to do as well as their better off peers.

Migration fueled by poverty is increasing throughout Moldova. It is estimated a quarter of the country's 4 million people have left. This can have devastating effects. It makes the responsibility on schools even greater.

Over 15 years, businessman George Soros has contributed 120 million dollars in reforming education in the region.

"The primary responsibility lies with the family. And it is a very natural thing where parents care for their children and that's really the basis of our civilization. But where that is lacking and the children are disadvantaged, kindergarten or primary school helps to make up and gives at least a fair chance to keep up with those who are better situated."

Jon walks to school with his younger uncle Dima and Eudokia [his grandmother] sets off for the fields.

“Children are more educated and developed if they go to nursery school because we can’t afford the same level of care at home, including feeding them. And he also plays with other children. I’m free. I can go and work the land and do everything I need to do.”

Just knowing that Jon is at healthy environment and being fed well is a weight off her mind. The 5 leis or 25 pence she gives per day covers his schooling and three meals.

To help working parents, pupils can stay at school even after lessons have ended till 6 in the evening. And after lunch it is time for a snooze.

The system actively encourages parents to get involved inside school. At School No. 152 it has transformed one girl’s life. Eight-year-old Natalie was born with cerebral palsy. This is the first mainstream school that accepted her and the school pays her fees of \$22 dollars a month. Her mother, Tatiana, often sits with her in class. Being in such an environment helps Natalie develop and the other children benefit from having her there.

“Her pronunciation is better and she is doing better and I believe if she can’t do it, she still tries. She’s not so inhibited anymore. She’s more outgoing and confident.”

Sammy’s parents, who are both in the teaching profession, are also very involved in his education.

After food it’s time to get down to some homework but Sammy doesn’t seem to mind.

“I like homework because I can learn new things and keep focused at school so that I’m prepared.”

With this education behind them Sammy and his class have high hopes for their future....some very high.

For all three children preschool education has made learning fun and been a big step forward. The hope is the education they’re getting will give them the chance to take those first steps towards a promising future.

Supporting language and literacy

Young children live in an exciting, dynamic world, full of fresh new experiences. Interactions with the world around them and relationships with others are key to the development of language. Children who hear more and richer language develop greater vocabularies and, in turn, have a better foundation for literacy.

Children's play, friendships and everyday interactions help build their language skills. Pretend play in particular helps build a sense of narrative, a sense of story, and vocabulary – all of which are important for literacy learning.

Early Child Development programmes use a variety of effective strategies to promote language and literacy such as:

- reading books and telling stories
- providing print rich environments
- developing active learning materials
- providing direct instruction
- offering scaffolded materials and learning experiences

Children love listening to stories. Books and storytelling enrich children's language, vocabulary and comprehension while engaging their imaginations.

Children become familiar with print, as well as the structure and pleasure of stories, whether it's in a group or sharing a book with a friend.

In a Loipi Community Learning Centre near Maralal in northern Kenya, Samburu children excitedly gather inside a traditional structure to listen to their teacher tell a story.

Following along carefully, they listen to the words, occasionally responding and the teacher uses her voice to keep the story exciting.

Listening to stories and understanding them helps children become familiar with narrative and structure of stories. They may learn life lessons, develop imagination, humour and a desire to read books.

In Madrasa preschool programmes, a world of print surrounds children.

The classroom is full of opportunities for children to see written words including homemade learning materials, posters on the walls and labels on shelves of play materials.

An active learning approach is used for children to become familiar with names and shapes of letters as well as individual words.

This little boy is using seeds to trace the letters, become familiar with their shapes and see that putting together two different letters in a sequence spells a common word. Children this age learn through sensory experience.

In this programme, children are learning the letters in important everyday words in their home language. Picture cards help them to understand the meanings of the words as well as match words to the cards.

There are plenty of materials for all children to use.

Before children can learn to read they must become aware of individual sounds within words, recognize letters and connect these to sounds.

In the Zanzibar SOS Village kindergarten, attended by children living in the SOS Village as well as the nearby community, children work with a variety of home-made materials in small groups.

This little girl is practicing the sounds of letters and putting them together to sound out words. The interactive material challenges her to sound out different 3-letter words.

At another table, children practice printing letters using paints, again providing a rich sensory experience.

Using chalkboards, children in this Madrasa preschool programme are printing letters and beginning to understand the pattern in the word Mama. Teachers provide support to facilitate the learning process.

A variety of homemade materials are available for children to play with sounds, letters and syllables and the teacher's assistance helps provide meaning for the use of the materials.

Here, the teacher is assisting children to put together two-letter syllables to form words.

These children already have a sense of individual letters and sounds and are now ready for the challenge of identifying vowels and practicing their different sounds in combination with consonants.

Early Child Development programmes provide activities and materials that build on levels of literacy learning. These children are now ready for printing in their own books. They can write their own thoughts and stories because they have had many opportunities and support to develop their emerging language and literacy skills.

Reading out loud allows the reader to practice... whether it's reading to a group of friends...or reading by yourself for the pure pleasure of it

For young children, a balance of opportunities for listening, speaking and becoming familiar with written language - all in a way that respects and understands their energy, their playfulness, and their fresh approach to the world of school, - builds a strong foundation for language and literacy skills and sets the stage for a smooth transition to reading to learn.