



2nd International Conference on Quality Education

CONFERENCE PROCEEDINGS
Kathmandu
24-26 August, 2019

Hosted by
the Ministry of Education, Science and
Technology (Government of Nepal) and
the Rato Bangala Foundation

Supported by



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Foreword

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Acronyms

AAP	American Academy of Pediatricians
AARMS	Aptis Action Research Mentoring Scheme
ACORAB	Association of Community Radio Broadcasters
ASER	Annual Survey of Education Report
CMC-N	Centre for Mental Health and Counselling –Nepal
CRM	Complaint Response Mechanism
CSN	Collaborative Schools Network
DFID	Department for International Development
ECED	Early Childhood Education and Development
ECD	Early Childhood Development
ESD	Education for Sustainable Development
EU	European Union
GNHA	German Nepalese Help Association
HPE H	Health, Population and Environment
ICT	Information and Communication Technology
IQ	Intelligence Quotient
IT	Information Technology
MGML	Multi-grade Multi-level
NCED	National Centre for Education Development
NDD	Neurodevelopmental disorders
NGO	Non-governmental Organization
NICSS	National initiative on Comprehensive School Safety
NRs	Nepalese Rupee
PPP	Public Private Partnership

QUEST	Quality Circles in Education for Students' Personality Development
RBF	Rato Bangala Foundation
RBPOP	Rato Bangala Partnership in Outreach Program
RBS	Rato Bangala School
RNDA	Rapid Neurodevelopmental Assessment
SDG	Sustainable Development Goals
SEE	Secondary Education Examination
SES	Socio-economic Status
SLC	School Leaving Certificate
SSDP	School Sector Development Plan
STEAM	Science, Technology, Engineering, Arts, Math
STEM	Science, Technology, Engineering, Math
TFN	Teach for Nepal
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
US	United States
USA	United States of America
VDC	Village Development Committee
VSO	Voluntary Service Overseas
WCTQEE	World Council for Total Quality and Excellence in Education

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Participant Detail

Introduction to the Proceedings

The second International conference on quality education was a gathering of educators from all over Nepal and throughout the world, who were trying to figure out how to best implement recent education research from all of the world in the classrooms of Nepal. The conference aimed to increase the quality of education in Nepali schools.

Over 600 Educators participated in the three-day conference, which featured 60 workshops and over 75 presentations that drew on the skills and experience of participants working in different areas of primary and secondary education. The conference was an opportunity for educators to meet each other and share their ideas in formal and informal settings, during sessions and breaks.

This book of proceedings is an attempt to capture the rich discussions and deliberations that happened in the course of the conference. While it is difficult to capture the level of enthusiasm and commitment shown by the participants, this book aims to be a comprehensive document where you will be able to find notes on each of the sessions that took place.

We hope this book will be useful for those who are working to understand and develop new directions for education in Nepal, as well as those who seek more information on the variety of workshops and presentations that happened at the Conference. Readers who see more information about particular presentations or workshop sessions should contact the organizers via the Rato Bangala Foundation.

Conference Organization

The Second International Conference on Quality Education was organized by the Ministry of Education, Science, and Technology in collaboration with the Rato Bangala Foundation. The following individuals made up the Steering Committee of the Conference:

Mr. Baburam Poudyal, Director General of CEHRD
Mr. Mahshram Sharma, Former Secretary of MoEST,
Mr. Dhurba Raj Regmi, Joint Secretary of MoEST,
Mr. Deepak Sharma, Deputy Director General CEHRD,
Mr. Krishna Prasad Kapri, Joint Secretary of MoEST,
Mr. Ghanshyam Aryal, Director, CEHRD,
Dr. Shanta Dixit, Chair, Rato Bangala Foundation,
Ms. Milan Dixit, Vice Chair, Rato Bangala Foundation,
Ms. Monita Gurung, Coordinator, Rato Bangala Kitab,
Ms. Esha Thapa Dhungana, Director, Rato Bangala Foundation

The conference would not have been possible without the support staff at Rato Bangala School, who provided logistical support and meals for the three conference days. The conference also received voluntary support from the following Rato Bangala School students and graduates:

Aahana Rajbhandari
Aaryabrat Chhatkuli
Aavasna Rupakheti
Abinav S Thapa
Adishree Shrestha
Asha Regmi
Aniruddh Tiwari
Aria Shree Parasai
Asmi Shrestha

Aastha Rijal
Ayush Gurung
Bhavya Joshi
Bibhu Bhatta
Bipashwi Shrestha
Bishruti Rijal
Dipson Pradhan
Hikari Shrestha
Janeet Bajracharya

Karan Mahato
Kaustubh Dhital
Meghna Adhikari
Meghna Karmacharya
Pranjal Adhikari
Pratyush Ghimire
Rakshit K Bhimsaria
Rinchen Dolker Sherpa
Ritika Pradhanang
Rubin Luitel
Saisha Joshi
Sambhavi Lohani
Sambridhi Tuladhar

Sanskriti Maskay
Saugat Shakya
Shreesh Tripathi
Subhanshu Prasad
Suyash Chitrakar
Tisa Manandhar
Udbav Aryal
Yashaswe Amatya
Mishal Sunuwar
Rincheen P Sherpa
Baibhav Poudel
Sammit Karmacharya
Shlesha Pradhan

The rapporteurs for the conference were Aayushma Gautam, Akanchhya Khanal, Alexa Maharjan, Chirag Giri, and Yashaswe Amatya.



Executive Summary

Background

The three day International Conference on Quality Education (ICQE) was jointly organised by the Ministry of Education, Science and Technology and the Rato Bangala Foundation. The conference was held on August 24th to 26th at Rato Bangala School in Lalitpur, Nepal.

This conference was held with United Nations Sustainable Development Goals- 4 (SDG 4) and Nepal School Sector Development Program (SSDP) in mind, to identify what actions should be taken, at the policy making level and the school level, to achieve the Nepal's Government's goal to promote quality education and transform public schools.

Quality education is instrumental to ensuring prosperous lives and livelihoods for children. Nepal can only become a middle income country by 2030 on the foundation of quality education. The debates and discussions of the conference proved to be a milestone.

Discussions and deliberations at the conference focused on the following six themes:

1. Learner Centered Early Childhood Education

Learner Centered Early Childhood Education is directly related to SDG 4.2 and the School Sector Development Program. We were able to make participants aware about the importance of Early Childhood Development

through teacher training and sessions on management, as well as workshops and presentations that focused on Learner Centered Early Childhood Education in a way that would aid understanding of the topics covered in the SSDP.

2. Learning by Doing

Project evaluation of the School Sector Reform Program (SSRP) shows that while the project was able to vastly improve the situation of access to education and gender equality, it was unable to have the desired success in terms of providing quality education inside the classroom. The School Sector Development Program emphasizes teaching and learning in a way that contributes to the wholesome development of children in early childhood and pre-primary school. It is evident that classroom practices need to improve, changing from rote learning and learning only from textbooks to learning through practice in a way that kids learn specific skills and can think and express creatively and logically. The goals of the School Sector Development Program and Sustainable Development Goals can be achieved only by increasing student active time through learning by doing, and thereby increasing teaching time.

3. Role of Leadership

The School Sector Development Program has pointed to the lack of effectiveness in the educational leadership of Nepal. It seems important to include materials about values of school leadership and school culture in school leadership trainings. To solve the problems of the education sector, school leadership, which is responsible for fulfilling the demands of stakeholders, must be strengthened. It is important to develop quality and effective school leaders who can provide capable and result oriented educational and academic leadership and fulfill the roles they have been assigned. Because better leadership can contribute to improving the overall effectiveness of schools, the School Sector Development Plan has placed high priority on leadership development. The materials presented at the conference were able to highlight these issues and facilitate discussions on the role of leadership.

4. Education Finance

The School Sector Development Program envisions collaboration between the local, provincial and federal levels for robust and sustainable financing in the education sector. However, this has not been successfully implemented till date. For the last few years, the federal government has been spending 10-12% of its annual budget on education. That amount is far from enough to improve the quality of education. In fact, it is barely enough

to sustain necessary costs, and inadequate funding often contributes to a deterioration in the quality of education. There was a lot of important learning at the conference about how to manage investment in education in the current situation and provide quality education to all children.

5. Private Sector in Education

The effectiveness of the School Sector Development Program will be strengthened with partnerships with the private sector. Creating an environment that allows for collaborations between public and private sectors helps to bring international standards into the country.

Regardless of whether children go to schools that are financed by taxes or schools where parents directly pay fees, their rights are the same. Keeping in mind that all children should receive a quality education, it is important to focus on how to ensure every child's right to a quality education and provide them with a skills-based education that contributes to their overall development. It is necessary to form Public-Private Partnerships and move forward through mutual cooperation and collaboration. Presentations at the conference focused on experience sharing on this topic.

6. Education for Sustainable Development

The Sustainable Development Goals are all interrelated. Sustainable Development means that every Nepali person has the skills to cope well with the environmental and social changes brought about by globalization. Nepal and Nepalis have been directly affected by globalization. Education should help young people understand globalization and make a living in ways that suit their cultural, environmental, and geographical conditions. This will enable Nepali children to be successful inside Nepal and abroad. The discussions of the conference have helped to forge a path forward in terms of education for Sustainable Development.

The Mission and Objectives of the Conference

This conference put many eminent people from the education field on the same platform so they could share their knowledge and experiences, and come up with a rigorous and objective game plan to achieve the goals of the School Sector Development Program by 2030. This provided an opportunity for national, regional, and international education practitioners and experts to share their skills and ideas on equitable quality education, and relevant teaching and learning. The main goals of the conference were as follows:

- To provide a stage for sharing of local and international experiences on quality education,
- To give and receive suggestions on how to create an enabling environment for quality and equitable education,
- To provide recommendations on how to prioritize early childhood development education in a way for it to be able to create a strong foundation for all citizens,
- To share experience on how to move forward to make schools child centered in practice,
- To share experience on how to institutionalize good practices in schools and how to strengthen the efforts of the Nepal Government's School Sector Development Program,
- To shed light on the Kathmandu Commitment on Education, made during the 2013 Conference on Quality in the Classroom,
- To discuss how the education system can be improved through cooperation between the federal, provincial, and local governments.

It was expected that the conference would have the following outcomes:

- Sharing of local and international experiences on quality education,
- Presentation and documentation of best practices,
- Move forward on the agenda of the School Sector Development Program,
- Development of a network of stakeholders for quality education,
- Recommendations on how to improve the quality of education,
- Clarifications of the roles of different stakeholders including the Nepal government's development partners for the development of local communities, school management, teachers, etc.
- Agreement on a set of criteria for setting quality indicators of early child development and education,
- Draw conclusions based on suggestions received at the conference about improving the quality of education in schools, and agreeing to implement them.

Program of the conference

Mr Baburam Poudel, Director General of the Center for Education and Human Resource Development, and Chair of the organizing committee of the Second International Conference on Quality Education chaired the inauguration ceremony that took place on the first day of the three-day conference. Presenters, workshop facilitators, participants, Secretaries of the

Nepal Government, ambassadors to Nepal, well wishers of the education sector, media persons, and guests of the Rato Bangala family were present at this grand ceremony. Rato Bangala School students provided entertainment at the ceremony first by playing the national anthem on violin, and then by performing a dance on the song Ay Giri Nandini. There was also a video presentation about the conference.

The three days of the conference featured speeches by the keynote speaker, presentations on different topics regarding education, experience sharing, and workshops. Three hundred and forty two participants from community schools and over 300 participants from private schools went to workshops and parallel sessions of their choice. A main attraction of the conference were presentations and workshops by national and international experts who have been using different media and technology for the promotion and practice of quality education.

Dr. Shanta Dixit, Director of the Rato Bangala School and Chairperson of the Rato Bangala Foundation, chaired the closing ceremony held on August 26th. The Chief Guest of the closing ceremony was the Chairperson of the Health and Education Committee of the House of Representatives, Ms. Jayapuri Gharti. Secretary of the Ministry of Education, Science, and Technology, Mr. Mahesh Dahal was a special guest. Students of the Rato Bangala School performed the Manjushree dance and sang the song "Hamro School". Ms. Esha Thapa conducted both the opening and closing ceremonies.

The conference was conducted in two languages. The presentations were mostly in Nepali, with special translations for international guests.

Many parties contributed to the success of this conference: The Ministry of Education, Science, and Technology, the Rato Bangala Foundation, Ncell, Rato Bangala School, Rato Bangala Kitab, the Asia Foundation, Asian Development Bank, Janata Bank, Business Oxygen Pvt. Ltd., the European Union, Association of Community Radio Broadcasters, and Himlal Media.



Pre-Conference

As per the pre-planned activities of the Second International Conference on Quality Education, 2019 (ICQE 2019) that the Rato Bangala Foundation hosted in collaboration with the Government of Nepal Ministry of Education, Science and Technology (MoEST), RBF conducted two pre-conference workshops. RBF organized one pre-conference workshop for the 29 elected bodies of Lalitpur Metropolitan city at Rato Bangala School on 26th September 2018 and another one for ECD facilitators in Birendranagar, Surkhet, Province 6 on 2nd August 2019.

Lalitpur Metropolitan City

A program entitled “Pre-conference on Early Childhood Development Education for the Members of Lalitpur Metropolitan City” was organized on 26th September 2018. Invitees included the 29 elected representatives of the bodies of Lalitpur Metropolitan city. Lalitpur Mayor Mr. Chiri Babu Maharjan and Deputy Mayor Ms Gita Satyal participated in an interactive orientation session on early childhood development.

The focus of the workshop was on brain development, the significance of ECD education and centers, and the current status of ECD education in Lalitpur Metropolitan City. In groups, participants discussed what they understand about Early Childhood Development Education and the current situation of ECD education in Lalitpur Metropolitan City. Participants suggested that ECD is a stage of learning before a child goes to school. As this stage

sets a foundation for life, we have to provide good learning environment and opportunities. They agreed that the condition of ECD centers is not satisfactory, and that even though early childhood education is improving, it needs further development.

Dr. Shanta Dixit, Director of Rato Bangala School gave a short presentation on brain development, where she explained how a child's brain develops at different ages. Research shows that the first three years mark the most sensitive and crucial period in a child's life as this is the time where they develop their sense of vision, hearing, conceptualizing and emotional control. She shared evidence from research which shows that investment in early childhood development and education has consequences in childhood and later, affecting IQ, educational achievements, pay scale and behavior as adults.

Ms. Milan Dixit, Principal of Rato Bangala School shared amongst the elected members about its charitable wing, the Rato Bangala Partnership in Outreach Program (RBPOP), and showcased glimpses of phase III of RBPOP. RBF had organized a few activities to provide a glimpse of ECD classroom to the elected officials, where the officials themselves could experience play-based pedagogy and realize how it is effective in the development of problem solving skills, linguistic skills, imagination, creativity, self-expression, and social and emotional growth. Ms. Kalpana Parajuli, lead trainer of the ECD project, conducted a Read Aloud session during the program, where she read 'Dayalu Rukh' by Shel Silverstein.

In his speech, Mayor Chiri Babu Maharjan said that the hands-on workshop made him relive his childhood education, but in a more enjoyable and practical manner. By participating in the ECD workshop, he realized how an ECD classroom should be run and what kind of activities should be included in early years' education. The Lalitpur Metropolitan City government has committed to develop at least 1 ECD center in each of the Metropolitan City's 29 wards to set positive examples in the pre-primary sector.

Participants also made Commitments at the Workshop to work, from their respective positions, for the betterment of early childhood education.

Commitments from Educationists, Resource Persons:

- Regular monitoring of Early Childhood Development Centers
- Discussion with the Metropolitan City officials regarding the management of early childhood development centers.

- Facilitation of different orientation programs related to the importance of quality education in ECD centers.
- Sending ECD facilitators to visit the model ECD center/classroom activities and motivate them to implement and practice some of the activities that they have learnt from there.

Commitments from Teachers:

- Implementation of child centered play based activities in their own school/ECD center.
- Requesting responsible officials to support and improve the managerial and educational status of ECD centers.
- Caring about the holistic development of each child in ECD center.

Commitments from the Mayor:

- Support to manage the ECD centers properly and develop them as child friendly learning spaces.
- Coordination and collaboration with Rato Bangala to provide training for the ECD facilitators.
- Support to maximize learning by play in each ECD classroom
- Support for floor seating and age-appropriate learning materials in each ECD classroom and toilets in ECD centers
- Monitoring to find out about the current status of ECD in Lalitpur Metropolitan City
- Allocation of budget for ECD centers

Reggio Emilia Summit

The Reggio Emilia approach was developed in Reggio Emilia, Italy, by Loris Malaguzzi and local parents. It is a constructivist method of education in which learning is self directed and exploratory. The Reggio Emilia approach sees environment as the third teacher of children. Children are seen in relationship to their peers and community, and learning happens through exploration and self-expression.

Three members of the Rato Bangala School faculty had already visited Italy in 2017, before the start of the Rato Bangala preschool to observe and learn from Reggio Emilia inspired schools. Impressed by what they saw, they decided to invite the experts to Nepal to share about the Reggio Emilia Approach. A two day summit was organized as a prelude to the

Second International Conference on Quality Education, ICQE 2019 at the Rato Bangala School on July 20th and 21st, 2019. The primary intent was also to widen participant knowledge on ways to creatively teach and enable children to learn and enjoy learning in a safe environment, not by copying the approach but by taking useful aspects of Reggio Emilia to apply in our own classrooms.

The two day workshop consisted of presentations by two Italian facilitators, Ms. Alessia Forghieri and Ms. Paola Cagliari, to the 142 participants of the workshop. Their presentations and sessions covered the components of the Reggio Emilia Approach, including the environment as the “third” educator, children’s investigations, and the role of documentation in the learning processes. After every session, participants were given time to ask questions and clarify their doubts. At the end of both workshop days, there were discussion and sharing sessions.

For many participants, it was the first time learning of this child-centered philosophy, and many of them appreciated the emphasis on the capacity of young children to learn. There was frequent mention among participants of focusing not just on what children learn, but how they learn. However, while the summit sparked many ideas in participants, many attendees were concerned about the ability to apply this model to the Nepali education system. One participant suggested a Nepal-centered conference that focused on how this model can be specifically applied in Nepal, given the country’s focus on a teacher-centered educational approach. Finally, participants felt that the use of rope, the game of Ringa-Ringa Roses, and bicycling were easy components to incorporate into their classrooms, even with the traditional system of teaching in Nepal.

The suggestions gathered from the participants can be broken down into three categories: structure, content, and logistics. In terms of conference structure, many participants suggested that the conference be more interactive and allow for more activities, discussion, and hands-on learning, such as in a workshop. In terms of content, participants suggested that more specific examples of the Reggio Emilia method be given in the context of Nepal. Furthermore, requests for government training or discussion with policymakers on how to bring these methods into the national curriculum were given. Additionally, there have been suggestions to provide videos on how teachers instruct these methods. Many participants asked for another conference or more opportunities to learn about these methods and said that they would like to engage in meaningful discussions with fellow participants.

Birendranagar Municipality, Surkhet

The one day workshop on early learning and brain development was conducted on 2nd August 2019 in Birendranagar, Surkhet of Province 6, by RBF staff and Chairperson of RBF Dr. Shanta Dixit. The workshop was conducted for 96 participants representing the government and non-government agencies, and public and private schools, as well as parents, local leaders, and Municipality officials.

The one day workshop focused on the significance of Early Childhood Development (ECD) education. Trainers focused on childhood brain development, its relationship with Early Childhood Development Education, and the significance of Early Childhood Development Centers. Early Childhood Development (ECD) encompasses physical, socio-emotional, cognitive and motor skills development of children between 0-8 years of age. It is the key to a full and productive life for a child. Early Childhood is a critical stage of development that forms the foundation for children's future, well-being and learning. The early years are critical, because this is the period when the brain develops most rapidly and has a high capacity for change; the foundation is laid for health and well being throughout life.

The first session was led by Dr. Shanta Dixit, Chairperson of the Rato Bangala Foundation, who shared the learnings from RBF's work in early childhood education, where a difference in teachers' and children's daily activities has led to changes in children's behavior as well. This experience-sharing was done with the belief that experience from one place can be useful in another place if we are able to contextualize the learning. Dr. Dixit also talked about the process of child brain development and the importance of creating suitable environments to develop young children's brains in a smooth and healthy manner.

In the second part of the workshop, participants were engaged in learning by playing activities, also known as the pedagogy of play. RBF focuses on 11 essentials activities such as Daily Morning Meeting, Classroom Agreements, Journal Writing, Daily Read Aloud, Centers in Classroom, Block Play, Conflict Resolution and Emotional Role-Play, Math Games, Songs and Rhymes, Phonics and Music Movement/ Gross Motor Activities. Participants realized how the activities are effective in contributing to develop the child's learning capacity. "I was really confused when first observing the piece of wood, but after participating in the workshop, I realized its importance" shared one of the participants, an ECD teacher from the community school of Birendranagar Municipality, Surkhet.

In the end, there was a read aloud session, where Dr. Dixit read aloud 'Day-alu Rukh' by Shel Silverstein. Her tone of voice while reading and expressions while acting out the story not only gave a glimpse of how a read aloud should be done, but also created a different world amongst the listeners, highlighting the importance of Read Aloud time for increased vocabulary, heightened brain activity, and significantly greater phonemic awareness.

The participants of the workshop really enjoyed the workshop. Their responses reflected the ECD facilitators' seriousness towards their children, the fact that they had been linking the contents of the workshop with their own behavior in the classroom, and their willingness to learn more and do better.

Photographs

- Pre-conference on Early Childhood Development at Lalitpur Metropolitan City, Lalitpur
 - Reggion Emilia Summit at Rato Bangala School, Lalitpur
 - Pre-conference on Early Childhood Development at Birendranagar Municipality, Surkhet
-



1. Ms. Milan Dixit addressing the Essential Best Practises about Early Childhood Development
 2. Municipality Members engaging in block play 3-4. Municipality members of Lalitpur engaging in hands on Early Childhood sessions 5. Participants during the program 6-7. Trainers conducting the session 8. Participants of Reggio Emilia Summit



9. Chair of Rato Bangala Foundation Dr. Shanta Dixit conducting a session 10. Practising Block Play during the program 11. Participants from Birendranagar, Surkhet engaging in hands-on activity 12. Participants from Birendranagar, Surkhet coloring the pictures 13-14. Participants from Birendranagar, Surkhet engaging in EC activities 15. Participants at Birendranagar, Surkhet



Conference Opening

Shanta Dixit
Chairperson
Rato Bangala Foundation

It is my utmost pleasure to be present before you in this Second International Conference on Quality Education organized jointly by the Ministry of Education and Sports and Rato Bangala Foundation, with the support of many other organizations.

Many of you have journeyed to come here, some from across Nepal and some from across the world. We are proud to note that 44 districts and all seven provinces are represented among you. Thank you for coming.

The journey of formal education in Nepal started 166 years ago in 1853, when Jung Bahadur Kunwar, upon his return from the United Kingdom, established Durbar High School primarily for the male children of his family. Almost a hundred years later, in 1951, there were 300 schools and 10,000 students. In 1971, with then-King Birendra's New Education Plan, the government became active in education and schools sprang up across the country. Now, in 2019, there are over 35,000 schools in Nepal.

Most children are now going to school, and parents sacrifice anything and everything to ensure that their children get the best schooling available to them. But while we have seen this great increase in the quantity of schools, what is the quality of education they are providing to our children?

The education our children need for the 21st century is one that fosters creativity, cooperation, critical thinking, and the ability to communicate well and to adapt in a constantly changing physical and social environment. But we teach our children in ways that were developed in previous centuries to train industrial workers. We place them in rows and tell them to memorize and not ask questions. We teach them from textbooks. However good the textbook, such books can never meet children's overall development needs. More than at any other time, it is now that we need to put into practice opportunities for our children to learn by seeing, doing, interacting, and by teaching others. Our children need to be not industrial workers, but leaders, thinkers, and creative problem-solvers so they can thrive in our country creating opportunities for themselves.

This Second International Conference in Quality Education: Ensuring Learner-Centered Education, comprises six themes which are presented in 60 different workshops and around 80 presentations. The themes are:

1. Developmentally Appropriate Early Childhood Education

It has become clear to educators around the world, that at the age between birth to five, children's brains are developing at a rapid rate. One million neuron connections are being made every second, more than at any other time in an individual's life. Because these children's neurons are firing so rapidly, they are very curious: they ask a lot of questions and are always on the move, never sitting still and always doing something.

We currently have the most unprepared people taking care of our precious toddlers. If Nepal is to give its children a chance of surviving and indeed thriving in a rapidly changing global environment, we need to make a 20-30 year plan to develop our Early Childhood Development centers, especially by providing them with highly skilled child-development facilitators who are paid well. The SDDP sad to say has not given Early Childhood Development the priority that it is due.

2. Learning by Doing

As educators we are aware of the fact that people remember least of what they read, and more of what they learn through discussion and personal experience. Of course, we remember the most when we teach others.

We have thought, as adult teachers in charge of a classroom, that we are the ones meant to teach, but in fact we need to give children opportunities to work together and to teach one another. Not only do children learn best by teaching, but they are also the most impactful teachers of other children. When a child helps a friend feels inspired and feels confident that the

new skill is within her reach to master. The adult teacher's ideal role is one of a facilitator, observing children and providing meaningful support as and when they need it.

To facilitate learning by doing in our classrooms, we teachers must first experience ourselves how to "do and learn". The opportunities that workshops in this Conference provide for hands-on learning will give our participants the confidence to start approaching teaching differently.

We hope that all schools become spaces where children learn in a multitude of ways: using all their senses, going on trips, conducting projects, and becoming the authors, artists, and musicians that it is within them to be.

3. Role of Leadership

It is leaders who provide the vision for schools and create school culture. If we want to raise children to be independent, responsible, creative, and collaborative, we need leaders who understand the importance of these values and who are capable of fostering these values and these capacities among their colleagues. As leaders we need to give teachers the leeway to work in a responsible manner and freely within boundaries. It is only teachers who have this freedom who will be able to cultivate independence and responsibility in their students.

Just as teachers need to be given leeway in their classrooms, so too trained school leaders should be given the freedom and the responsibility to run their institutions independently and to the best of their abilities.

We have several sessions on leadership, and we hope the school leaders among you have registered for these sessions.

4. Private Sector in Education

While parents enroll their children in private sector schools because the SEE examination results of these schools are better, this is not a standard for quality education.

Instead of emphasizing exam results, private schools must transform into spaces where children learn by doing, and where they can freely learn the skills of their choice.

Those in both the private sector and the government must work together to cultivate in Nepali children the capacities and the skills that they need to do well in this ever-changing, globalized world. It is only through the collaboration of these sectors that we can hope to move towards middle-income

country status. A good forum for exchange of ideas between those working in private and public schools must be established for the good of all our children.

5. Education Financing

Clearly, all of the themes presented in this conference are directly related to financing. Developmentally appropriate early childhood classrooms require good teachers, proper nutritious food, material for children to engage and play with, outdoor space, and spaces for playing and napping. Proper toilets and water facilities are a must. Learning by doing requires trained teachers and material, opportunities to explore away from the classroom, labs and libraries, and assembly and games areas.

As we know, Nepal is not a wealthy country. Our annual budget this year amounted to NRs1.532 trillion, which is \$1.5 billion. So even if 20% of our national budget is put to education, we will not have the best-provided-for schools in South Asia, but we can have the best schools that Nepal can afford. For this, every rupee has to be put to good use. We must not have schools with 20 classrooms where there are not even 100 students. We must not have 500 students and only three teachers. This is a complete waste of resources. In remote areas, we must train teachers to facilitate multi-grade classrooms where children learn through active participation. And most of all, we must hold teachers accountable to their children. If we do not have this, no matter how much money we put into education, the lives of our children will not change.

Education only receives 10.19 percent of Nepal's annual budget. All poor countries lift themselves out of poverty by investing in education. It is a real tragedy that we in Nepal have not learned this fundamental truth.

It is essential that we increase the budget allocated to education. However, before doing so, we need to do a lot of homework on how this budget must be used. For one, teacher-training colleges should attract students with the highest grades and give them rigorous training. We must also set up a competitive hiring process. When teachers are hired as political favours, we do a gross injustice to our children and to the future of our country.

Perhaps decentralization of education will give us hope. The local authorities will be held accountable, will receive praise if the job is done well, and will be put to task if they fail. Nepal is in a crisis in education, and this is the time to use all the resources honestly and in an appropriate manner so children will prosper.

6. Education for Sustainable Development

This theme encompasses all of the above. Quality education for all is one of the UN's Sustainable Development Goals for 2030, but sustainable development also means defeating poverty and attaining a good quality of life in a world that is changing both climatically and in terms of livelihoods. These things are not possible without the awareness, critical thinking, and problem-solving skills that a quality education fosters in our children.

Graduates with the worst grades opt to become teachers. While grades are not a fair representation of people, what this trend does show is that: 1) Teaching is not valued in our country, and 2) that it is considered an easy job that anyone can do. It is no wonder that we are so badly failing our children. Education for sustainable development asks for a long-term plan. And Nepal should start making its own long term plans rather than receiving cookie-cutter plans made by people on other continents, which do not cater to our unique needs.

As this conference takes on its further editions every two years, we hope to create a movement by which quality education is the rule rather than the exception in Nepal.

Veronica Cody Ambassador of the EU

Education has been a priority issue of the EU. We recognize good and bad education, and are proud to support inclusive and equitable education in Nepal.

I've seen many kinds of schools in my time in Nepal. I have seen firsthand, the potential, and the hunger of learning, of your boys and girls. I visited a public school in Nawalparasi, and was impressed to see every student's commitment to engage with their studies and hunger to learn.

It is important to go to school, independent of origin, gender, or disability. Nepal has made many strides in that respect, as well as in making sure that the schools are safe, and the government should be congratulated on that. The next challenge is exactly what this conference is about: quality education. This is a room full of folks interested in translating these achievements into learning outcomes. We see articles in the media about kids who have difficulties reading whole sentences and doing basic mathematics, despite being enrolled in school. We want to make sure, collectively, that every Nepali girl and every Nepali boy makes the most of their time in school.

The European Union has committed 60 billion to Basic Education between 2013 and 2020. We are supporting the Government of Nepal and other development partners to achieve visible outcomes in increasing reading proficiency in the early grades, ensuring equitable access, and building resilient schools. In terms of quality education, we are supporting the implementation of the Ministry of Education's School Sector Development Plan. Through this plan, we also support many efforts to improve early childhood education outcomes, through training and professional support for teachers, as well as better mechanisms to ensure equitable appointments and inclusiveness.

We are also focusing on improving the curriculum, in particular, fluency and comprehension in Nepali, hopefully English, and in Mathematics. We're also supporting the implementation of the Early Grade Reading Program, through teaching and learning materials, teacher training and pedagogical support, community organization, and student assessment and monitoring and evaluation. We actively participate in the annual mid-term budget review with the government, and the joint mid-term review.

So what I want to highlight is that while money is very important, engagement is also important. Ensuring that we are committed to the goal, and to see what progress is made on a year-by-year basis is also very important. We also believe that providing a path after early education and training young people for the jobs of tomorrow is complementary to our efforts in early education. The European Union has committed 40 billion to this for the same time period for technical and vocational education, focusing on agriculture, tourism, and construction.

Last, our Erasmus Plus program which awards scholarships to Nepali students to continue their higher education in European Universities, promoting learning and exchange. In 2019, I am proud to announce that 52 Nepali students are going to study in Europe through this program, where they will share, with European peers, new learning opportunities. I recently met them for their orientation, and it was heartening to see the enthusiasm with which they were about to embark on their trip. The scholarship will pay their tuition fees, their travel and accommodation, and they will receive a small stipend for their time there.

As you know, the challenges to achieve the Sustainable Development Goal-4 is big, but the rewards will be reaped by the whole nation. The Nepal Government has the ongoing support of the European Union. I would like to thank the organizers of this conference for putting together this conference, and I look forward to seeing the results. I wish you every success.

Khaga Raj Baral
Secretary
Ministry of Education, Science and Technology

Recently, a conference on best practices in classrooms happened in Province 1. Such conferences are going to happen in the rest of the country. And the Rato Bangala Foundation is also organizing such conferences in the provincial levels. So we are moving forward, in a collaborative way.

At this conference, we will talk about education, and teaching and learning. Quality is, of course, a relative term. We will never be satisfied with what we have achieved in terms of quality, and we must not be either. Even Norway and Finland, which do really well, still talk about how to do better. Tony Blair, when he became Prime Minister (of England) talked about his priorities. Priority number one was education, priority number two was education, priority number three was education.

The Nepali state has also accepted that the first priority is education, and we are determined to improve the education sector. When we celebrated International Teachers' Day, we talked about how right to education means the right to quality teachers. So this conference also focuses on that. If our work in education, education policy, curriculum, or teacher training doesn't affect the classroom, if it doesn't make a difference in learning, it isn't useful. Right now less than 50% of our students achieve proficiency at grade level. As educators, we cannot be satisfied with that.

The transformation of a teacher is the most important issue. When I was at the National Centre for Education Development (NCED) I went to Khotang and organized a gathering of teachers. I asked them, "Despite having so many trainings, despite the fact that every teacher is trained, why hasn't there been any change in the classroom?" And they asked me to organise a training that changes their attitude. We have trainings that transfer knowledge, we have training that transform skills, but what kinds of training do we need to change attitudes? We don't have such a training. I promised that if they could find me such training, I would bring it to them, but there was no answer. However, until we change our attitude we cannot change our results.

I remember one day from my youth. I was sitting in a neighbor's house and it was raining very hard. There was rain in the front yard. My brother asked the old man of the house where the rainwater goes. The old man said it goes to the nearby river, Sim Khola. "Where does it go from there?" "It goes

to the Dhobi Khola." "And from there?" "Rupse Khola" "And then where does it go?" "Seti." "And from the Seti?" "Trishuli" "Where does it go from there?" "Narayani" "And then?" "It goes to the Ganga" "And then where does it go?" "It goes to the ocean." "And then?" By then the old man was annoyed, and he probably didn't know where the water went next. "Tero tauko! (it goes to your head!)" That was the end to all our questions. I felt very bad. But this is what happens in many of our classrooms even today.

Curious children don't expect those kinds of answers. And we may not know everything. We may not know about the whole water cycle, for example. But we must tell them we don't know and then find out. I want to ask this of teachers— when students ask you, "Where did this come from?" don't say it came from the formula. Why did the formula come from, who made this formula? When I meet teachers, I often ask them why certain math rules hold. And I'm hardly ever satisfied by their answers. If I was a student, I would have to pretend to be satisfied. If they asked me whether I understood, I would have to say yes, because I would have no option.

Many of the people who are here at the Conference today are also very curious. If the Conference cannot speak to your curiosity and change how you think about certain things, then it will not have been successful.

I am going to end with an example of Cambodia, which is a country that eats a lot of rice. Cambodians eat more rice than we do. But mice were destroying a lot of their rice yield, so the government created the scheme. People would be rewarded for killing mice. There was a collection of huge numbers of dead mice, turned in for a monetary reward. So the government started asking people to just turn in the mice tails. Huge number of tails were collected. A large budget was spent on rewards. But mice still ruined much of the rice yield. The government did some research; they found out that farmers would cut off mice tails, and let the mice go.

In fifty years of public education, we've had many projects, but we haven't been able to achieve much. The tails are in our hands, but the mice are still destroying the rice. Now we need to stop collecting the tails. Perhaps when this conference starts being organised every two years, we can learn more from each other. I wish for the success of this conference. Thank you.

John David Snyder

Keynote Speaker

In the interest of full disclosure, I have to admit I do not really know how to give a keynote. I don't know what I am doing up here! So, while I freely acknowledge it might not be the right thing to do, what I am going to attempt to do is to tell you why I am attending this conference and why I think that is important.

What am I doing here?

I believe the fundamental aim of education is for each and every student to leave the K-12 system with the power to pursue a future of his or her own choosing. A future not dependent upon income, zip code, the color of one's skin, the language spoken at home, one's gender, or any other accident of birth. Further, schools and communities where this is the case would become the norm, not the anomaly. Or, as John Dewey wrote over 100 years ago: "What the best and wisest parent wants for his child, that must we want for all the children of the community. Anything less is unlovely, and left unchecked, destroys our democracy."

I believe that by attending this conference and learning with and from the other people attending, I will be better able to more closely approximate this goal, towards which I have toiled (with wildly varying levels of success) for the past 47 years.

Why does it matter?

There is a novel by J. D. Salinger called *Catcher in the Rye*. It is the story of one weekend in the life of the main character, Holden Caulfield. He attends a boarding school and is very confused and unhappy there, and with his life more generally. So, he decides to run away to New York City. Before he goes, he wants to tell all the other students what he thinks of them and their school. With his bags packed, he stands at the top of the stairs prepared to give them a piece of his mind, his parting shot. Before he can get a word out, he stumbles and falls down the stairs, so the parting image he leaves behind for his classmates is him tumbling, awkwardly and painfully down the stairs.

He arrives in New York City and has a series of misadventures. Things are only getting worse and worse for him. In the middle of the night he decides to go visit a former teacher who lives in the city. The teacher awakes and

listens generously and lovingly to Holden. Finally, the teacher asks, what do you want, Holden? Holden responds by saying,

"I have this dream. And in this dream, I have a catcher's mask on and am wearing a catcher's mitt and I am standing at the edge of a cliff. In front of me there is a field. And it is a beautiful field with flowers blooming in bursts of color and tall grass waving in the mild breeze, and there are kids of all different colors, speaking all different languages, playing together and everyone is happy, smiling, and laughing. And my job is to catch them if they get too close to the cliff and might fall off. I just want them to keep playing, to keep being happy, smiling, and laughing together."

The field is innocence and the cliff is experience. Holden doesn't want any of the children to lose their innocence, to fall off the cliff into experience and become as sad and hurt and confused as he has become.

The teacher needs to go to bed, he has to teach in the morning, and asks Holden to stay. But Holden leaves with the intention of getting on a bus and going somewhere, anywhere, better. Before he leaves, he wants to say good-bye to his younger sister Phoebe. The next morning, he goes to her school. She is in class and he sits on the stairs outside the room until she is free. He glances at the wall, and someone has written the "F word" there. He does not want his sister to see this, it is ugly and so sad. He takes out a handkerchief, spits on it, and washes off the word. His sister is taking a long time to come out, and Holden has to go to the restroom. He isn't feeling well. In the restroom, he looks up and the "F word" is written all over the walls. He realizes even if he spent his entire life trying, he couldn't erase all the F words in the world. He can't protect his sister. No matter what he does, those kids are all going to fall off that cliff.

There are a lot of "F words" in education. There are children who come to school hungry each day. Who have been berated and bullied a dozen times before classes even commence. Whose schools do not have the basic materials required for human growth and development. There are parents who ache each day because they do not have the resources they so desperately want to provide their children. There are teachers who have forgotten why they became teachers, who have lost and can't find the love that called them into the classroom. There are principals who are more concerned about their school's rating and their own advancement than they are about the growth and development of the children and families in their care. There are politicians and businesspeople who choose to plunder the transitory present rather than sow the seeds of a fertile future for our children and our communities.

Like Holden, we as educators, cannot erase all the “F words” in the world. But there is nothing more noble and more important in all of human existence that our effort to do so, day after day after so often heart wrenching day.

That’s why being here matters.

Giriraj Mani Pokharel **Minister of Education, Science and Technology**

After seven decades of political struggle, some peaceful and some armed, we promulgated a new Constitution in 2015. Based on the Constitution, we are implementing a socialism-based Federal Democratic Republic in Nepal. We are working on the democratic system with three different levels of government, all elected. But there hasn’t been enough discussion about how to work the education system in such a structure, how to move it forward, or how to improve it. This conference, with learner-centred quality education as its theme, is very relevant in light of the Nepal Government’s current priorities. And it is happening at a theatre that is named after a pillar of Nepali literature.

Out of six topics of this conference, learner-centred approach to education is especially important. Learner centered education is able to instil different kinds of skills in young people. According to Howard Gardner, there are eight different kinds of intelligence, Linguistic, logical, visuospatial, kinesthetic, musical, interpersonal, intrapersonal, and naturalist. No one has all of the skills or intelligences. All children have some intelligences in plenty and are less skilled at some things. We must give children the opportunity to develop the skills that they wish to develop.

At a time when all children are coming to school, a single classroom should be able to produce athletes, singers, musicians, engineers, doctors, scientists, political leaders, sociologists, economists, and business people. Therefore, it is important to transform classroom teaching and to encourage the development of different kinds of skills.

We have been working for over half a century for affordable and quality education. Educational institutions have now reached every village. In a way, we are further ahead than other developing countries. Children who do not have access to schools have been provided learning experiences through alternative education, open education, and distance education. Local gov-

ernments have started announcing that there are no out of school children in their areas.

However, we have not been able to make the expected improvement in the quality of education. That is where we should focus our policy next.. I have seen that stakeholders from all sectors are committed to working to improve the quality of education. Local governments have started the process for quality enhancement. Many of them are doing exemplary work. Quality education has become a topic of concern for many. And I hope that this conference will be able to move forward in analysing both the theoretical and practical sides of quality education and present a structure for quality education that is acceptable across the developing world.

I expect that this conference will present a new and suitable road map for a country like Nepal, with so much natural and cultural diversity and a federal government structure, highlighting the roles and responsibilities of each level of government in ensuring quality education and working towards economically and socially transforming the country through education. The themes of this conference are important in and of themselves but also in relationship to each other. It is my hope that you would look at them independently and in how they relate to one another.

Respected audience, during my travels I have learned that there is no standard model for quality education. I feel like quality education is defined according to the times, circumstances, society, community, and the nation. In my opinion, however, quality education has three dimensions: input, process, and output. Input includes budget, clear education policy and laws, improved infrastructure, plenty of resources, able human resource, and updated curriculum. Process includes proper management and good governance of educational units and child centered classrooms that ensure meeting learning goals, employment of creative teaching techniques, use of teaching materials, time management, progressive assessment techniques, etc. All students who enter schools should be able to finish with a good grade and have good behavior, working social relationships, and high personal and social rates of return to education, that is output.

I would like to remind you that legal, policy and management frameworks have already been set in place for pre primary upto the university system to be a high-quality, useful for practical life, modern, and technology-friendly and to produce quality human resources for the country. Now we have to change our thought and work processes.

I want to share with you that the forthcoming National Education Law and National Education Policy will address all the complications that have risen due to the recent federalization of the state and clarify work distribution among the different levels of government. The National Education Policy has been debated by Parliament for almost 40 days and a Committee of Ministers are compiling the suggestions received from Parliament that need to be addressed. Based on this, we are preparing to make two acts, one of which is about University education, and the other one about basic and secondary education. We have taken seriously the idea that we need to invest more in education, and although it looks like just over 10% of the national budget is allocated to education, we must not forget that the provincial and local governments also spend on education. In addition, the National Reconstruction Authority has also allocated budget for school construction as a part of the earthquake reconstruction. Overall about 13% of the budget is being spent on education.

One of the sub topics of this conference is education leadership. Leadership is the local government, leadership is also the provincial government. Leadership is the school management committee, the Headmaster, the teachers, the mothers' group, and the community. Let us not look at leadership in isolation. In the past, when the performance of community schools was degrading, we did not have the infrastructure to take ownership of schools. Now we have the local government. This does not mean the local governments interfere with the school. It means that they support the school in its day-to-day activities.

We must also remember that the quality of education cannot exceed the quality of teachers. Many people say that teachers are political and the teacher should not be allowed to have a political affiliation. But let us remember that during dictator regimes, the education sector has played a role to bring about change. School Principals have been in politics since 2032, students were a political force when political parties were banned. And teachers have been active in politics since the forties. As political parties, we have to take some of the blame too. But in the past, we fought to get our rights, and now we have gotten those rights. Therefore in the Eighth Amendment of the Education Act, we suggested that teachers should not be active members of any committee of political parties. It is difficult to tell anybody who has been involved in politics to let the politics go, but in the changed circumstances, we need to think about the changed role of teachers. Teachers are still agents of change. They are the leaders of educational transformation. The teachers of today should not only transmit knowledge but be facilitators in the creation of knowledge.

We just completed the licensure examination for temporary teachers. Nepal is the only country that gave teachers the option to take an exam or take a golden handshake. We have increased the pass marks for these licensure exams from 40 to 50 for the first time. Teachers today are preparing citizens for 30 years later, and a workforce for 30 years later. We have to remember that the workforce of the future needs to be more skilled and work in different circumstances than we do. Therefore, teachers have to be fluent in their subject matter, classroom techniques, management, collaboration, and communication.

This decade (2076-85) has been declared as a decade for quality enhancement of public schools. All stakeholders and well wishers need to make efforts for this to become reality. Public schools need to get back the public's trust. The government is determined that public schools should be the agents of quality education in the next 10 years. The current Constitution acknowledges the role of the private sector, and stresses on increasing the investment in education from the public sector. Just like I am the patron of the public sector, I'm also the patron of the private sector. We must move forward with the private, public, and community trust schools as the 3 pillars of education. But the private sector must also continue to think about its strengths and weaknesses, and focus on giving life skill based education that will help children make a life and a living in our current situation.

I'm sure that I do not have to talk about equal access to education; the Constitution itself ensures that. The School Sector Development Program focuses on equity, quality, contextuality, and competency as its core values. The National Education Policy is on its way to being approved. It brings different education policies under the same umbrella, where we have specified the roles of the federal, provincial, and local governments. The 15th Plan gives much priority to the issue of quality education. We have been trying to focus on technical education for all 753 local units and have already successfully implemented it in 540 units.

In the past, we have been lacking especially in good governance in education. We must hold each other accountable and make strides in this area. We are celebrating education day this year with the slogan "our common pledge, strengthening of public education (haami sabai ko pran, sarbajanik sikshya sabalikaran). We are working towards prosperous Nepal, happy Nepalis (*samridhha Nepal, sukhi Nepali*). We cannot achieve this without quality schools.

I first met ECD facilitators who had been trained at Rato Bangala in Lamjung, the last time I was a Minister. You have done some very important work, and need to think about how the work that you have been doing can reach all the schools in Nepal. I wish you all the best in continuing your good work, and thank you for organizing this conference.

Baburam Poudel

Director General

Center for Education and Human Resource Development

There is a verse in Sanskrit which means there is no sound without a mantra, no plant without some medicinal qualities, no person without skill. The only thing that is missing is someone who can bring these into life. I want to link this to teachers, as well as to the Ministry.

Teachers have the skills they need. We need someone who can bring these skills to life. The Ministry of Education has played a part by organizing this conference and gathering all kinds of experts in the same place, with the help of the Rato Bangala Foundation.

We say that the school is a Saraswati temple. I was thinking this morning: if the school is a temple, then who are the Gods? Who are the priests, what is the method of prayer, what are the offerings,? And then I thought, the Gods in this temple are the children. If the school is a temple, teachers are the priests. The curriculum and teaching materials are the offerings. And all the other stakeholders are the people who come in with some offerings, sing accolades, and worship. Only the teachers, the priests, can actually make the children happy.

That is why in Sanskrit, they say "Guru Bishnu, Guru Brahma, Guru Deva Maheshwor". Teachers are Brahma because they are the creators of sparks of knowledge. They are also the keepers of knowledge. They take knowledge and pass it on from one generation to another. That is why they are the operators. The Bishnus. Gods are also the Destroyers. The Shankers. They destroy ignorance, and create light. That is why Gods are Brahma, Bishnu, and Maheshwor. We are just here to sharpen that skill in teachers. When Hanuman was about to cross the ocean, he didn't quite know how he was going to do it. And someone told him, you are the son of the wind, you can do it. I think this conference will have the same role, tell the teachers in the room that if you believe in yourselves, you can in fact change the face of public education in Nepal. I believe that this conference will serve as a reminder that only teachers have the ability to make this change.

We have a long way to go. We have to now focus on access plus quality, and widen the reach of the trainings for ECD teachers and facilitators. We also need to make education accessible anytime, anywhere, with the help of technology, so that all children, in all corners of Nepal can have access to quality education. We can not take our classes to the world, therefore, we must focus on bringing the world to all our classrooms.

I wish all of you a fruitful three days at this conference. May this conference be a hub for a lot of learning and sharing. Thank you.



Plenaries

The Implications of Brain Development in Early Childhood

Dr. Shanta Dixit and Ms. Milan Dixit

August 24, Day 1

Unprecedented advancement in science and medicine has allowed everyone around the world, including us in Nepal, to understand the structure and function of the brain. The size of the human brain is about 3 pounds, 1.5 kilos, and 15 cm long. The Newborn has 25% of the brain volume of an adult, and weighs around $\frac{3}{4}$ of a pound. However, within the first six-month the brain volume grows to 50% of adult size and in three years the brain volume is 80%, and 90% by the time children are 5 years old.

The brain grows by forming neuron connections, and in babies, more than a million connections are made every second. The connections, or “firing” of the brain happens when children undergo certain activities. These connections between the brain cells, or the “firing” are what make the brain the command center of the body. When connections are frequent, they become stronger, and the children become more proficient at doing those tasks. However, the connections that are not used become weaker and slowly disappear evident in children unable to do these tasks. The connections that are used most frequently are further strengthened through a process called myeliazation, which results in proficiency in these activities.

While developing skills through firing neurons applies to people of all ages, there is a special time period called sensitive or critical period where the

brain of the young child is ready to learn specific skills. The sensitive period is in the first three years of life, particularly in the first year where the brain is most malleable and the child learns very easily. After this sensitive period, the capacity to learn those specific skills is not as easy for the child. Learning can happen later too, but it is much more difficult both for the child and for the adult fostering these skills.

Vision: At birth, new born babies do not have all the visual abilities. In the first few months of life, babies learn to focus their eyes, move them accurately and use them together in a coordinated manner and to send the information from the eyes to the brain for proper interpretation. Vision supports the development of the brain by providing information and stimulation in the earliest days of the baby's life. In the first few months, the care-giver has to go close to the child and make contact. They begin to have depth perception in 5 months, and start seeing color at this time.

Hearing: Children start hearing at 20 weeks of gestation, and hearing will be mature by birth. The fetus hears sounds of the mother, and low frequency sounds. A baby when born is able to hear well. Children love music and are fascinated by routine sounds. Hearing is crucial to speech development, and by 6 months children recognize familiar voices. They slowly begin to comprehend the words spoken. Hearing has a large impact on speech and language development.

Habitual ways of responding: These are habits that children form in the early years. This is the time to respond to children in a pleasant way so they learn the same. Parents foster this skill by being role models, showing good manners, engaging in physical activities, encouraging family bonding, setting strong ground rules, encouraging a healthy diet, rewarding the child for good behaviour, staying involved and eating meals together.

Emotional control: Babies are born with little self-control, and are unable to control their emotional states or behavior. However, emotional control begins in the baby's earliest months and continues for the first 3 years. Giving a child who is throwing things a ball so he can learn to throw and teaching a two year old not to grab a friend's toy are examples of emotional control. However a baby needs to be calm before they can be taught. They need to be calmed. Children need support to articulate their feelings. They need opportunities to choose. They need to learn to wait.

Language development: Newborns through 3 months make cooing sounds and cry. From four months, they gurgle, grunt, squeal, laugh and make dif-

ferent crying sounds. From six to nine months, babies babble syllables and start imitating the tones and speech sounds. By 12 months the babies first words appear, and by 18 months to 2 years they will start using around 50 words. By the time they are 2-3 years old, they can make sentences of 4-5 words. Children “serve” and parents “return”. They respond to the babies’ call to engage. This is how babies learn language and communication.

Symbols: This is the ability to make something stand for another. By around 18 months, children can use one object to represent another object and engage in pretend play. Children put the doll to sleep, sip pretend cups of tea, and become the mother to the doll. This symbolic play is highly correlated with language development.

Peer Social Relationship: Having peers to play with strengthens this aspect of development. When children are around children, they learn how to share things, how to play together and how to enjoy each other. Although in the beginning children do not really play together, but engage in parallel play, they soon learn to work in groups. We can see that this skill develops through primary school and later. So there is no need to push this in the early years, but let it develop naturally as the child grows and associates with friends.

Numbers: Children love to sort, arrange by size, shape, look for patterns, identify big and small, and organize them according to size once they become three years and more. When they repeat numbers and count them they do not necessarily understand what they are saying. So, in the early years, numbers need to be used creatively, like how the right brain would like it, looking at patterns, looking at the whole. The left brain functions of numbers must be left to primary age, when the child is about seven years old.

We see that the earliest skills of vision, hearing, habitual ways of responding, emotional control, language development happens in the first year of life. Symbols and peer social relationships and number skills develop a bit later and continue through school age.

The research on sensitive periods indicate that we, as a society, are doing an injustice to the parents, the teacher and the child. The parent does not know what to focus on in the first few years of life, the teacher is expected to teach students content that their brain is not ready to absorb. The teacher gets frustrated and feels unsuccessful. The child, unable to do much of what is required of him/her in school develops low self-esteem,

begins to feel that he/she is not capable of learning, and, eventually drops out of school. But the greatest harm that this is doing, is robbing the child's opportunity to learn and become capable and confident adults.

It is clear from research that when the brain is abused, the child suffers not only socially and academically, but suffers from all kinds of ailments and is not able to lead a healthy life. Long term studies in Detroit, Harvard, North Carolina have shown that children that receive good early childhood care have long term benefits. They are more likely to have completed school, have higher paying jobs, have good relationships in the family, be better parents, and enjoy life better and have fewer incidents of incarceration.

With the data from the long term study in Detroit and North Carolina, Robert Heckman made a calculation of the return on investment. It is clear that the best time to invest is during pregnancy, and then in early childhood. The rate of return keeps decreasing as states invest on older children.

There is therefore compelling evidence to show that early childhood investment is the best, and nations that recognize this will best serve their children and themselves.

"I tried to teach my child with books,
she gave me only puzzled looks.
I tried to teach my child with words,
they passed by her often unheard.
Despairingly, I turned aside,
'How shall I teach this child,' I cried?
Into my hand she put the key,
'Come,' she said, 'play with me.'"

– *Anonymous*

Research suggests that the experiences of the early years have a deep and lasting impact on the brain development of children. These form the foundations of their later education and experiences. But many early childhood programs ignore the research on early brain development.

It is important for educators to pay attention to research about how and when children's brains develop the most. We should put thought into what experience to give students in our classrooms, what kinds of curriculum to make, and what activities suit them best.

Research says that the right side of the brain is responsible for empathy, understanding, creativity, and imagination. The right side of the brain devel-

ops first, and it is important to develop the above mentioned skills before a child is seven years old. The left side of the brain is responsible for languages, numbers, literacy and analytical skills. The left side of the brain can develop well only after seven years of age.

Small children can not read or write. When we force them to read and write at a young age, we are only discouraging them, and creating negative experiences of school for them. Teachers are just wasting their time when they try to teach children to read and write before they are of age. Because young children can not remember when we drill facts into their brains, they have to be taught the same thing multiple times. Real education, therefore, can only be achieved if we teach students in a developmentally appropriate manner.

Educators need to focus more on the skill development of children. They need to learn, in the classroom, how to learn about and understand the world.

But now, classrooms are falling victim to increasing educational loads. Children go to school earlier than ever. But classrooms have not changed to accommodate these young children. Two year-old children are taught in the same way that first graders were taught four decades ago. The more reading and writing that children can do, the better it looks. Many educators say that this is what parents want. But isn't their job to convince parents of what pedagogical approaches work best?

Research shows that play is important in the early years. It shows that children learn through play. American psychologist and Professor at Boston College, Peter Gray says that when kids don't play, they are worried and depressed, and suffer through many psychological problems. They are also less empathetic. Play encourages students to make their own decisions and solve their own problems. This develops their capabilities and confidence. Pediatricians also recommend focusing on play.

The American Academy of Pediatricians clinical report "Power of Play" says play is important for the development of deep bonds with parents, learning of life-skills, and prevention of negative stress. AAP also encourages pediatricians to write a prescription for play during childrens' first two years. The World Health Organization says that children should sit less and move around more to be healthy.

Playing with parents and other children helps children the social, emotional, linguistic, and critical thinking skills that allow them to work well with other

people. By asking children to sit idly and not play, we are not just cheating our children, but also our country. Education starts with the body. Play always involves physical components that have positive effects on physical health, motor controls, strengths, and endurance. With each movement, children learn through experience physical, mental, and social skills. Play also aids physical development and lights up different pathways that are important for brain development. The more children move, the more they learn. The more they learn, the more they want to learn.

Smartphones and tablets are interferences to learning. Studies show that using these kinds of technology for just one hour a day can make children more worried and depressed.

The Learning Pyramid, first devised by Williams & Shellenberger (1996), is one way to see children's learning. The bottom of the pyramid shows seven skills. First, children develop their physical and sensory skills. Besides the five senses that we usually talk about, including sight, smell, feel, taste, and hearing, the other two are vestibular and proprioceptive skills. The vestibular system is concerned with the body's sense of balance. Proprioceptive skills give us a sense of where we are, what obstacles lie ahead, whether we may fall, what may hurt us, and what is hot or cold. Tactile, Vestibular and Proprioception skills are the first to develop, and they aid later development. Further development, such as speaking, language, problem solving, and critical thinking are informed by the development of these senses.

The prefrontal cortex of the brain is the working center of the brain, and play helps the prefrontal cortex grow. Play changes the connections between neurons and strengthens them. When these neuronal connections are not used repetitively, they are lost. Therefore, it is important to give children rich experiences in their early childhood.

According to Harriet Cuffaro, "Play is the textbook of early childhood." Stages of play including Unoccupied Play (Birth-3 Months), Solitary Play (Birth-2 Years), Spectator/Onlooker Behavior (2 Years), Parallel Play (2+ Years), Associate Play (3-4 Years), and Cooperative Play (4+ years). Blocks, for example, are useful in many of these stages of play, helping to develop social skills, physical skills, artistic skills, language, math, and science skills. Dramatic play, where kids enact different roles such as that of a doctor, teacher, their parents, and others, help them understand the world and their surroundings better. The interactions and conversations during play helps develop their linguistic skills and helps them think in abstract and interactive ways, builds self-confidence and communication skills. Play teach-

ers children self regulation and improves their Executive Function. Recent studies show that preschool teachers describe self-regulation as the most important skill for school readiness, more important than IQ. Self-regulation teaches children to switch tasks, focus on what they are doing, understand their feelings, wait for others, respect their peers and understand their emotions, and delay gratification. Self regulation and Executive Function are important for later learning and development.

Free Play, active play, telling stories, dramatic play, and playing with rules helps children be more flexible. They help them to think about their actions and control their impulses. This affects later social and educational skills. Functional Exploratory Play helps hand-eye coordination, identifying and classifying things, thinking skills, motor skills, pre-literacy, and per-writing skills. Structures of free play teaches children to think innovatively, to take healthy risks, to figure things out for themselves, and to solve their own problems.

When adults take charge of play, children only learn to follow directions, and lose some of the benefits of play, such as creativity, leadership, and collaborating skills. Self-directed play encourages children to collaborate with others, cooperate, have conversations, solve problems, and negotiate. It is therefore important to let children play with open-ended tools and toys, to ask them questions that encourage them to come to their own conclusions, to let children do their own work, to create environments for play that also take care of children's developmental stages and security, and to make rules for indoor and outdoor play.

The following three things are important for the development of children and families: strengthening relationships with each other, improving life-skills, and reducing stress. Play helps develop these.

If we look at a list of 21st Century Skills developed by the World Economic Forum, we can see that many of them, including communication, literacy, creativity, judgement and decision making, are developed in the early grade classrooms. We have to change how we teach our youngest children to make sure they develop these skills.

We would like to end with a quote by John Dewey, "If we teach today's students as we taught yesterday's, we rob them of tomorrow". Thank you.

What we have learned about Improving Schools

John David Snyder

August 25, Day 2

In this presentation I will outline four themes of school improvement. These can be thought of as the “primary colors” of school improvement – by mixing and matching these four themes, each individual school improvement effort is more likely to move the effort in the desired direction.

1. Clarify Your Aims/Goals
2. Improving Schools is Human Development
3. Context Matters
4. You Cannot Do it Alone

Clarify Your Aims/Goals

At the end of the day, “education” is a value proposition. What matters? To Whom? What are the goals? Whose knowledge/what information “counts?” What investments to make? How to allocate resources? These are all value laden questions. There is no one right Answer.

So, the question that needs to be addressed is improvement towards what? What are your goals/aims? You need clarity on what you are trying to achieve ... even though you can not know until after you have changed whether or not the change “worked.” If you do not know where you are going, that is exactly where you will end up. Or worse, you will expend time, energy, resources, ideals, hopes, and dreams ... and end up exactly where you began.

First of all, do you really want to “change/improve” at all? A system is set up to produce the results that it produces. At least in the U.S., despite much hand wringing and rhetoric to the contrary, the reality is the current power structure is more in favor of keeping the status quo (that in the short term is working quite well for those in power) than risking the unknown of change/improvement. So, one really does need to gauge the political, social, emotional will to change. Change is not “just” a technical issue with a technical solution. In fact, history is clear, solely technical changes inevitably result in sustaining the status quo ... no matter their intent.

Systems are designed to resist change (and individual people don’t much like change either). So, if one really wants to change/improve, one has to be clear on one’s goals, and those changes will involve changes in the hearts and minds of a critical mass of people at every level in the educational eco-

system. To do that requires understanding and addressing the strengths, interests, and needs (including the messy awkward ache and awe of emotions/feelings) of the folks who will ultimately have to do the changing.

So, what are “your” goals? In what direction are you trying to improve? Towards what aims? Who the “your” is a really important issue. Who is at the table? Who decides? How? The answers to those questions and how they play out may be even more important than the answer itself.

The “decision” itself can be thought of in several ways. Several examples (certainly not exhaustive) for consideration.

One way to look at the aims of education is whether the goal is to tweak the system to reproduce the status quo or to resist the status quo – to create an entirely new status quo. This (as with almost all “aims”) is not an either/or situation but rather a both/and balance. Among other factors, the balance of the both/and depends upon the stress/comfort level of the individual and the larger collective. Humans have a basic need for both certainty/structure/security and creativity/freedom/ambiguity. The greater the stress level on the organism, the more the balance swings towards security/status quo/one right answer. In greater the comfort level (less stress) the balance swings towards creativity/freedom/ambiguity. Both are human needs so always need to balance them in your aims.

IF change is desired, another way to think about the desired change is whether the aim is equality, equity, or liberation. Equality means everyone gets the same thing, equity means everybody gets what they need in order to succeed, and liberation means completely re-defining “success.”

Still another way to think about aims is whether the primary service of education should be to:

- Society (which could be for “citizenship” or the “economy” or both);
- Knowledge (generation of new knowledge that benefits everyone – but the definition of “knowledge” is dependent upon an earlier more basic decision regarding reproducing or resisting the status quo);
- The Individual (which could be “get a job” or “self-actualization/spiritual well-being”).

Clearly service to one of these three can be seen as being in service to others. Everything, in a democratic society and public education, is always a continual balancing act. Still it is essential to have some shared idea to focus the continual balancing and trying out and changing. If not, the default

mode will tend to “the rich getting richer” – and, as I said in my introduction yesterday, at least for me, public education is about each and every one of our children, not those who, by accident of birth have privileges to which others cannot even aspire.

Improving Schools Is Human Development

Education is a human endeavor. Human beings are not machines or inanimate objects. They are living learning organisms. All education (whether the growth and development of the individual child or a system of public education) is a matter of human growth and development. Thus, if one wants to “improve schools” one must establish conditions that support the growth and development of human beings.

It is important to make a distinction between establishing conditions that support the growth and development of human beings and telling people how to change. As any parent can attest, an essential universal basic law of the universe is that one cannot tell people what to do. Ultimately it is always their choice to do what you tell them or not. You might make the choice “obvious” but it is still somebody else making that choice. But what about ... I’ll shoot you if you don’t do what I say. The history of the world is full of examples of people who were willing to choose the risk of being shot (many of whom were shot, and many of whom were not) rather than betraying another human, or their values, or their dignity, etc.). Less extreme, my mother gave me the choice of sitting for hours at the table and being berated if I didn’t eat my vegetables or getting to leave the table to join the human race. So I “chose” to eat the vegetables. But to this day I have a large degree of animosity to vegetables (including not eating very many of them even though I know I should).

Telling people what to do and then punishing them for not doing so, rarely achieves one’s goal in the short term, and nearly always results in failing to meet one’s goal in the long term. Frankly, while rewarding people for doing what you want them to do has a higher success rate in the short term, it is also nearly always insufficient in the long term. It is the distinction between extrinsic (a compliance, reward and punish, model) and intrinsic (an assess and support model) motivation. A solely reward and punish compliance model results in anger, depression, guilt, shame, and violence. Not, as far as I know, anyone’s aims for education. The impetus for beginning and sustaining change can only reside in the individual doing the changing.

A second element of human development is that it occurs in multiple domains. People are more than just one “thing.” We all develop cognitively

(and that involves more than just disciplinary subject matter traditionally taught in schools), emotionally, socially, aesthetically, physically, morally, spiritually, and in other areas. “Changing” people requires addressing all the domains of being human. One cannot change “people” and thus cannot change “schools” without incorporating all the wondrous domains of being human.

It is very important to understand how one wishes to determine success. Why bring assessment up here? It could (and it will) be brought in all of the themes. The answer is because what gets measured, especially when there are stakes attached to the measurement, is what gets emphasized. And, that means, inevitably and always, what gets measured becomes the “focus” of the endeavor and, inevitably and always, makes that particular measure not only inaccurate but harmful. It limits our sense of the capacity of humans, constrains our sense of what is possible, and hinders any system that truly desires to educate. That does not mean “don’t assess” but rather to understand what happens when one does. Be humble, know that numbers don’t tell you what to do. The bumper sticker is use multiple sources of evidence, collected over time, and in multiple contexts.

Development is a process, and the measurement of a process, because it is always moving is quite difficult.

- Lucy Sprague Mitchell, “It is the wiggle that is most interesting.”
- Deming: “The most important things cannot be measured. The most important things are unknown or unknowable.”
- Hargadon: “Because we cannot measure the things that have the most meaning, we give the most meaning to the things we can measure.”
- Cameron (often attributed to Einstein): “Not everything that can be counted counts, and not everything that counts can be counted.”

At the end of the day, every human life is a miracle. Each person really is magic. So, I would argue, yes get a little more specific, but never lose the miracle of each and every one of us. Measurement is an imprecise science. All measurement has error. So, it is extraordinarily important to never limit the magic of the human to the illusory certainty of an absolute number – any number assessing any single attribute (no matter how valuable the attribute) of a human being. Define a skill or a trait and humans will vary in their measurement on that skill or trait. Some will be taller. Some will be shorter. Some will be better at arithmetic and some will be worse. Some will read sooner and some will read later. Some will have more money and some will have less. This is the wondrous diverse humanity that we are all gifted with at birth.

Context Matters and Schools Reside in Embedded Contexts

Human beings reside within contexts/environments. Those contexts matter. They create the conditions for human growth and development and thus for school improvement. Classrooms and schools are embedded in multiple nested contexts making them even more complex and complicated. There is a set of contexts in which classrooms are embedded in the United States. I am certain this would be different in Nepal, but also quite certain it would be equally (if not more) complex and complicated. This is the nature of public education in a democracy, and like democracy itself, as difficult as it makes it, it is the way it “should be” because nothing else works. So, the question is, what are the roles and responsibilities of the different levels of the educational ecosystem? What is the relative value and contributions of the inside out or bottom up approach to change versus the outside in or top down approach to change? I prefer the inside out/outside in language for two reasons. First, it does not have the hierarchical connotations that often constrains generative relationships because of attitudes about “authority.” Secondly, “top” and “bottom” are relative terms. Depending upon where one sits in the ecosystem, most every position (with the possible exception of the students!) is a top of someone and on the bottom of someone else.

What happens “outside” the actual physical location where the work takes place influences what happens inside that location. If, for instance, someone turns up the heat in a building, then the people inside the individual rooms in that building start to warm and begin shedding layers of clothing. Or, if a state (which is the outside to the inside of the classroom and the school where the work has to take place) changes graduation requirements, then teachers teach different content and students learn different content, or at least have opportunities for learning different content. And they demonstrate their learning differently.

Thus, there are definitely roles and contributions for both inside out and outside in. Ultimately, however, it is not possible to scale quality solely from the outside in. In the realm of education, a purely “trickle down” theory of change is illusory thinking. This is because the outside cannot do the work. Presidents do not fight the wars. Executives do not make the sales. Legislators, district superintendents, researchers, and foundations do not educate our children. Even further, only children do the actual learning of desired knowledge, skills, and disposition so what goes on inside the heads of the students on the inside of classrooms that are inside of schools is where the ultimate work (and value) of education happens. In addition, the needed expertise to scale quality exists on the inside, not the outside. It is exemplary

teachers who know how to teach, exemplary school and district leaders who know how to lead. If I have a research question (e.g. how to ask a question that can be addressed empirically and what kinds of data would help me address that question) I would go to a researcher. But, if I have a “how to teach” question, I would go to a teacher! We are not denigrating anybody here. Educators, researchers, policy makers, community organizers, the business community—we all have value and important roles to play if we are to more closely approximate our goals for our children and if children are to possess the power to pursue a future of their own choosing.

The function and the contribution from the outside-in is to help create the conditions that make it so that people on the inside can succeed because of, not in spite of, the outside. This means a core task (and largest budgetary expense) of “outside” in school improvement efforts is to locate and use the expertise that resides “inside” the system both to inform the outside and to expand the reach (scale up) the benefits.

Returning briefly to the assessment issue, each level of the ecosystem needs different kinds of data in order to assess and support and improve its roles and contributions.

Different levels of the system need different kinds of data in order to meet their responsibilities to assess, support, and improve their contributions to the growth and development of children. The data useful to the best of teachers is always “N of 1” data. In the moment, nuanced, idiosyncratic, rich data about each individual child in his or her classroom. Aggregated data provided long after the data is collected is of no use to the teacher in the day to day-ness of teaching and learning. Conversely, people outside the classroom cannot know everything about every student. In fact, that kind of information, aside from being too voluminous to even peruse, is of no use to them for their role. They need aggregated data at the program level in order to make fiscal and policy decisions. As a Dean, I needed aggregated information about all of my students, sliced in different ways, in order to support sound programmatic and institutional decisions. That is much different than the individual information that each teacher needs to support the education of the individuals in their care. Unfortunately, folks at all levels of the educational ecosystem, tend to think the data they need is the data everybody needs.

The important thing to remember is to not force data that is useful for one level onto another level. This requires an understanding and respect (because one cannot respect if one does not understand) of the strengths, in-

terests, needs and contributions of the different levels. This is equally true for teachers to respect the needs and contributions of the “government” and other actors “outside” the crucible of the classroom, as it is for the “government” and other “outside” actors to respect the needs and contributions of each individual teacher ... and more importantly, for everyone to respect and appreciate the strengths, interests, and needs of each of the miracles who enter our classrooms each day.

You Can't Do It Alone

The African proverb says it succinctly: It takes a village to raise a child. In terms of educators, it means that in order to have we want, we have to share what we want. This is what I call “love.” A love that the miracle of each and every one of us requires to grow and develop and become the human beings we are meant, and have the capacity to become. And what Rosenberg calls “natural giving:” When you take from me, I feel so given to. It is the enactment of an assess and support approach and the antithesis of the Who’s right/Compliance approach.

Out of this foundation of love comes:

- Faith in the capacity of the other to grow and develop;
- Belief in our own capacity to become the human we can become and to help others to do so;
- Vulnerability, the capacity to allow ourselves to be open to being wounded, to not know what is going to happen, to know that there will be failure, that it will hurt, yet still act in accordance with the better angels of our nature;
- Empathy to understand, accept, and use the strengths, interests, and needs of our fellow human beings, our allies (inside and outside the school), to create the conditions to provide with each and every one of our children (and they all “our” children) the education (the love) they deserve and that the well-being of our communities, our nation, indeed, our world, requires.

These fruits of love are required for school improvement. Without them the system, and the individuals within the system, will remain trapped in the technical (level one changes) and never move into the adaptive human (level two) changes. Educational change, human growth and development, comes from the well spring of the wonder, ache, and awe of the wholeness of the hearts, minds, and souls, and bodies of each of us. Each of us individually, all of us as a collective.

As abstract, and perhaps “spiritual” rather than “educational” as that may sound, there are ways to establish the conditions that make it more likely for schools to nourish those potentialities of human existence. Below is an example of an approach to “accountability” – which really means the shared responsibility to create the conditions that support the growth and development of each and every one of our children – that hopefully will help people see what the lofty ideas mean in terms of what I and we can do differently this afternoon.

This model for sharing the responsibility for improvement represents a mutually interdependent constellation of policies and practices emanating from a consistent view of teaching/learning and a support and assess (professional), approach to human development. Briefly, the view of teaching and learning is one that recognizes the wondrous but extraordinarily complex interactions within and between a teacher and the growth and development of students. Quality instruction grows out of knowledge and skills about learners, about the content to be taught and about teaching practices. More importantly, and more difficult, quality instruction requires the integration of knowledge and skills in these domains in the crucible of our classrooms: classrooms where each child is different in unique ways. Technocratic, one size fits all, approaches that fail to account for the diversity that enters each and every classroom daily condemn our children to failure. As any parent of more than one child can attest, the parenting behaviors that resulted in particular behaviors with the first child do not result in the same behaviors with the second child. If that is the case with children from the same gene pool and the same family environment, imagine the situation with 30 children in a classroom or all the children in Nepal. If students are to learn well, and continue to learn throughout their lives, their teachers must know them well; know the knowledge, skills, and dispositions they wish their students to learn; and know where and how to provide experiences for their students to meet them where they are, to support their growth through their personal pathway to achieving our societal goals and their individual dreams.

This model contains two orientations: Professional and Improvement. Improvement and Responsibility (often referred to as accountability) are not in tension with each other but rather are symbiotic. Being a professional means living up to four commitments:

- A primary and inviolable commitment to the client (the children and families in the care of educators);
- A commitment to use the best of existing knowledge and practice in service of the client;

- A commitment to continually revising practice and creating new and better knowledge in service of the client; and,
- A commitment to the profession and the next generation of professionals.

An improvement-oriented model does much more than set goals, evaluate whether those goals have been met, and then mete out punishments and/or rewards. "Accountability is achieved only if ... policies and practices work both to provide an environment that is conducive to learner-centered practice and to identify and correct problems as they occur" (DarlingHammond & Snyder, 1992, p. 27). An accountability system that is not oriented towards, nor support, improvement can be called many things, but successful is not one of them.

Improvement requires a model of responsibility that includes six essential mutually interdependent elements.

- **Goals/Policies.** These could consist of the same goals that currently exist. It is likely, however, that the goals for our children, the goals for the adults who are charged with supporting their growth and development, and the policies established to enact them, will evolve as the world evolves, and as more people become knowledgeable about, and involved in, the democratic governance of public education.
- **Structures.** Structures are the methods of organization set up by an entity to meet its goals. For instance, a goal could be to improve the learning outcomes of children with identified disabilities. One structure to meet that goal would be the creation of an individual education plan and a conference with all the relevant stakeholders to approve that plan. Or a goal could be teacher collaboration. One structure to meet that goal would be weekly faculty meetings. A "structure" by itself, as quite notable in the examples provided, is necessary but not sufficient to really understand how an organization is going about meeting its goals.
- **Processes.** Processes are approaches used within structures to engage individuals within an organization to enact their commitments in practice. How, for instance, are Individualized Education Plan meetings organized so that all participants are heard, respected, and the best possible solution agreed upon? How are faculty meetings "run" so that they become opportunities for educators to learn with and from each other? While often given slight shift in policies, processes are as important as structures. In combination, structures and processes document and make public how and why an individual or an institution is currently going about meeting the desired outcomes. Once practices become public, they become shareable, and thus improved.

- **Feedback and Assessment.** Feedback and assessment mechanisms are the ways in which an organization goes about collecting information to help them understand how well it is progressing towards meeting its goals. In order for feedback and assessment mechanisms to meet their responsibility for improvement functions requires a system of assessments that includes multiple sources of timely information collected in multiple contexts over time, provided in formats that are understandable and usable by the multiple stakeholders of public education.
- **Safeguards.** Safeguards are protections put in place so that if assessments show, for instance, that an individual or group of students, is not advancing towards meeting our shared goals for them, that those students receive the supports necessary for success. (Embedded here is an “equity” focus for education.) A primary function of safeguards is to prevent students (or other categories of players in the educational enterprise for whom we have goals) from falling through the cracks.
- **Incentives.** Incentives motivate and sustain ongoing inquiry and change, encouraging all members of an ecosystem to focus continually on the strengths, interests, and needs of the students and on the use and further development of quality practice.

The six elements, working together, constitute an assess and support approach for improvement. An organization demonstrates an improvement orientation when it sets goals, establishes structures and processes to meet those goals, and designs assessments, safeguards, and incentives to ensure that the organization achieves closer approximations of its agreed upon goals and ongoing inquiry leading to improvement occurs. Enacting this model for improvement is an iterative process that requires continuous evaluation of how the organization more closely approximates its established goals, is open to new and more inclusive, less easily assessable goals, and ensures that those who work in the system have the capacity and the conditions to do what they are capable of doing and what needs to be done.

Conclusion

If I were to be asked what the one “take-away” I would like for you to leave with today, it would be for each of you to take a moment and look at the people sitting around you. Then say to yourself, with meaning, “I am so grateful to be surrounded by miracles.”

Nutrition and Health for Children

Dr. Aruna Uprety

August 26, Day 3

When I was in grade seven or eight, I wrote an essay about education, “Raja ko man huncha rajya ma, Bhidhwan ko man huncha sansar ma...” (the king’s mind is on the kingdom, the intellectual’s mind is on the world). My teacher made me read the essay aloud on stage in front of the whole school. This simple act by a teacher raised my confidence and I felt like I wanted to do something in my life that would bring me recognition and pride. Therefore, I am humbled to be here among so many teachers today. Teachers can make so much of a difference in people’s lives!

Money well invested on children returns 10 folds. It is an extremely valuable investment. Investment in nutrition is closely linked to children’s futures. Recently, The Guardian wrote an article about Nepal: Nepali kids are stunted and malnourished due to junk food. “Babies in Nepal get quarter of calories from junk food, study finds”, the title read. But nutritionists in Nepal have been saying this for years. We are giving our kids ultra processed foods, and keeping them from their health. We think that eating a little junk food is fine, and then we lose track of how much junk we are feeding them. In terms of nutrition, Nepal’s condition has not improved much from 2011 to 2016. Our babies still have low birth weight, which causes a lot of health problems in the long run, including kidney failure. So much of this is related to politics. Packaged food products are high in sugar, salt and fat, and low in micronutrients. Research says that excessive salt, sugar, and fat is really bad for us. Lack of nutrients and micronutrients causes problems such as anaemia, bone problems, hormone issues, and even depression. However, corporations and sometimes even the government promotes these kinds of foods because of powerful lobby groups and business houses.

The government has given subsidies for nutrition distribution like iron, especially for kids and women, but we don’t pay attention to what we eat. Pregnant women are prescribed Calcium and Vitamin D. What we forget is that Kaalo Daal (black lentils), cooked in an iron utensil, is the best source of iron, and that dairy and sunshine are natural sources of Vitamin D and Calcium.

Nutrition is a process; a child’s growing brain needs love as much as food, and many of our cultural foods meet our nutritional needs. Customs like dahi chiura for pregnant women, oil massages for babies, and a feeding ceremony that marks babies’ transition to solid food are all healthy traditional

practices regarding nutrition. Many foods that are associated with festivals, such as kwati (mixed-bean soup) in the monsoon season, yams and sweet potatoes during the winter, and karkalo (taro leaves) are excellent sources of nutrients. Traditional foods like flax seed, sesame, lemon, vinegar, yogurt, buttermilk, gundruk are excellent sources of probiotics and prebiotics.

Things like Bournvita and Horlicks are hogwash. We can get the nutrition that they claim to have through sprouts and by eating a diet full of different kinds of grains. And eating well is not expensive. Every school should have mid-day meals and gardening programs, which only cost Rs 17 per student. Fifteen rupees can come from the federal government, Rs. 1 can come from the local government, and only Rs. 1 has to come from parents and families. Currently, there are nutrition rehabilitation centers, which nurse malnourished children back to health while also educating mothers about nutrition. It is a good practice for raising community awareness about nutrition.

So, what can we do as teachers, individuals, and parents? Learning about food and culture is learning about life and health. We need to understand our cultural practices surrounding food, and teach children about healthy food, nutrition, and the economics of food. We also need to take concrete steps to avoid junk food in schools and offices. One way to do this effectively is to prepare food together with children, and eat with them. We need to focus on eating food, not medicine.

Dr. Uprety also brought a guest speaker, Sharada Jnawali, co-author of *Nepali Home Cooking for Healthy Living*, a book on ayurvedic foods, with a focus on traditional preparations of vegetarian whole foods.

Photographs

- ➔ Welcoming the Chief Guest
 - ➔ Participants Registration
 - ➔ Inaguration Ceremony
 - ➔ Keynote addresses
 - ➔ Dance Performance
-



1. Dr. Shanta Dixit and Ms. Milan Dixit welcoming the Chief Guest Hon. Minister of Education, Science and Technology Mr. Giriraj Mani Pokharel **2.** Lighting of the Lamp by the Chief Guest **3.** Participants registering during the Conference **4.** Participants glancing at the Conference Schedule **5.** Attendees at Inauguration Ceremony



6-10. Inaugural address by Keynote Speaker Chief Guest Mr. Giriraj Mani Pokharel, Former Secretary of Ministry of Education, Science and Technology Mr. Khaga Raj Baral, Dr. John David Synder, Ambassador to the European Delegation Ms. Veronica Cody and Chair of Rato Bangala Foundation Dr. Shanta Dixit **11-12.** Rato Bangala School's students performing 'aai giri nandini' dance **13.** Rato Bangala School's students playing National Anthem



Workshops

Learner Centered Early Childhood Education

Defining “Learning Centered”

Ms. Judith Gold, Assisted by: Ms. Sarita R.

August 24, Day 1

What exactly does Learning Centered mean? What is meant by a learner-centered classroom? In this interactive workshop, participants thought through what is meant by learner-centered classrooms. They explored photographs of classrooms to help them identify the defining characteristics of learning centered environments and decide when students are involved in ‘learning by doing’. Participants were shown a video that exemplifies the child’s ownership over the learning process and asked to observe the role of the teacher. In the end, the facilitator provided guidance to teachers and school leaders on how to create a learning centered environment.

Why Are Materials the Textbooks of Early Childhood Classrooms?

Ms. Judith Gold, Assisted by: Sanchita, Shanta N.

August 25, Day 2

Materials are often referred to as the textbooks of Early Childhood classrooms. This hands-on workshop gave participants the opportunity to work with the materials found in early childhood classrooms. Through hands-on explorations, participants examined the following: why these materials were

chosen, what challenges these materials present, and the different learning opportunities that the range of materials offers children.

Musicking in the Early Childhood Classroom

Ms. Lavina Chong Wei Li, Assisted by: Rochana, Amar, Manju G.

August 25, Day 2

Are we all musical? Do we possess musical intelligence in us? This workshop helped participants integrate vocal play with body percussion and movement, find creative ways to work with props in the early childhood classroom, and understand the elements of music like form and tempo. It provided a platform for educators to share ideas and strategies on how to develop children's musicality in Early Childhood classrooms.

Through creative engagement in music making and expressive movement, participants entered a journey of rhythmic discovery. The workshop involved activities such as vocal exploration, musical conversations, movement, prop play, etc.

Learning through Centres: A Learner-centered Approach

Ms. Shanta Nepal and Ms. Shweta Khanal

August 25, Day 2

Preschool children are active learners who have agency to guide their own learning. In this workshop, participants got clear ideas on designing activities for children that keep the learners at the centre of the learning process and actively engage them in their own learning. The learner centered approach believes that students must construct their own meaning and knowledge from their current and past experiences.

The workshop started with circle time, consisting of an introduction, meeting time with morning message, and read aloud, after which the participants worked in different learning centers. Following the activities, there was a group discussion on how kids would have felt about the activities that the participants engaged in, and a presentation about the Rato Bangala Early Childhood Center.

Benefits Of Child Led Play Based Learning

Ms. Rianne Wiggers and Ms. Rojina Pathak, Assisted by: Sweta K.

August 25, Day 2

Children love to play. Through play, children develop confidence and compassion, explore creativity, face challenge and risk, all while developing a

sense of community. Child-led play can be used to develop the seven areas of learning (communication and language, literacy, physical development, personal, social and emotional development, mathematics, understanding the world, and expressive arts and design) and to creating a love of learning in the early years.

Participants in this workshop were invited to freely explore the materials kept in the classroom by facilitators, a combination of no-cost natural materials and other materials. They were then given a presentation on the seven areas and asked to look for opportunities for learning in the materials that they found in the classroom. They then brainstormed how to use these materials and activities to achieve the goals of the Nepali curriculum.

Using Blocks in the Classroom (Learner Centered Early Childhood Education)

Ms. Sadikshya Bajracharya and Mr. Midesh Maharjan

August 26, Day 3

Blocks help children learn various methods of creating structures, figure out how to manipulate objects and get used to working together. In this workshop, participants were given first-hand experience in working with blocks, giving them the opportunity to understand what children learn from blocks and why it is important in early childhood.

Participants were allowed to play with blocks individually, in pairs, and in groups. At the end of the workshop, they were asked to reflect on their feelings about building in different situations, and given some reading materials about the importance of Block Play.

Learning by Doing

Geoboard to Teach Math

Ms. Anshu Hyoju and Ms. Rati Maharjan

August 24, Day 1

A geoboard is a mathematical tool that is used in the exploration of two dimensional geometry. Children are able to learn various mathematical concepts by engaging in hands-on activities using geoboards. When they use geoboard, they can see, test, prove their point, create their own definition of these concepts, and hence develop an in-depth understanding.

In this workshop, participants explored how to use a geoboard to teach the concepts of shape, area, fractions, etc. in Math classes. Facilitators organized a combination of engaging individual, small group, and large group activities and discussions in which the participants explored learning through the geoboard.

Understanding Trigonometry through Games and Puzzles

Mr. Binaya Raj Shrestha and Mr. Kishor Bista

August 24, Day 1

Trigonometry is often thought of as difficult and based on formulae that “just are”. In this workshop, participants were introduced to some games and puzzles that can be used to teach trigonometry, such as the Magical Hexagon, Jigsaw puzzles, and clinometers. Participants also made simple clinometers during the workshop, which they could use in their classrooms and which they could teach their students to make themselves.

Introductory Session Of Hands-On Learning To Foster Critical Thinking

Mr. Sonam Tamang and Mr. Rupesh Bhattarai

August 24, Day 1

In this session, participants were able to experience a Karkhana class and its elements (think, make, play, innovate). Facilitators led discussions on hands-on learning and its applications in the classrooms. The participants exchanged ideas and shared their views with each other throughout the session.

Participants underwent a design thinking process during this session that they could take back and implement in their classes by using commonly-available resources. By the end of the session, teachers had ideas on how to guide their students to develop project ideas for a few STEAM experiments and projects.

Collaboration to Promote Learning

Ms. Vani Rana

August 24, Day 1

Lev Vygotsky stated that we learn best through interactions with our peers and teachers. The Social Learning Theory also explains that creating an active learning community can positively impact a learner’s ability and help meet individual learner goals. Collaboration is a key learning skill for the 21st century; the capacity to collaborate with others is essential, given that the

most pressing problems that face the world today are multi-faceted and require people to work together for solutions.

However, “real” collaboration is hard to do well and will not happen on its own. In this workshop, participants discussed collaboration through a word web activity, talked about skills that students need to collaborate with each other, used rubrics from the internet to talk about how to assess collaboration, and talked about teaching strategies and protocols that aid collaborative learning.

Multi Grade Multi Level

Mr. Kedar Tamang and Mr. Chandra Shrestha

August 24, Day 1

This workshop gave participants an introduction to multi grade multi level classroom techniques, including those in reading and math. Multi grade multi level methodology is an innovative methodology for primary education. It allows teachers to work with students across grade levels who are all trying to learn the same skills, and help students make progress at their own pace. It is helpful for teachers who have to teach students coming from a wide range of ability-levels/ with a wide range of proficiencies.

The workshop began with a presentation about MGML methodology followed by a simulation activity and feedback session on the simulation activity.

Reading with Your Children

Ms. Kalpana Parajuli

August 24, Day 1

This workshop focused on read alouds, including what they are, why they are important, and how to conduct Read Alouds in the early years classrooms. After a short presentation by the facilitators, participants experienced demonstrations of reading aloud. They also had the opportunity to practice reading aloud with each other, and to improve their reading aloud with feedback from each other as well as the facilitator.

The Pleasures of Chhanda (Chhanda ko Ananda)

Mr. Tikaram Sharma

August 24, Day 1

Chhandas are rhythms and tunes that are employed in many poetic traditions of the Indian Subcontinent. Chhandas make poetry-reading enjoyable

for students, make poetry more accessible to the masses, and are an important part of the literary traditions of the Nepali language.

In this lively workshop, participants were taught to read Nepali poetry in chhanda. After a discussion about chhanda, participants were taught to recite poems written in different chhandas. They practiced individually and in groups. The participants were also given some time to write a verse (or more) in the Anustup chhanda, which is also known as the first of the chhandas, and to share it with the group.

Children as Music Makers

Ms. Sonya Phillip, Assisted by: Shanta N., Sweta K.

August 24, Day 1

Music has several benefits linked to classroom learning and cognition. Recent studies have shown the impact of music lessons on inhibition control, planning and verbal intelligence.

This workshop went beyond singing traditional and well known songs at music time, and instead focused on actively engaging children to create songs in the classroom. Participants learned several concepts in a joyful way through music, and had some practice on how to create songs with children to teach similar concepts to them.

Overcoming Math Trauma For Students

Mr. Midesh Maharjan, Assisted by: Shilpa R.

August 24, Day 1

This workshop focused on demystifying math by providing information on why our students are failing at the subject, provided specific strategies for reducing fear of math, and taught strategies for making math relevant to students while still being able to meet the curriculum requirements, informed by international best practice on mathematical literacy.

Participants did a role play on a typical math class in Nepal, discussed how students must feel in those classes. Then they broke down different topics in groups to prepare plans for lessons in which learners performed a more active role than just listening. Then they shared strategies for teaching common math topics using games. They also wrote math stories and word problems to make mathematics relevant to students' lives.

Being Scientists

Mr. Basanta Yadav, Assisted by: Sabita M.

August 24, Day 1

This workshop focused on exposing teachers to how children should work so that they can assume the role of a scientist and apply scientific skills to learn through inquiry. Facilitators gave participants scientific problems and asked them to solve them and share their reasoning for how they solved the problems. Participants also discussed different scientific skills that can be used in inquiry-based science classrooms, and how using these skills in the classroom can help children understand concepts better.

Setting up Literacy Centers in the Classroom

Ms. Kiran Khadka and Ms. Milan Sharma

August 24, Day 1

Literacy centers in classrooms facilitate the learning of language skills. This workshop focused on generated ideas about organizing several literacy centers and helping children in Guided Reading.

In groups, participants brainstormed ideas for different literacy centers. Facilitators demonstrated literacy center sessions, with a demonstration on how to rotate groups of children within the literacy centers. Participants also brainstormed suitable activities for each center, and discussed how they were planning to create these centers in their classrooms and conduct similar sessions with their students. In the process, participants also learned about two different ways to make groups– heterogeneous and homogeneous groups.

Critical and Creative Thinking Skills in Nepali Classrooms

Ms. Anne Brown, Assisted by: Anshu A.

August 24, Day 1

This workshop engaged participants in some of the pedagogical approaches that have enabled teachers in four different regions of Nepal to use Creative and Critical Thinking Skills, as well as P4C (Philosophy for Children) approaches with grade 1-8 students.

Facilitators gave insight into some practical classroom activities that hone in on students' Thinking Skills. Through hands-on activities, group sharing, connecting concepts, and question formation, this workshop helped participants to develop an understanding of how to encourage creative and

critical thinking among children. There was a substantial amount of discussion and reflection in this session.

Storytelling

Ms. Chanda Tamang and Ms. Rajshri Nirala

August 24, Day 1

Kids love stories. Story-telling helps to teach listening as well as socio-emotional skills, makes children more empathetic, and exposes them to new vocabulary. It also develops imagination, helps children stay engaged, and increases enthusiasm for reading.

In this workshop, participants learned about how to develop and refine one's story-telling skills and present before an audience. Participants did different exercises in storytelling, role-playing, voice modulation, facial expression and motion. Then they learned a story, used a story mountain to lay out the main events of the story, and used their notes to tell the stories with expression, voice modulation and motions.

Using Centers as an Effective Classroom Tool

Ms. Rati Maharjan and Ms. Bandana Upreti

August 24, Day 1

This session focused on the importance of learning centers in classrooms, as well as possible designs and strategies for using centers in the ECD classroom.

Participants got a feel for child-centered Early Childhood Education through activities such as the center activity and by rotating through and experiencing the five centers that the facilitators had created: Reading corner (LA), Collage corner (Art), Teachers center (Math), Bump Game (Math), and Dramatic play. Facilitators also used additional classroom techniques, such as a message from the teacher (at the beginning of the session) and ground rules to give participants the real feel of being in an ECD classroom.

Developing an Integrated Curriculum

Ms. Sheelu Karmacharya

August 24, Day 1

This workshop focused on using a theme or topic to design an effective integrated curriculum to further children's understanding about the world around them and improve student achievement.

After watching a presentation on designing an integrated/ interdisciplinary curriculum, participants were divided into 5 groups. In their groups, participants moved through 5 tables (each of which was assigned a subject: Science, Math, Language Arts, Social Studies and Art) doing activities related to the theme (Zoo study). The discussion and reflection session that followed examined the process of integrated learning.

Using Mentor Text to Teach Writing

Ms. Kiran Rana and Ms. Rochana Ghimire

August 24, Day 1

Often, children (and adults) want to write, but don't have a clear sense of what writing styles to use. This can cause them to feel scared of the writing process, and discouraged to try out new styles. This workshop's focus was on how emulating a mentor text can be a good way to introduce writing styles in Writer's Workshops.

Participants were given a book to read and discussed the writing styles employed in the book. Then they were asked to write using the same styles. In the following discussion, participants talked about what styles from the book they employed in their own writing, and how a mentor text is useful during writer's workshop.

Doing Science

Mr. Basanta Yadav, Assisted by: Tara N.

August 25, Day 2

This workshop focused on various innovative methods of doing science with students. Many teachers focus on teaching science, even in the elementary grades, whereas children prefer to "DO" science than just learn from teachers or texts.

Each group of participants was given a question card and asked to discuss what classroom activities can be used to find out the answer to the question on the card. Then they were provided with the necessary materials and asked to do the activity they had described. The participants later re-grouped based on the classes they teach, and discussed what conditions they could use certain methods in their classes.

Using Literature In Teaching Math Themes

Ms. Shilpa Rimal and Ms. Mamata Rana

August 25, Day 2

In this workshop, participants learned how to use stories to make Mathematical concepts more relatable, personal and realistic. Facilitators and participants read the book “Anju le garchhin” and “Ek Dana Makai” and discussed how a child could relate to the books and how they could use it to understand different concepts.

Then they worked in groups to create stories that could help them to facilitate a Mathematics lesson, and shared the stories that they wrote. Facilitators talked about how word problems are also a kind of story-telling, and discussed how teachers can personify word problems (by using the names of their students, for example, or a context from the classroom) to make them more fun.

Skills on Note Taking

Ms. Margaret Singh

August 25, Day 2

The word research sounds big and is often scary to both teachers and students. Note-taking is a simple skill that can be important in helping both students and teachers do research.

Participants learned how to use what they know about a certain topic (in this case, Indra Jatra) to locate keywords that they can use to find more information. They were also given a few sources and asked to note down key information from those sources. Participants worked in groups to prepare the introduction and body of their research with note-taking as a key skill.

Engaging Students by Embracing Questions Rather than Answers

Mr. Umes Shrestha

August 25, Day 2

In a traditional teacher centered class, teachers usually deliver content and answer to the students easily. However, instead of simply delivering content, teachers should help students in the path of exploration and discovery. One way a teacher can enable and empower students is by allowing them to ask questions and then helping them and the answers to their own questions.

However, in many Nepali classrooms, students do not ask questions. This workshop helped participants gain ideas on using the Question Formulation Technique. Participants formulated their own questions and gave each other feedback so they could eventually encourage students to ask critical questions and lead them on a path to lifelong learning and empowerment.

Characterization in Story

Ms Bandana Aryal and Sadikchhya Bajracharya

August 25, Day 2

In this workshop, participants learned about the importance of character development for story writing. Facilitators and participants first read a children's story book together, and selected a character from that book to analyse. They then went on to create their own characters, with different characteristics, and wrote short stories centered around those characters. Participants learned how characters are important elements of fiction books, and gained experience on how to help students think about characters in Language Arts classrooms, and how to develop strong characters during writing exercises and workshops.

Use Of Geogebra For Teaching And Learning Geometry Circle

Mr. Niroj Dahal and Mr. Raju Thapa

August 25, Day 2

This workshop focused on teaching participants how to use GeoGebra for teaching and learning geometry circles. Participants were able to experience visualizing the various relationships of the circle that is part of the grade nine and ten curriculum developed by the Curriculum Development Center.

Participants were able to conceptualize and visualize the various relations of the circle using the software GeoGebra. They also learned skills that they could use to integrate the GeoGebra in teaching and learning of geometry circle, along with other resources.

Technology Moderated Design Thinking Theme

Ms. Nilima Manandhar

August 25, Day 2

Solving problems gives children creative confidence, and helps them change how they think about themselves and their ability to have an impact in the world. Design thinking draws on various methods from across the

field of design to create learning experiences that unlock students' creative potential.

This workshop focused on describing problems and potential solutions visually and using design thinking methods along with technology to develop, apply, test and improve innovative and creative solutions. In groups, students identified a real world problem to solve, worked on understanding the problem, ideated to design a prototype, and performed a set of experiments to see the weaknesses and strengths of the proposed solution.

Movement to Enliven the English Language Curriculum

Ms. Samara Gupta, Assisted by: Pragya

August 25, Day 2

Research says that pairing hands-on movement with learning helps to dramatically increase comprehension and retention. This active and engaging workshop for primary school teachers. During this workshop, participants used creative movement and kinesthetic activities to create constructive learning experiences for their students. Participants experienced ways to teach grammar concepts, comprehension, vocabulary, and punctuation through movement while developing students' critical thinking, collaboration, creativity and communication skills. This workshop was built upon the work of Susan Griss, a pioneering innovator and author in the field of arts in education.

Comprehension Through Reciprocal Teaching

Ms. Amardeep Kaur Bista

August 25, Day 2

Reciprocal teaching is a technique where students are actively involved in collaborating with each other and teaching their peers what they understand about a certain topic. This session focused on teaching comprehension through reciprocal teaching by coordinating the use of four comprehension strategies: Predicting, Clarifying, Questioning, and Summarizing. Participants were encouraged to think about their own thought processes while reading the text.

In small groups, participants played the roles of Questioner, Summarizer, Predictor, Clarifier, and Graphic Organizer and worked through some comprehension exercises with guidance from the facilitators. They took turns to change their roles so they could experience each of the five roles. The session ended with participants sharing their experience with the activity, as well as strategies to use this activity effectively in the classroom.

Thinking With Our Hands

Ms. Rachel Manandhar, Assisted by: Niva

August 25, Day 2

This workshop focused on exploring the theory of multiple intelligences to highlight the diversity of learners in our classrooms and modeling hands-on lessons to maximize access and learning for all students. Participants and facilitators discussed current practices, as well as strategies to increase participation, engagement, and overall achievement for students of all ages and abilities.

Facilitators also organized some hands-on class simulations for Language Arts, Math, Science and History classes. The workshop ended with a debriefing session on how these strategies can be used in the participants' classrooms.

Metacognition and Comprehension Strategies

Ms. Richa Singh, Assisted by: Bandana U.

August 25, Day 2

This workshop focused on strategies that help develop the habit of making connections while reading and to navigate their own understanding through metacognition (thinking about one's thinking).

Participants related the text they read to their own experiences, similar texts, events and to the world as a whole. They also learned how they can help students develop this skill by modeling and providing concrete experiences to help students understand and apply the strategy to fiction or nonfiction texts. Participants first read a poem without its title, and then re-read it with the title. Then they discussed what difference there was between how they felt about the poem when they had complete information about it, versus when they didn't, to demonstrate how metacognition may be important in reading comprehension. They also discussed strategies to deal with reading comprehension difficulties, such as rereading, slowing down a little, reading aloud, or continuing reading.

Setting Up STEAM Challenges In The Classroom

Ms. Sabita Manandhar and Ms. Tara Nepal

August 25, Day 2

STEAM projects are usually a combination of two or more of Science, Technology, Engineering, Art, and Math. They are useful in the initial exploration

of ideas, enhancing creativity/ imagination, building problem solving skills, designing, connecting, using the trial and error method, etc. They are also a lot of fun.

In groups, participants built either a balloon powered car or the tallest possible paper tower using only the materials they were given. Participants were asked to predict how far their car could travel or how tall their paper tower would be. Then they demonstrated their products, compared to the other groups', and discussed why different groups got different results, using scientific, mathematical, and engineering concepts to better understand the challenges at hand.

Concrete and Pictorial Approaches for Fraction Concepts

Mr. Indu Kumar Lama

August 25, Day 2

This workshop focused on using concrete materials to conceptualize fraction concept. Facilitators used paper cut-outs as well as real-life objects to demonstrate different concepts, such as proper and improper fractions as well as equivalent fractions. Facilitators also used these objects to teach about the addition and subtraction of fractions.

Participants learned some practical ideas for their classrooms, which can be implemented using only low-cost and no-cost materials.

Experiential Learning of Scientific Skills

Ms. Sunita Adhikari, Assisted by: Nilima S.

August 25, Day 2

This workshop focused on the different skills that come to play while learning science, using teaching materials appropriate to their surroundings.

Participants were given directions to do different experiments, predicting the results of their experiments before actually doing them. After the experiments, participants talked about the skills they used. Participants also learned about how to effectively use videos as a teaching tool.

In their debrief session, participants and facilitators discussed what skills they used during the workshop, and how these skills can be used in the classroom.

Focusing on Story Elements in a Writer’s Workshop

Ms. Bandana Aryal and Ms. Nripa Malla

August 25, Day 2

In this workshop, participants learned how to write a short story with details about characters, setting and plot through the Learning by Doing method. Using a short story as mentor text, participants talked about lead, character and characterization, setting, plot, climax, and dialogues. Is the story written as a first person narrative or a third person narrative?

The participants were introduced to the writing process, consisting of pre writing, first draft, revising, editing and publishing. Participants first wrote some disjointed details, such as details about a character and descriptions, before they went on to writing the introduction paragraph of their own stories.

Co-Creating Background Knowledge: Using Images, Artifacts, and Short Texts

Ms. Rachel Manandhar, Assisted by: Munni, Margaret

August 25, Day 2

This workshop focused on the power of building background knowledge for students in order for rich learning to occur. Participants were provided models for creating background knowledge using visual imagery, artifacts, and short texts that would aid learning through inquiry.

Participants and facilitators explored the importance of activating prior knowledge to engage all learners when introducing a lesson or new concept. Facilitators organized a simulation to make the concept more clear. In the debriefing session, participants and facilitators talked about student talk strategies that can be used to increase participation, engagement, and overall achievement.

Planning and Organising Effective Field Trips

Ms. Kalina Pradhan, Ms. Eli Kawas

August 25, Day 2

Field trips are generally enjoyed by all children, break the monotony of classroom learning, and encourage interdisciplinary learning. This workshop focused on organizing effective trips with different pre-trips and post-trip activities to help all kinds of learners to process the information they gained during the trip.

Participants went on a trip to the Rato Bangala School garden to find different types of plants. Before the trip, they were given a trip sheet, as well as a set of rules for the trip and safety rules. Participants discussed the different kinds of plants they found, and in groups, worked on documenting their findings, which could be compiled into a book over time. In the debriefing discussion, participants discussed how to organize effective field trips, and what teachers should do before, during, and after the trip.

Encouraging Creativity through Music & Movement

Ms. Lavina Chong Wei Li, Assisted by: Rochana Amar, Manju G.

August 25, Day 2

This introductory workshop session showcased a creative approach to Music and Movement in the classroom. This workshop used an exploratory methodology that engaged participants and helped them experience the entire music process through just one song.

Participants were able to use a single song and approach it in different ways. Songs/ Chants/ Rhymes can be 's-t-r-e-t-c-h-e-d' to allow children to internalize the musical concepts and make learning fun and meaningful at the same time. In addition, participants and facilitators moved to music themselves before discussing the link between creative music movement and 21st century skills such as perspective taking, cognitive flexibility and inhibitory control.

Using Drama in the Classroom

Ms. Amita Koirala and Ms. Bandana Uprety

August 25, Day 2

This workshop focused on teaching drama, with or without a script, in order to aid understanding of the lesson and also teach students about drama.

At the beginning of the workshop, facilitators distributed scripts that they had prepared for the workshop and read it out to the participants. Then they discussed radio plays and Readers Theaters, which are both methodologies often used in the classroom. In groups, participants were asked to select stories and prepare plays on the stories. Both groups presented their plays and gave feedback on the play that the other group had prepared. The workshop ended with a conversation on how the process felt for the participants, and how similar activities can help students in the classroom.

Experiencing Place Value Through Base-10 Blocks

Ms. Nucche Maharjan and Ms. Niva Manandhar

August 26, Day 3

Place values are an important concept that Mathematical understanding is built upon. Therefore it is very important that children actually understand place values well before moving on to other Mathematical concepts. In this workshop, participants learned how to effectively teach place values, as well as addition and subtraction of numbers with up to four digits, through the use of base ten blocks.

Participants played an addition game using dice and base-10 blocks as a warm-up activity, followed by other games to experience addition and subtraction of two and three digit numbers, and then talked about the relationship of units, tens, hundreds and thousands as a part of their simulation.

Let's Play Math Games

Ms. Kalpana Parajuli

August 26, Day 3

In this session, participants learned to play different math games which increases young children's understanding of math concepts. Participants were introduced to Math Strands (Number Sense and Numeration, Measurement, Geometry and Spatial Sense, Patterns and Algebra, and Data Management and Probability), and discussed the importance of Math Games.

They also got the opportunity to play the games, each of which were related to one or more Math strands. Participants also learn to adapt the games for children with different levels of understanding of mathematical concepts, and how to check for student understanding.

Literary Panel

Ms. Munni Sharma Pandey

August 26, Day 3

In this workshop, participants were introduced to the literary panel, which is an exercise in the Language Arts which helps students think from different perspectives, empathize with different characters and put forth their opinions, think critically, and interact with peers based on a professional model. Participants were asked to assume the role of any given character of the book, which may be living or nonliving. As a group, the participants read a book, listed down all the characters on newsprint paper, and prepared spe-

cific thought-provoking open-ended questions to generate discussion. The workshop ended with a reflection on the literary panel.

Learning by Doing: Seed Exploration

Ms. Sarita Rana, Assisted by: Pragya

August 26, Day 3

When children get to build on their experiences and participate in exploring the environment, they come to an understanding of the world around them. When teachers provide the right environment that allows children to explore and experience for themselves, children then start to construct their understanding of the world around them. In other words, learning takes place.

Through a presentation about seed exploration, the facilitator demonstrated that children are aware of their surroundings, naturally curious about their lives and the world around them, and learn best when they are engaged meaningfully in their own learning.

Using Different Poetic Structures in Nepali Poetry

Sudha Ojha

August 26, Day 3

At the mention of poetry, students are often overwhelmed. In this workshop, participants wrote five different kinds of poems of different lengths in a stress-free and fun environment.

At the beginning, participants wrote a folding poem. Then, they brainstormed different aspects of poems, such as rhythm and tune (chhandas), the poet, experience, feeling, theme, etc and made a mind map of their discussion. Then they wrote a haiku (3 lines with 5-7-5 syllables each), a tanka (five lines with 5-7-5-7-7 syllables), a visual poem, and an ode (a poem written to address an object). Participants learned about how to engage students in writing poetry in an interesting way.

Role of Leadership

Am I A Good Leader? Self-Assessment For School Leaders

Ms. Vaishali Pradhan, British Council

August 24, Day 1 (1.2.J)

This reflective session helped school leaders do a self-assessment of their leadership using the British Council's continued professional development

(CPD) framework for school leaders. It taught participants about the different professional qualities of good school leaders as well as the stages of development for school leaders, which is based on global research and evidence. After a reflection about their own leadership, participants had a chance to explore various opportunities for continued professional development.

Leadership Dilemmas: Using the Consultancy Protocol to Make Smart Leadership Moves

Ms. Sara Rebecca Levine, Assisted by: Jenny, Sarita R.

August 25, Day 2

As leaders we are constantly facing dilemmas-- a problem that has lots of different potential answers. When faced with a dilemma, it is often hard to know what to do. In this workshop, participants will learn how to use an easy listening and question asking tool to identify possible solutions in a thoughtful way. Participants will learn how to use the consultancy protocol through a combination of observation and working in small groups.

The Values that Drive us and the Culture we Create

Ms. Sara Rebecca Levine, Assisted by: Bilquees, Richa, Esha and Jenny

August 25, Day 2

In this workshop, participants learned how school culture relates to student outcomes and how school leaders play an important role in creating school culture. Participants, who were leaders of public and private schools, reflected on their core values as leaders and started to examine the alignment of these values with the culture they create in their schools. They were introduced to concepts of positive and toxic cultures, and spent some time thinking about what aspects of their leadership style they should continue with, and what aspects they should rethink.

Education for Sustainable Development

Stress Management

Dr. Pushpa P. Sharma

August 24, Day 1

Stress is the pressure experienced by a person in response to their life in terms of adjusting to or dealing with circumstances that disrupt their regular functioning, and any factor that can cause body or mental tension.

In this Workshop the facilitator, who is a psychiatrist, focused on helping participants identify good stress and bad stress, as well as physiological and psychological responses to stress. He educated participants about good coping mechanisms and effects of poor coping. Coping mechanisms depend on the situation and the individual dealing with stress. Unless teachers can recognize that, students will not receive proper help managing stress, which will in turn affect their academic, social and personal life.

21st century education in Nepali Public School

Ms. Meekha Mathema

August 25, Day 2

This workshop focused on the 4 Cs of 21st Century Learning: Collaboration, Creativity, Critical Thinking, and Communication. The moderator discussed 21st Century Education in Nepali Public Schools, and especially the role of the 21st Century Teacher, which is to help students connect learning with real life and to provide them with the necessary skills to prepare them for success. Participants discussed how it was possible to give students a voice, choice, opportunities to reflect and innovate, opportunities to think critically and solve problems, the responsibility to assess themselves, as well as the tools to connect their learning to different subjects.

A Quest for Identity Awareness for Learner-Centered Education: Insights from Narrative Inquiry

Ms. Mingrui Yang, Assisted by Sarita P

August 25, Day 2

This workshop provided participants with the opportunity to do a critical review of challenges against learner-centered education. Participants shared and explored the use of autoethnographic methods for identity awareness and cultural capabilities. They also shared personal narratives to practice doing autoethnography, and explored the power that narrative inquiry could have in learner-centered classrooms.

Occupation, Business & Technology

Ms. Meekha Mathema and Ms. Aayusha Kapali

August 25, Day 2

Inspired by the efforts that were made in Nepal Adarsha School in Ganabahal by Daya Foundation's Aayusha Kapali, this workshop focused on how to use Occupations, Business and Technology Education to help students take ownership of their learning. In this interactive workshop, participants

discussed how OBT courses could help children learn life-skills, and learned about how to design OBT courses for children in different contexts.

Creating A Gender Responsive Classroom

Ms. Jenny Manandhar and Ms. Sheelu Karmacharya

August 26, Day 3

This workshop focused on gender bias, as well as gender sensitivity and responsiveness in classrooms, child safety, and issues of consent.

Participants discussed their own gender as well as one time they felt really good and one time they felt bad about being that gender. Participants also discussed gender bias in schools, homes, and language before they were shown a powerpoint presentation on gender-responsive classrooms and classes. In groups, participants created classroom rules for being gender sensitive with children. Participants also discussed consent with the help from some videos, and discussed what steps they could take to implement more gender-responsive classrooms in their own schools.

Critical Thinking Manifest In Many Forms: Strategies to Foster Deep and Active Learning

Ms. Kausalya Khadka

August 26, Day 3

In this workshop focusing on critical thinking in the classroom, participants learned about using various activities, such as think-pair-share, brainstorming, simulations, drama, debates, fishbowl activity, asking open ended questions, etc. to foster critical thinking in their own class. Through different classroom games where participants had to look for answers to different questions and discussions where participants helped each other, facilitators demonstrated strategies that encourage active learning in classrooms. The participants also learned about the KWL activity (what I know- wonder- want to learn) and discussed how it can be used to get learners of all ages to think about certain topics and start learning in a self-directed manner through enquiry.



Presentations

Learner Centered Early Childhood Education

The Value of Steady Beat and Form in Music-making with Young Children

Ms. Lavina Chong Wei Li

August 24, Day 1

MODERATED BY : Mr. Sangay Sherpa

Steady beat is the underlying, unchanging, continuous pulse of music. The value of steady beat is often undervalued in early education.

Experience 1- Listen to the following pieces of music and tap the steady beat on your lap.

Steady beat is a learned behavior and fundamental skill. According to some people, children who lack steady beat competency have difficulty coping with academics. Steady beat is calming and purposeful and acts as an organizer for children. Day to day activities such as playing basketball, chopping vegetables, skipping, reading, reciting poetry and rhymes require steady beat. The awareness of steady beat affects childrens' reading and writing. It helps in concentration, understanding of space and distance, and self-control. In addition, if a child has difficulty speaking, music can help them speak. There are many children who stutter when they speak, but not when they sing.

There are 4 main components that lead to steady beat competency— listening, control of movement and coordination, concentration, and observation. To help children develop their steady beat competency, you can play music or songs with a strong beat and allow children to respond to it. You can also do activities that allow them to experience steady beat with body percussion instruments and props (scarves, stretchy band), bounces and tapping games, and rhymes.

Form is the structure and pattern of musical compositions.

Experience 2- listen to this song and can you identify the form (dancing pattern activity with classical music). Singing activity: Namaste rhyme as “Na-mas-te Na-mas-te/ Shuva prabhat shuva prabhat/ na-mas-te”

Making musical sounds and rhythms is a powerful learning experience that can allow students to follow the form of the music. Eventually, children can make music to learn music.

Ecological Framework for ECD in Nepal

Ms. Bhima Rai (Seto Gurans)

August 25, Day 2

MODERATED BY : Ms. Monita Gurung

In the early ages, it is important to teach students about their own identity. We need to decide on our philosophy of identity, creation, nature, and nurture. Even within a school, we may have different perspectives on the creation of the universe, for example, from one that focuses on Brahma to one that is based on Science. We need to have clarity on how we teach little kids so they are not confused by this.

Seto Gurans was started in 2005 by Agatha Thapa with the aim to bring sociologist and psychologist Lev Vygotsky’s philosophy into Nepal. Our goal is to promote learning in the different contexts that children live in. We place emphasis on how to respect other cultures and how to build interest in learning. The Sociocultural Theory states that individuals learn from the community, and that their learning depends on the structures they see around themselves. Community and culture have a deep impact on early childhood development, as do peer groups.

Some ways to encourage learning in the early years is by having kids work across ability levels, giving them clear signals and directions, and encouraging them to play investigative as well as imaginative games. We can also participate in building stories with students that include characters from

different backgrounds and circumstances, and organizing culture and social days.

The Seto Gurans model has been practiced all over Nepal, including districts ranging from Bajura to Jhapa and Rupandehi. It uses different models in different communities to give children an experience that will prepare them for further learning. For example, the materials and lesson plans that are used to teach religion, geography, and botany in different parts of the country are all a little bit different.

Transformative Power of Early Childhood Education: Cultivating 21st Century Skills

Ms. Meenakshi Dahal

August 25, Day 2

MODERATED BY : Ms. Monita Gurung

Early childhood is important for human development. The Nepal government cites the lack of manpower as a reason for the hindrance of development. We need a transformation, not just change, to improve education in Nepal.

We need to prepare our children to be global citizens, to become effective and successful 21st century citizens. Twenty-first century skills include foundational literacies and competencies, character qualities, critical thinking, creativity, collaboration, and adaptability. Here in Nepal and in many other parts of the world, we have deep conflicts in the way we parent our children– we want to make them tech savvy, but we restrict them from using mobile phones.

“We are currently preparing students for jobs and technologies that don’t yet exist... in order to solve problems that we don’t even know are problems yet” -Richard Riley, former US Secretary of Education.

The first eight years are crucial for building a foundation for holistic development. About 85% of brain growth happens in the first 3 years. Social skills at age 5 can predict future life outcomes. All children can be employed by 25 if we focus on ECD. Skills that are important in the workplace, such as problem solving, analytical skills, communication, teamwork, and leadership, are all developed in early childhood. In their early childhood, children also go through a lot of emotional development, and learn, among other things, how to recognize emotions, take initiative, control their temperament, and how to be self-aware and practice self-regulation.

There are different windows of opportunity for the development of different skills. We have to catch those opportunities. We have to change the beginning of the story to change the rest of the story.

Blocks

Ms. Sarita Rana (Rato Bangala School)

August 25, Day 2

MODERATED BY : Ms. Monita Gurung

Block play is essential in early childhood centers. It is an ideal open-ended material that encourages creativity, risk taking, and supports the holistic development of children.

Playing with blocks encourages students to use their imagination, think creatively, and express themselves. It allows for unique opportunities in self-expression, where children learn to communicate their ideas with each other, give directions and suggestions, and discuss plans. It promotes problem-solving, as well as mathematical and scientific thinking. Students often make complex structures. Six and seven year old students have made things as complex as prototypes for a stairway that is accessible to wheelchair users and mechanisms for transporting water from a water tank to users. Block play also increases students' self-esteem and promotes social emotional growth.

A set of blocks allows complex learning experiences to be made available in every setting. It is a very smart investment; a full set of blocks costs less than 20,000 rupees, helps learning in a host of different ways, and lasts for a very very long time.

Linking Brain Research to Classroom Practices

Ms. Samara Gupta (Learning Matters)

August 25, Day 2

MODERATED BY : Ms. Monita Gurung

After exercising, Oxytocin, which can be compared to fertilizers because it redies the brain for learning, is released. This enhances learning. So even a two-minute long energizer can make your students more ready to learn what you will teach next. Research done in the USA says that sports has a similar effect. In Illinois, gym class transformed the student body, enhancing learning and reducing other problems. In South Carolina, fourth to eighth graders spent just 30 minutes every morning exercising, and after just 4 months there was an 83% reduction in behavioral and disciplinary issues. But in most schools in many different parts of the world, we still ignore the

need for sports. We need to take research to our own teaching practice, and structure our classes according to these.

The prefrontal cortex has an important role in executive functioning— planning, organization, learning from mistakes, working with memory, exercise turns prefrontal cortex on. When children are stressed out, the amygdala is activated, and the prefrontal cortex is activating less. This has negative effects on executive functioning. And despite knowing this, we give children so many stressors. At home, and in school, and in classrooms. We need to stop doing that.

We need to stop stressing out our children, and give them pleasurable learning experiences so they can develop better. Building safe learning environments is the best way to encourage student participation and learning. We need to listen to the research and use them in our classrooms.

Learning by Doing

Use Of Geogebra For Teaching And Learning Geometry (Circle): Initiation For Quality Education

Mr. Niroj Dahal and Mr. Raju Thapa

August 24, Day 1

MODERATED BY : Ms. Jenny Manandhar

After working as a traditional teacher, it is easy to realize that there is a need for a paradigm shift among teachers, from teacher centered to student centered education. ICT needs to be integrated in teaching. Due to wide internet access and the prevalence of smartphones, it is not difficult to integrate ICT in the teaching of math to enhance the teaching and learning process. The central obstacles in teaching mathematics could be concepts without adequate illustrations.

This paper explores the lived experience of the use of GeoGebra to teach circles to twenty students in one of the secondary schools of the Kathmandu Valley. The Mathematical software GeoGebra is an interactive geometry, algebra, and statistics application used to foster mathematical experiments and discoveries during classroom teaching. It is easily accessible and not difficult to use. Our research attempted to determine whether the use of GeoGebra helped students in a substantial manner to understand the concepts of the circle. It uses teaching experiment as qualitative research methodology, and spans four teaching episodes in twelve days.

We used adequate illustrations, pictures, and animations of objects using GeoGebra to make concepts of geometric circle visible to students. The result of the experiment shows that GeoGebra is helpful in learning concepts of the circle. Findings of this study show that if GeoGebra or another such software is used in the mathematics classroom, students become more active constructors of knowledge. Similarly, they collaborate with each other, visualize the key concepts of the circle, and enjoy their authority in such classes. The tool supports interaction between students in a friendly learning environment, teamwork, and meaningful conceptual learning, and shifts the classroom environment from teacher centered to learner centered. As a result of this experiment, training is currently ongoing in all seven provinces about the possible teaching and learning uses of GeoGebra.

STEAM Pedagogy as an Appropriate Approach for Integrated Curriculum

Mr. Binod Pant

August 24, Day 1

MODERATED BY : Ms. Jenny Manandhar

Integrated curricula for grades 1 to 3 has recently been released by Nepal government, where they teach the languages (mother tongue, Nepali, English) as well as Math, Science and Social Studies in an integrated manner. The old subject-centred approach to the curriculum compartmentalized topics, focused on discrete tasks and concepts as opposed to a more real-world approach, and was rooted in disciplinary egocentrism. It did not cater to the child as a whole human, respect the connections between subjects, and the reasons why learning is important; most people don't learn for the sake of it, they learn to solve problems.

The new integrated curriculum , in place since 2075, has fewer interdisciplinary subjects, such as Hamro Serophero (The Environment Around Us), Math, Nepali, and English. Teaching in an integrated way harbours thinking skills, interpersonal and interpersonal skills, as well as communication and and multi-literary skills.

STEAM is Science, Technology, Engineering, Arts and Math. It is taught through inquiry based approach, contextual learning, and experiments, and uses various forms of arts in teaching as well as technology and design thinking. STEAM is usually taught through inquiry based tasks, but a perfect format for proper teaching does not exist. It gives children problems, a chance to brainstorm them, make predictions, test and revise ideas, and share results. It encouraged students to solve problems themselves.

The integration of arts integrates the fine arts, stories and poems into the process.

Therefore, I advocate for teaching integrated curriculum to young students through a STEAM pedagogy, which will encourage them to connect, wonder, investigate, construct, express, and reflect.

Early Grade Math Development in Nepal

Mr. Ranjit Mahato

August 24, Day 1

MODERATED BY : Ms. Jenny Manandhar

According to the National Assessment of Student Achievement (NASA), 75% of students in grade 5 can't meet the requirements of the syllabus. When we did a test in West Nepal, of 643 students in grade 3, less than 50% recognized three-digit numbers. The ASER Nepal 2018 study says that 30% 5-7 yr olds couldn't recognize single digit numbers, and that only 20% could recognize double digit numbers in Province 2. Likewise, 25% of grade 3-5 students made 2 or more errors in recognizing numbers between 1 and 100. Test scores for grade 3, 5 and 8 students, measured by the National Assessment of Student Achievement (NASA), are decreasing. SEE grades in Mathematics have also halved between 2072 to 2075.

The age while starting education has decreased but the curriculum has stayed the same. We don't use materials in our classes, and employ textbook centered learning. In addition, the curriculum is over ambitious, even when compared to other countries' Math curriculum. Teachers' weak content knowledge also affects students' understanding. It is important to think about how children learn Math, and at what age and level of schooling are they most likely to grasp different concepts best.

Our curriculum caters to the students at the very top of their class, or those that are gifted. It is linear, and because most topics are never revisited, there are not many opportunities for consolidation. It does not give teachers enough opportunities to assess students' learning.

We recommend a reduced number of broad topics for each grade, with less learning targets, and a curriculum that supports continuous assessment.

An example for very young students:

Topic: NUMBER SENSE COMPETENCIES

Expectations: quantify, place values, compare 6-digit to 4-digit numbers.

We can help make targets easier for teachers to reach and measure by only having five broad domains for each grade, and 2-5 competencies per domain. Use of materials also creates behaviour change and enhances learning in students.

There are still a few remaining challenges. The first is the diversity of languages, dialects and accents in Nepal, which is a boon, but also a challenge in the classroom. Then there are large class sizes, lack of strong teacher preparation systems, and gaps between the curriculum and the actual learning pace of children.

Reflection on a Year of Hands on Learning Experience

Mr. Sunoj Das Shrestha, Ms. Sanyukta Suman and Ms. Tashi Dolma Lama (Karkhana)

August 24, Day 1

MODERATED BY : Ms. Jenny Manandhar

Karkhana is an education company that designs learning experience that converts classrooms into a lab of curious learning through programs like Beecreative. Karkhana's learning wheel includes make, play, think, and improve, through which Karkhana's classes aim to teach the 4Cs— critical thinking, communication, collaboration, and creativity.

Karkhana's BeeCreative program caters to 4000 students in the 2075 academic year, and teaches 130 classes/ week in different schools in Kathmandu and Pokhara. And although most of the students enjoyed the science, Karkhana's focus on teamwork, sharing ideas, challenges and experiments amassed greater positive feedback from students. Students gave negative feedback on the story-telling aspects of classes. Students enjoy learning through hands on methods. Unlike traditional classrooms where students learn mostly through lecture, student-teacher relationships are very important while trying to foster such hands-on learning.

Artisan/ Nepal's Living Traditions

Mr. Stephen Truax Eckerd

August 24 and 25, Day 1 and 2

MODERATED BY : Mr. Sangay Sherpa

(This presenter used pictures and videos featuring sculpture, thangka painting, restoration of monuments, delicate paintings made on sculpture, etc, and showed the power of visual symbolism/observation to teach not just art, but a wide range of topics in the social sciences.)

We spend more time reading labels these days than we do looking at art. But Nepal is a living museum for different art forms as well as crafts. In a world where the most popular youtube videos are how to videos, there is a lot of value, proven already, to learning by observation. By watching videos of how Nepali artists create art right here in Nepal, students can learn not only about extraordinary techniques that artisans in Nepal employ, but about social relationships, work environment, management, economics, history, cultural preservation, anthropology, and sociology.

The purpose of teaching art is not as much to create more professional artists, but rather create human beings who are critical viewers and thinkers. In the 1990s they began mandating computer classes in high school in the USA. They accommodated that into music, art, and studio dance. The focus was/is science, math and technology. Recent studies show that students who pursue STEM score more if they have had art related classes. This highlights the importance of knowing how to look closely and interpret what you see.

Just a glimpse at one of Leonardo Da Vinci's notebooks suggest that he was very curious and observant; he has hundreds of pages in his notebook about his observations regarding how bodies work. For example, he studied the flight of birds and made the first painting of an airplane. His greatest painting embodies visual observation. Children are naturally creative; if given freedom, space and materials, their creativity blossoms.

Student Centered Learning

Ms. Nitu Kedia

August 25, Day 2

MODERATED BY : Ms. Archana Rai

Students need to be given a chance to express themselves and what they want to in the classroom and outside. Currently, there is a focus on competition, technology, and preparing students to cope with the changing world. There is also emphasis on critical thinking to prepare children for the 21st century.

To that end, teachers need to relinquish control and remember that the process is the product. This is not completely a new process, and just needs to be done more consciously a majority of the time. We need to encourage students to explore and do their research. We have to teach students in a way that they can figure out what works for them by thinking of themselves as learners.

This helps to create a conducive learning environment in class, and encourages students to be self-directed learners. It encourages them to produce knowledge, rather than just be consumers of knowledge. This is very empowering. Students learn to ask questions rather than just repeat back answers, become more confident, and become active learners.

One challenge is to incorporate this into the class period or into the academic year. Another challenge is to assess learning that is done through a less structured way. The student-centered approach is difficult to implement, but if teachers make an effort to get to know their students and their interests, make learning contracts as a class, and have high expectations, it is possible. It can be messy at first and requires getting used to, but is worth it.

Showcasing Learning by Doing

**Ms. Milan Dixit with panelists Ms. Margret Singh and Ms. Shilpa Rimal
(Rato Bangala School)**

August 25, Day 2

MODERATED BY: Ms. Munni Pandey

Experiential learning is a fun and effective way to teach kids about different concepts and to make sure that they learn the necessary skills that empower them to become self-directed lifelong learners. Although experiential learning requires more planning than traditional classrooms, it is effective and students are better at retaining what they learn.

Teachers first have to select an appropriate topic, brainstorm how to teach the content, become familiar with the subject, and think about how it can fit into curriculum's objectives. What is the most interesting question regarding the topic for students, and what kinds of problems can they solve? Students should be able to apply the skills and knowledge that they have acquired through studying the topic to other learning.

After an introduction to the topic, including children's pre-information and what they want to find out and how, teachers must reach out to families to invite them to participate in the learning process. They should be open to themselves learning with students. After active investigations and presenting their own learning, students must reflect on what they have learned and celebrate their learning. Teachers must use resources including experts, field trips, books and web resources, as well as artifacts to teach. Topics that can be explored in various different ways over an extended period of time are also recommended.

Occupational Business and Technology Education Nepal

Ms. Meekha Mathema (Daya Foundation)

August 25, Day 2

MODERATED BY : Ms. Swastika Basnet

The grade 8 students (12 boys and 11 girls) of Nepal Adarsha Secondary School, Ganabhal started a brunch for teachers, students and community that they call Bestie Brunch, as a part of their Occupations, Business, and Technology course. Their aim was to figure out how to use local resources to start a business and generate income.

After a brief orientation on entrepreneurship and business and the use of technology in business, students visited vendors to find out local prices and commercial restaurants to identify possible market strategies. Students made a questionnaire, wrote papers on their findings and presented them. They decided on the price based on the cost of raw materials and the business plan was finalized.

Students used eco friendly products [duna, tapari] in their brunches and wore the haku patasi (Newari cultural outfit) as servers. They used proper cooking gear in their kitchen, which helped them to maintain hygiene, and sold Samaya Baji. All of the profit generated was donated to the school library.

This year the students are planning to do a business project on food-processing, packaging, and labeling, and planning to sell to the local communities.

Role of Leadership

Practice and Perception of School: Principals on Instructional Leadership

Mr. Subash Shrestha

August 24, Day 1

MODERATED BY: Ms. Sudha Ojha

Even though Principals are supposed to play the role of educational and instructional leaders, they are not held responsible for unsuccessful results. This qualitative research explores the role of the principal as instructional leaders in institutional schools inside the Kathmandu Valley. Interviews with principles, classroom and school observations, and field notes were the main data collection methods used for the study.

The research found that while one principal focused on all domains of learning and aimed to create an environment where all students develop the necessary skills to excel in the real world, another principal focused on books, course completion and summative assessments and bulky report cards. Similarly, leadership styles differed between the principal who gave teachers feedback after the lesson and the principal who judged teachers and lodged complaints, rather than supporting them.

In other words, one principal practiced collaborative efforts for development and used current pedagogical practices to inform themselves while the other principal practiced authoritative effort based on traditional pedagogical practices. However, both principals felt that they failed to motivate teachers for professional development.

The findings of this study were consistent with research that says that effective principals give teachers the opportunity to self reflect, self assess, and empower themselves to promote lifelong-learning in their institutions.

Local Government Experience Sharing

Ms. Mohanmaya Dhakal (Deputy Mayor of Birendranagar Nagarpalika, Surkhet)

August 25, Day 2

MODERATED BY : Ms. Amita Koirala

Surkhet has 64 community schools with over 20 thousand students, and over 32 thousand students in institutional schools. It has achieved all of the Nepal Government's key indicators in terms of primary level, and almost achieved net enrollment at the basic level, but has yet to achieve the target for survival level in grade 8.

In the academic year 2076/77, the Municipality has made performance-based contracts with the head teacher, and arranged for incentives for head teachers, ECED facilitators, and school personnel. We have a School/teacher/SMC of the year program. In addition, we do teacher trainings, and are trying to reward and punish teachers based on their performance.

The first goal is to first create safe schools for safe communities. We have also started a support mechanism for institutional schools, and an experience sharing program between community and institutional schools. We aim to increase student learning targets by a minimum of 5 percent. Our target is to eventually have an education hub here.

Although there is much opportunity for resource integration and mobilization as well as high will-power, there is some disappointment after three years of local government hasn't been able to deliver any results. There is poor institutional capacity, as well as poor level of motivation and morale in staff.

Policies, laws, rules, and plans are not in place. There is no clear demarcation of what the local, provincial, and federal governments are supposed to do. There is also a lack of sufficient budget. The lack of a school supervisor and resource person, who were in place a few years ago, makes it more difficult to do work. Other challenges include lack of teacher qualifications and capacity, insufficient investment, and bad infrastructure, including toilets and drinking water. Class sizes and lack of parental awareness are also problems.

Now, we need to work on a Municipality education plan, as well as an education policy for our municipality that will help us implement the school year how we want to, track students, set benchmarks for quality, and supervise schools better.

Local Government Experience Sharing

Mr. Mamata Prasad Chaudary (Mayor of Ghoda Ghodi Nagarpalika, Kailali)

August 25, Day 2

MODERATED BY : Ms. Amita Koirala

Since the responsibility of school education has come down to the local government level, it is even more important to work on developing our schools.

Ghoda Ghodi Municipality has 86 schools (51 community, 35 institutional), 1 community college, and 1 community center. We are planning to make a municipal education work plan and implement it. In addition, we will create a map of all existing schools and move forward with school mergers, as well as teacher adjustments. There are some schools that have just 10 students, and other schools which have a secondary level authorization (authorization to run grades 0-12) that only have classes upto grade 5. In addition, there is politics inside schools.

Out of all the municipalities, we spend the most on education. We have school busses, and have begun some model schools. We focus on how to elevate all schools, rather than just those that have the ability and resources under the current circumstances. We are also focusing on ICT and

extra-curricular activities. But we do have problems like the lack of electricity wiring in schools, and lack of ICT teachers.

All our teachers are encouraged to go to conferences and workshops, and we have trained all our early childhood education facilitators. We encourage professional development of school staff, and focus on improving our student learning achievement. We are also working on improving our institutional schools, which often have better infrastructure but don't pay their teachers well. Often, during research, we find that many private schools don't meet quality standards that have been set for them.

We are also thinking of ways in which we can better support students with disabilities, through scholarships and resource rooms, where all students can get help and study. In addition, we are focusing on reading and considering making the Tharu language the medium of instruction to create a fully-literate municipality because that is what most of our students speak at home. We have also implemented 90-minute class periods so that students have more time to understand the depth of whatever they are studying. We are trying to move the system to one where students do more work with teacher facilitation, as opposed to the current system where students watch the teacher talk and demonstrate to them.

There are still some challenges. Corporal punishment still exists, and many students are bullied; some even drop out because of this. The federal government is there for monitoring and checks and balances. But first, before we can do substantial work, rules and regulations should be passed to allow us to do such work. But we had to start where we were, and we are doing what we can to build better schools for our children.

Aptis Action Research Mentoring Scheme (AARMS)

Mr. Bhogendra Lamichhane

August 25, Day 2

MODERATED BY : Ms. Archana Rai

Despite the fact that most of our teachers have teacher training of some sort, there is a lack of support mechanisms once teachers step into classrooms. Mentoring helps teachers improve the quality of teaching and learning inside classrooms.

The Aptis action research mentoring skill scheme is a mentoring scheme by the British Council which helped teachers do classroom-based research to benefit their own teaching and learning, develop new reflective practices, try out different approaches and ideas, and improve student learning.

In their research, teachers explored four themes: assessment, multilingual education, innovation and ICT, and inclusive education for the development of 21st century skills. Seven teacher-educators worked as mentors with a super-mentor. Teachers were given an overview of action research, provided help to identify problems, given feedback, and given tools for research.

A survey of confidence found that the intervention increased teachers' confidence in their ability to understand and analyse needs and problems in their own classrooms, find solutions to these problems, and conduct action research. It was also found that the intervention gave teachers an improved understanding of the teaching practice, improved their relationship with students, helped them gain an identity as a researcher, and enriched their professionalism. Teachers felt more empowered after the intervention.

Thoughts About Assessing School Leaders

Mr. John David Snyder

August 26, Day 3

MODERATED BY : Ms. Esha Thapa

There are three "basic facts" about assessment.

1. All Measurement (another word for assessment) Has Error. The error factor gets greater when working with "moving parts" like human beings.
2. Assessments/Measurements of Complex Tasks Assess a Proxy for the Whole Goal. They sample parts of the universe, they do not measure the whole universe. This is important because of the often, as a result of high stakes assessment, what gets taught also changes.
3. Measurements/Assessments Never Tell You What To Do. The interpretation of numbers and what the appropriate actions in response to them are not measurement/assessment issues. They are human judgment issues.

There are two principles that these basic facts inform:

1. For Complex Tasks, Assess Actual Performance, Not the Knowledge That Might Be Involved in Performance. It is the performance that matters, not the knowledge. For example, we wouldn't think of giving someone a driver's license for the first time without seeing if they could actually drive.
2. Assessments Should Be Educative. Cognitive ability is not fixed and it can and does change. The goal of assessments can not be to sort people, but rather to help educate people. If an assessment only tells me

that I am better than you, and does not help educate, then it is a waste of time and money and has fully anticipated harmful outcomes.

So finally, let me use an example of a principal performance assessment that we at the Massachusetts Department of Elementary and Secondary Education developed that meets these principles. Because leadership is complex and requires the integration of multiple sets of knowledge and skills, we envisioned: Three to five tasks, each with multiple components, which assess two or more challenges/dimensions of leadership. Tasks include addressing the process (planning), the end result (product/outcomes), and evidence of “learning from experience”.

Since our goal for principals is not to recreate what is, but to create better schools and improved outcomes for all our children, one task, for instance, could focus on Continuous Improvement. One of the greatest challenges 21st century leaders face is implementing educational change that results in improved student learning.

For example, one possible task to assess continuous improvement would be to ask the candidate to develop a comprehensive school improvement plan for his or her school. The plan should focus on improving the performance of all students, including those who are most at risk of not meeting challenging performance standards. It should: be based on current school data (student, teacher, and program), reflect the research-based practices of highly effective schools, acknowledge contextual barriers that need to be addressed for change to take place, identify mechanisms and strategies for engaging stakeholders in the process, indicate the allocation and reallocation of resources, specify a timeline and the tools that will be used to monitor progress and make necessary adjustments in the course of time.

Private Sector in Education

Panel on Public Private Partnership

**Mr. Sudarshan Ghimire with panelists Mr. Sakar Pudasaini (Karkhana)
Dr. Shanta Dixit (Rato Bangala School); Mr. Shishir Khanal (Teach for
Nepal)**

August 25, Day 2

MODERATED BY : Ms. Bushraa Rehman

Public Private Partnership is a new concept in Nepal, where many people don't realize that everything outside government organizations are private. There are many non profit private organizations. There is also the miscon-

ception that PPP is private schools helping the public by providing some tokens, when that isn't all it is.

What is PPP?

Shanta Dixit: Privates helping public schools with children's development in mind.

Sakar Pudasaini: PPPs enable us to work on a cost sharing model, where public and private schools allocate money. It helps when government grants are not enough to do meaningful work. In Education, PPPs can help do work in teaching, infrastructure, or curriculum.

Shisir Khanal: PPP prioritizes doing work economically. Because the government can't do everything, we need partnerships. One example is schools that are initially run privately, and later handover to the government (like privately managed roads).

Why PPP?

Shanta Dixit: RBS initiates public-private partnerships to spread quality education throughout the country. RBPOP's model is a learning and sharing cycle. RBS teachers have always trained other teachers. Since the beginning of RBPOP, RBS has formed a partnership with parents, through which it allocates 18% of the total school fees to improvement in the education sector. In 2018, RBPOP funded ECD training in public schools in Lalitpur. RBPOP has also contributed to organizing the Second ICQE.

What role do you expect the government to play?

Shanta Dixit: Government system needs play a monitoring role and set standards for teachers who will work with public schools

Why is PPP important in Nepal?

Shisir Khanal: There are community expectations towards what a teacher needs to be like, playing roles to transform communities, for example. Parents are taking the lead and have standards for what kind of education their children need; so the demand for PPP is high.

Sakar Pudasaini: Private organizations have a big role in raising our current standards. Our students don't meet international standards. STEAM Education and critical thinking skills, for example. The idea of a Maker Space

is spreading. Karkhana is interested in cutting edge stuff, like technology education and ICT.

Where should PPP start?

Sakar Pudasaini: There is low human resource capacity in Nepal, and a system reform is needed. Currently, we blame teachers, but no one asks why they fail. There are problems in recruitment, support, and training. Instead of bringing plans and policies from outside, we need to design innovations within Nepal. That is why PPP is important.

Private Schools In Nepal: Choice, Performance, and Equity

Mr. Bishnu Bahadur G.C.

August 25, Day 2

MODERATED BY : Ms. Bushraa Rehman

Private privately managed schools exist all over the world occupying as much as 93% of the market in places like Hong Kong and 96 in Macau. Even though the dominant narrative is the private schools offer choice, it is not clear who they offer these choices for, or what people make the choices based on. Often, private schools employ child-centered teaching processes, but they often focus only on the product results.

Access to private schools is many times dictated by family financial conditions, merit, and gender. Private schools are generally more expensive than public schools, and at the macro level, there are more girls in public schools and more boys in private schools.

In 1995, the World Trade Organisation reached the general agreement on trade and services and removed barriers on trade, health, and education. Nepal joined the WTO in 2004, and became open to cross border supply of goods and services, which meant an exchange of students as well as an increase in professional travel.

Through a study of 21 participants from three different districts, it was observed that reasons for choosing schools range from affordability and trust to teaching learning processes, modern technology, extra curricular activities, medium of instruction, and brand names. Parents are starting to focus more on the process than results, and prefer student centric teaching processes to traditional teaching practices.

Private schools all over the world are playing an important supplementary and complementary role in the global Education for All movement. However,

equity is the demand of the present times, in order to reduce exploitation and promote personal integrity. Although the private education sector is far from equitable, partnerships between the private and public sector can make it possible to give quality education to all children.

Showcasing the Snowyak Foundation

Mr. Binod Shahi

August 25, Day 2

MODERATED BY : Ms. Bushraa Rehman

The Snowyak Foundation is a solely Nepali-funded NGO that aims to educate children in Dolpa district in the north west of Nepal. Dolpa is a remote district with low life expectancy and literacy, and inadequate facilities for schools and health posts.

The Snowyak Foundation has worked on establishing and running school in Dolpa, and has so far built 12 schools in as many villages with support from 18 volunteer teachers, and impacted the lives of more than 1200 students. It has given support in the form of education materials to over 1600 students of 18 villages. The Snowyak Foundation is supported by Nepali students from 35 different schools, more than 1000 young people and homemakers, and Nepalis from all over the world.

Showcasing Rato Bangala Partnership in Outreach Program

Dr. Shanta Dixit (RBPOP), Mr. Midesh Maharjan (Rato Bangala Foundation), Ms. Milan Dixit (Rato Bangala School), Ms. Kalpana Parajuli and Bibek Dahal (Rato Bangala Foundation) with participants from different partner schools.

August 25, Day 2

MODERATED BY : Ms. Sudha Ojha

The third phase of RBPOP aimed to contribute to a cultural shift towards child friendly education in government schools by supporting teachers and principles to implement child friendly practices. The project provided training to teachers and principles in partner schools.

Principal training included two basic components; leadership skills and community engagement skills. Two separate sessions with school leaders and teachers, as well as combined sessions with both school leaders and teachers started off the project in 2016. Similar sessions were done separately with principles and teachers, and in combined fashions during the second and third years.

One project component was the RBF-Karkhana fellowship, which provided hands on learning experiences to students so that they could learn to be able to articulate scientific concepts by participating in projects. Science and math teachers from partner schools had the opportunity to observe and co-teach classes so that they can learn to run similar classes in the future. Another aspect were children's literature festivals, which were organized in the partner schools to increase children to read more extensively and to raise awareness amongst teachers and parents about good reading habits. The 3-year program is almost over now and a two-year follow-up is ongoing.

As a result of the program, schools and teachers have come up with missions and visions for their schools, essentials of child friendly schools, teacher support mechanisms, guidelines for working with parents, and codes of conducts for themselves. Schools have also been able to improve how they work with parents, conduct hands-on lessons, and enforce positive discipline through classroom jobs, field trips, and face-to-face seating.

Education for Sustainable Development

Education for Respect of Diversity: Integrating Teacher Development and Curriculum Reform

Ms. Mingrui Yang and Dr. Ora Kwo

August 24, Day 1

MODERATED BY : Ms. Richa Singh

The Hani are a minority group mostly living in Honghe Hani and Yi Autonomous Prefecture, Yunnan Province of China. Honghe became nationally 'visible' in China at the turn of the new millennium, with national and international concerns over the extinction of fragile cultures and environments. Honghe Hani Rice Terraces (HHRT) was nominated as a World Cultural Heritage by UNESCO in June, 2013.

As an ethnic-minority group, Hani children are culturally rich, surrounded by rich natural resources, and curious about the world. Yet, they are seen as economically poor, lacking in prenatal care, left behind by parents, teachers, visitors, and volunteers, losing their home from environmental destruction, and limited by the heritage image of their region.

The Hani children need long-term supporting relationships, contextualized life guidance, cultural awareness, pride and confidence in their culture, and

dignity. However, because of the School Merging Policy (2001-2012) done to achieve standardization as a part of the Education for All, which aims to make education compulsory and free for children ages 7-16, primary and middle schools in local villages were closed, and Hani children were put in boarding schools. This increased the danger and cost of transportation, and increased dropout rates. Children were disengaged and losing interest in learning, losing confidence in education, and distracted by job opportunities.

There are, of course, challenges to implementing learner-centered education in such a rural area, where available teachers are mostly from rural areas or local communities, and often take teaching as a stepping stone for other jobs rather than as a career. They are often from rich cultural background, but economically poor, lacking in confidence and cultural capital.

Policy development must be responsive to local needs for effective implementation. For developing policy to promote education that respects diversity, we need to think about whether cultural resources can be used for curriculum reform to build up cultural capability and dignity in students, whether local cultural values can contribute to learner-centered education, and whether teachers can develop into local elites with both cultural expertise and professional dignity so that they can bring about curriculum reform for learner-centered education.

Book Talk: Sikaune Saili

Mr. Khaga Raj Baral in conversation with Esha Thapa

August 24, Day 1

MODERATED BY : Ms. Richa Singh

Where did you find the inspiration to write the book?

The book is a recollection of my own experience being bullied in school. As a student of literature, I think it was natural that I wanted to write a book about my experience.

You have written in your book that “bullying happens everywhere, and can be done through any media. But the bullying that happens in school has an especially negative impact on children. Parents and teachers should be aware so that they can stop this kind of behavior” (p 18). There are a lot of children like you in Nepal who are bullied in school and who are misunderstood at home and don't get help to overcome that bullying. What can we do for them?

Bullying is still prevalent today, but has evolved. When students drop out we don't recognize bullying as a cause, but among the students who started grade 1 in 2007 and did their SLC exam in 2016, 8-9 lakh were missing from the education system. Along with poor education, maybe bullying also caused a lack of motivation that caused so many drop outs. Often, students are bullied by friends and even teachers! The pressure to score high grades also has negative effects, especially in those circumstances.

But most of the time, policy interventions are deemed ineffective. Bullying is prevalent even in Japan and Denmark. And there are some counselling services, but they are not effective when children don't share what is going on in their lives. My own experience was that I didn't want to go to classes and wished for the teacher to be absent. Ragging and bullying are unacceptable, and have deep psychological effects. Plans for anti-bullying policy will only be effective if implemented carefully and rigorously.

How possible do you think it is to meet the 2030 goal to become a middle-income country?

It is not impossible. But youth and skilled manpower needs to be here to develop the country. That is a cultural challenge for us because the society places a high value on people who go abroad, get permanent residence somewhere else. Change can happen through education and motivation to serve the country.

What changes should be introduced in the system for these changes to take place?

We need to teach practical skills in the classroom, both in the technical and vocational stream, as well as in the regular stream. We also need to treat students properly– and with respect. This helps them stay motivated, and makes them want to do well.

10 Steps to Radically and Rapidly Improve Public Education in Nepal

Mr. Rajan Maharjan and Mr. Sagendra Shrestha (Collaborative schools network)

August 24, Day 1

MODERATED BY : Ms. Richa Singh

These are the steps that Collaborative Schools Network has come up with after 4 years of experience working in community schools, and increasing student numbers by 225% in those 4 years.

1. Open and competitive teacher recruitment: Schools should be able to get good teachers, depending on their needs.
2. Greater Accountability: Currently, false data is reported from the school level up, increasing student numbers. More importance is given to quantity, rather than quality.
3. Overhaul initial teacher training: Right now, teacher preparation involves no training, and is just theory-based. The quality and skills of incoming teachers is not up to the mark. Many teachers participate in trainings but don't implement what they learn inside their own classrooms.
4. Improve government textbooks: Books lack detail. When we know that teachers follow books word by word, why not give them a good book to follow, with interactive activities for every lesson?
5. Higher status, skill, and salary for school Principals: There is a difference of just Rs. 500 between the salary of a Principal and that of a teacher in public schools. Principals should be paid more, and should be nominated based on their capability rather than years of experience in teaching.
6. Equalize the status and salaries of primary and secondary teachers: Secondary school teachers get a bigger salary than primary school teachers. This implies that primary school teachers don't need many skills, and incentivises skilled teachers to move to secondary classrooms. This is flawed. Early education is the base of all learning. Primary and secondary school teachers should be paid equally to encourage more skilled teachers to stay in primary classrooms.
7. Increase teaching time: The government mandates 190 teaching days per academic year, but many public schools don't reach that number because of numerous obstructions. Maybe awarding the schools that meet this minimum will increase teaching-learning time.
8. Schools full of love: Teachers need to understand students' needs, be polite, and try to bond with them. For example, if students are not doing well in academics, the school should have free coaching; if a student is absent, the school should call their guardians.

The 8 points are difficult to implement but with the right mindset it is not impossible. Improvement is urgent at this point. And although many of these steps are policy-level, there are some that can be, and have been, implemented. It is important to focus on improving management, and improving teachers' habits (for example making lesson plans).

RNDA Internationally and in Nepal

Dr. Naila Khan and Dr. Shanta Dixit

August 24, Day 1

MODERATED BY : Ms. Archana Rai

Neurodevelopmental disorders (NDDs) are a set of disorders that can cause functional limitations in children. The prevalence of NDDs is increasing in low-income countries. Often, it prevents children from participating fully in their societies.

As of 2008, the most used screening tool worldwide was the Ten Questions test, which could identify at-risk children. However, there are three stages of identification -screening, assessment, and diagnosis. No developing country has been able to go beyond screening in twenty years due to the lack of the kinds of professionals (child physicians, child psychologists and therapists) necessary for assessment.

The Rapid Neurodevelopmental Assessment (RNDA) (rnda-bd.org) is a tool that was developed in Bangladesh by a team of committed researchers, including physicians, developmental pediatricians, child neurologists, neuro-epidemiologists, child psychologists, special education teachers, and developmental therapists whose aim was to simplify the multi professional team (MPT) assessment. The tools have been validated against psychometric tests and tests of adaptive behavior which were either developed or adapted for Bangladesh. It is a thirty minute tool that can be administered by people who have graduated college or high school. It has been applied all over the world, including with children born to climate refugees mothers in Bangladesh, with aboriginal babies in Australia, and countries as far as in Fiji, Haiti, Guatemala, Kenya, Zambia, India, and Bhutan. In Bhutan, the test has buy-in from the government, and is administered by all primary school teachers.

Instead of diagnosing kids with a mental disability, the RNDA focuses on identifying if they can complete simple tasks that allow them to do simple tasks by themselves. The RNDA does not look at emotional development, family background, intelligence, or personality of the children.

UNICEF is now working towards the institutionalisation of RNDA. In addition, The WHO's The International Classification of Functioning, Disability and Health uses the "F Words" to talk about the concepts covered by the RNDA; fitness, function, friends, family, fun, future. Studies have also used the RNDA as a tool to look at different NDDs in different populations.

NEPAL

There is an RNDA training of trainers at Kanti Hospital with theory-based lessons and practical experiences. So far, the screenings of one hundred thirty six children show that there is a high consumption of junk food, as well as high levels of stunting and wasting. Contrary to expectations, young children are shorter (stunted) in relation to the average height of the population.

Study Of Psychological Problems In School Children

Dr. Pashupati Mahat (Senior Clinical Psychologist, CMC-N)

August 24, Day 1

MODERATED BY : Ms. Archana Rai

According to the WHO, 10-20% of adolescents and children have mental illnesses. Bullying, depression, loneliness, anxiety, attempted suicide by adolescents, mostly 13-17 year-olds, are examples. Such problems often contribute to students dropping out and reduced achievement.

In Nepal, 5 % of children and adolescents have emotional and behavioural problems. Half of adult mental disorders start at adolescence. Thus, prevention and early detection and treatment programmes are important. This study used mixed methods to assess the nature of psychosocial problems in school children and its impact on their learning capacity. A total of 1545 students from 46 schools in four districts attended screening. In addition, there were some focus group discussions conducted with parents and teachers. Data was analysed using quantitative and qualitative procedures. Common emotional and behavioral problems observed were anxious-depressed (17.2%), withdrawal-depressed (15.8%) and somatic complaints (16.9%), scholastic problems 7.3%. In addition, 21% of students reported feeling low levels of happiness. Higher percentage of boys (50.6%) have emotional and behavioral problems as well as scholastic problems than girls (49.4%), and students of primary grades are more vulnerable to emotional, behavioral, learning problems and more likely to drop out of school. Higher rate of psychological problems were observed in Janjati students, followed by Chhetri and Dalit ethnic groups.

However, there is a lack of understanding of emotional, behavioral, learning problems such as anxiety, depression, attention problems, school truancy, behavioral problems, and severe form of mental health problems and their impact on daily functioning of individuals.

It is imperative to invest in the psychosocial well being of children in schools. Findings of this study can serve as a guide in the development of policies to create child-friendly classroom environments and build counseling services for students and parents at school. It should prompt teachers and parents to think about how to create a better studying, teaching and learning environment in schools and at home, and to use different teaching methods so that all children can learn well.

Teacher Service Commission

Dr. Tulasi Thapaliya

August 25, Day 1

MODERATED BY : Ms. Kausalya Khadka

Despite the fact that the government spends a lot of money on teacher training, the quality of classroom teaching in Nepal's schools is not at par with the rest of the world. It is necessary to make the teaching profession more organized by reexamining the steps that the Teacher Service Commission) takes to give teaching licenses and possibly improving the selection process of teachers.

For that, we need to examine the following questions: what is the curriculum for teacher preparation like? How is ability measured? Teachers should be selected through a primary exam, written exam, and interview process. It is also necessary to create a new format for measuring teacher qualification: managing learning, use of information and curriculum technology (ICT), continued professional development, communication and collaboration, and skill in teaching. Teachers who continually improve should be identified as distinguished professionals.

Assessment Of Curriculum

Mr. Lekhnath Poudel

August 25, Day 1

MODERATED BY : Ms. Kausalya Khadka

Curriculum evaluation is done to determine if curriculum brings intended results, and to gather data to help improve the curriculum. There are different ways of assessing the curriculum, including opinion gathering, content analysis, expert assessment, student assessment, performance assessment, etc.

In addition, there are also three kinds of curriculum, intended, implemented, and achieved. There is usually a gap between achieved and intended curriculum, which teachers and educators try to minimize as far as possible.

Ongoing work in the field of curriculum include advancement in science and technology, life skills, value based education, diverse needs inclusion, competency based strategies, and assessment. But there is also a challenge in evaluating and updating the curriculum; children have diverse needs and conditions, there is a multiplicity of stakeholders, and it is also difficult to measure outcomes.

Effective Ways to Improve the Quality of Education for Marginalized Girls in Nepal

Dr. Ananda Paudel and Mr Nabin Lamichhane (DFID)

August 25, Day 1

MODERATED BY : Ms. Kausalya Khadka

The Girls Education Challenge is a project by Voluntary Service Overseas (VSO) and Mercy Corps whose vision is to accelerate learning of marginalized girls. There are currently 42 projects in 17 different countries that design interventions to address the complex intersectional barriers that prevent girls from accessing education. In Nepal there are five different projects which aim to improve learning opportunities and outcomes for about 31,000 marginalized girls.

STEM II is a project in Kailali District. Among the participants, 54% belong to the Tharu minority. After-school and weekend Girls' Clubs, classroom management, parents' engagement sessions, and the insertion of gender issues in School Improvement Plans are aspects of the program design. Based on an independent evaluation with a treatment group and a control group, the project has contributed to an increase in both literacy and numeracy. This can be attributed to a few factors including improved teaching, extra classes, and reduction in household chores, and the girls club, which allowed girls to review their progress in groups.

The Sisters for Sisters program helps girls transition from basic to secondary education and equips them with skills so that they are able to become leaders and influence /control their own sexual and reproductive health. The program uses a mentoring approach in which big sisters (community volunteers) mentor little sisters (girls in school) in one-on-one and group sessions, whose topics range from school attendance to menstrual hygiene, peer support, and life skills. Over 2,000 little sisters have finished SEE and transitioned into grade 11 since the beginning of the program. Having observed positive changes (including increased confidence in girls and their increased involvement in family decisions) a few local governments have even started adapting the mentoring approach for their own youth.

Teaching Learning Assessment

Mr. Sudip Neupane

August 25, Day 1

MODERATED BY : Ms. Kausalya Khadka

Although assessments are helpful in measuring students' knowledge, skills, and learning, most educational institutions in Nepal are obsessed with paper-pencil limited-time tests. It is very rare for educational institutions in Nepal to do both summative and formative assessments.

This study aimed to explore students' perception of examinations in English (which is taught as a foreign language) and to explore their strategies for exam preparation. It had 15 participants from the Kathmandu valley aged 12 to 16 years old, who were given an open-ended question to answer about examinations.

Students commonly felt that an examination was an assessment of what they did not know rather than what they did know. However, they also did benefit from the discussion of the answer sheet after they had been graded. Examination fear was also commonly seen in students, who were afraid that they would be judged by their marks or penalized for difference of opinion. They often felt that there was no respect for their ideas and an encouragement to write only what the teacher had taught them.

Students reported that memorization, notes, memory maps, self explanation, and preparation of chits (used for cheating during the exam) were commonly used strategies for examination preparation.

Environment Video, Screening and Discussion

Wildlife Conservation Nepal

August 24/26, Day 1/ Day 3

(Wildlife Conservation Nepal used videos showing the importance and relevance of ecological studies.)

Often, our view of education is so narrow that we fail to acknowledge that subjects that are outside the realm of what we are used to (which is Language, Math, Science, and Social Studies) are not "real subjects", are a waste of time, and have nothing to contribute to students' growth. From a young age, students are pressured to become doctors or engineers or lawyers, and ridiculed for wanting to do other things. In fact, parents often explicitly choose to send their children to schools which offer none of these "ridiculous" options and focus just on the curriculum and on exams.

However, studies in these areas are very important, not just because they broaden children's horizons, but also because they teach them 21st century skills, such as collaboration and creativity. Students become more confident when they can bring home a product that they have created themselves.

Wildlife Conservation Nepal has been collaborating with the Ministry of Education since 2075 to promote ecological studies as an affordable option for every school, with different grants and commonly-overlooked resources like unused land at the school's disposal.

Education for Economy and Environment: Janajagriti Basic School

Mr. Madan Rai

August 25, Day 2

MODERATED BY : Ms. Bilquees Banu

The Janajagriti Basic School in Dandagaun, Khotang places priority on skills-based practical education. Since the last five years, the school has been teaching students farming, fish farming, animal husbandry, swimming, and home construction. Students also get to learn gardening, sewing, woodwork, masonry, horse riding, cooking, and driving. The students learn how to operate machinery that helps with daily farm-work, and how to use information technology and computers.

The school is run by the Subhadra Madan Foundation and has 200 students from 52 districts and 42 different communities of Nepal. Students are taught almost all the practical skills that they need for life in their communities. The school educates children in 12 different fields including languages, food, shelter, entertainment, humanities and management, and the creative arts.

Janajagriti Basic School teaches practical skills that can be used by students to become independent, rather than suffer unemployment even after finishing their higher education, as has been the fate of many Nepali youth.

Experience Sharing

Ms. Sristi K.C. (Founder President, Blind Rocks)

August 25, Day 2

MODERATED BY : Ms. Amita Koirala

After she lost her eyesight at age 16, Sristi KC went to various colleges for admission but was rejected by all of them. They made a host of different ex-

cuses; there were no teachers who could teach her, it would be time-consuming, she would require additional accommodation, etc. When she finally enrolled, Sristi felt like she was treated differently from other students. She did not have access to textbooks and study material, and felt left out.

Our education uses a banking approach to education, where the teacher deposits knowledge in the students' brains, without acknowledging the critical consciousness of students. While the real world measures success only when we implement our knowledge logically and rationally, our education system only assesses people based on their marks. There is no consideration for the students' learning.

The education system is targeted towards a small group of students, and wants everyone else to adapt. The environment is less than ideal for most students, with or without disabilities.

In fact, schools should be able to offer multiple methods of course information, rather than just textbooks, and allow multiple means of expression rather than just writing. There should be multiple means for engagement, such as games and performance, rather than the monotony that is currently prevalent. Teachers need to work more as a catalyst for learning.

There are two models with which the education system can deal with disability; the medical model, which views disability as a problem, and the social model, which sees it as a condition without any positive or negative connotation. The social model works on the assumption that people are "disabled" not just because of their conditions, but because of how society treats their condition. It helps people with physical differences accept and embrace their bodies, and to implement equality and equity.

Teacher Management in Federal Nepal: A Policy Perspective

Mr. Min Bahadur Shahi

August 25, Day 2

MODERATED BY : Ms. Amita Koirala

Teacher Management includes teacher education and qualification, licensing, recruitment, placement and deployment, transfer, professional support, evaluation, and retirement. In Nepal, teacher management has been a problematic issue, with conflict among the three levels of government, different categories of teachers, as well as nepotism, favoritism, politicization of education.

In other federalized countries such as India, Brazil, Russia, the USA and Kenya, the local, provincial or state, and federal governments work together, sharing duties for recruitment, deployment, evaluation, retirement, and funding of teachers. The exact roles of the different governments and their units differ by country.

In Nepal, however, there is a lack of consistency in what different legal documents say about teacher management. According to the Constitution of Nepal (2015), the local government is responsible for both recruitment and deployment of teachers. However, the report of the Higher Level Education Commission (2018) says that the Teacher Service Commission recruits and local government places teachers. The Education Rule of Mahalaxmi Municipality, Lalitpur (2018) is consistent with this report, and dictates that permanent teachers should be selected by the Teachers' Service Commission and deployed by the local government.

There are pros and cons to both the grassroots model, which is more democratic, and the authoritative model, which is controlled by the center. But there should be a mid-way that works best for our own circumstances in the newly federalized Nepal.

Life Skills Education and Resilience in Children for Better Future

Dr. Gunjan Dhoju

August 25, Day 2

MODERATED BY : Ms. Kausalya Khadka

Nepal is yet to attain Education for All. Literacy rate is still low, dropout rates for children are high, and there is great gender and economic disparity. One important factor related to school dropout is mental health and well being. This ultimately affects their ability to lead a fulfilling and productive life.

The inclusion of life skills education as part of the school curriculum, that takes into account the mental health of children, is necessary if we are to promote their overall well being. A desk review conducted as part of the research on "Resource Mapping and Needs Assessment for Child and Adolescent Mental Health Services" found that the education system is adversely affected by the aftermath of past conflicts, natural calamities, climate, topographical challenges, economic and social factors.

Amidst the chaos, the education system continues to take a blanket academic-focused approach, resulting in high stress levels in children, without

development of necessary skills to tackle daily challenges. This ultimately fails to prepare them for life's future challenges. One important factor affecting the education system in Nepal is the poor awareness of mental health of children and adolescents among teachers and parents. Most of the schools do not have counsellors for students, and the psychological needs of students are not addressed. There is also the tendency to discriminate against children who are weak in studies or those who have mental health issues. Corporal punishment continues in many school, although deemed punishable by law. Special schools and inclusive schools are not available in most parts of Nepal.

Merely focusing on literacy will not equate to education. Significant reforms are needed in the educational sector in Nepal. The current education system needs to be re-evaluated, and child focused education has to be adopted not just to meet the academic needs of children, but also to include mental health promotion and life skills. The system of evaluation also has to be changed to promote a healthy learning practice. Life skills approaches have to be incorporated in schools as part of the regular curriculum. This will be a step towards holistic education and well being of children of Nepal.

Quality Circle For Quality Education: A Learner Centered Approach

Ms. Tina Saud

August 25, Day 2

MODERATED BY : Ms. Archana Rai

Quality circle is a participatory method that can be used to solve problems in schools or in work places. Student quality circles, for example, can help solve issues such as bullying, homework overload, dirty classrooms and school premises, and internet addiction. Student quality circles can help students understand problems, work systematically to solve them, and to learn about participatory decision-making. By working together, students often develop collaborative and creative leadership personalities.

Quality circles were first developed in Japan in the early 1960s by Dr. Kaoru Ishikawa for the improvement of quality and productivity in industries. In the early 1990s Dr. Jagadish Gandhi imported the method from Japan and advocated it through the World Council for Total Quality and Excellence in Education (WCTQEE). It was brought to Nepal in the early 2000s by Professor Dinesh P Chapagain through QUEST Nepal (Quality Circles in Education for Students' Personality Development) a nonprofit non-governmental organization.

In the first step of the process, students use the Ishikawa diagram to identify the causes of the problem they have sought out to solve. With help from the diagram, they identify, analyze and solve their problems.

Remedial Education

Ms. Seema Acharya (World Education)

August 25, Day 2

MODERATED BY : Ms. Archana Rai

Most students in Nepal have low learning outcomes in Math, Science, and English. World Education is trying to improve learning outcomes for grades 4-8 by focusing on the early grades through a remedial education project.

The remedial package was developed after a study was done to assess Math, English, Nepali, and Science achievement in upper grades. We found that students were not at grade level. This was due to a lack of subject teachers, teachers who didn't have the necessary skill-sets to be teaching these subjects, and a lack of resources. Students did not have a strong Mathematics foundation.

The remedial education project by World Education prioritizes the development of foundational knowledge and uses early grade curriculum along with higher-level skills for students in the upper grades.

The project was first piloted in 27 project schools through the Math camp. For English and Science, the package is based on classroom remedies, but for Math there is a remedial camp. In a diagnostic test after the two-week pilot Math Camp, it was found that the camp did boost results. There was no effect of gender on the impact of the study, according to these results. The project has now reached implementation phase, but donor support has been withdrawn. An additional component in this phase is on-site support for teachers, based on the learning that teachers often face difficulty implementing what they learn during training. Subject experts now communicate with teachers who need help with the curriculum.

Disaster Risk Management in School: Earthquake Safety Solutions

Mr. Dev Kumar Maharjan and Ms. Smriti Pokharel

August 25, Day 2

MODERATED BY : Ms. Sudha Ojha

In a country like Nepal, which is prone to disasters such as earthquakes, floods and landslides, we need to have proper disaster risk reduction plans

in order to contain the loss of life and property, and to ensure that students can continue going to school. Damages of the 2015 Barpak earthquake totalled 31,320 million Nepali rupees, mostly incurred by the public sector, and a huge proportion incurred by the education sector.

To reduce the risk of such disasters, the process of updating building technology using retrofitting and disaster preparedness is ongoing. The Sendai Framework for Disaster Risk Reduction for children, as well as some of the Sustainable Development Goals, including targets 4, 9 and 11 focus on building resilient infrastructure that is safe and sustainable.

The Sendai Framework uses non-formal education through schools, after school clubs and extracurricular activities to educate people about disaster risk resilience and puts into place guidance and regulations for schools as well as governments at all levels. Funding is necessary for physical and structural risk reduction, including retrofitting and rebuilding, as well as capacity building to make school response plans functional.

Comprehensive School Safety Framework Policy and Practice in Nepal: An Effort Under the NICSS 2018/19

Ms. Pratistha Pyakurel

August 25, Day 2

MODERATED BY : Ms. Sudha Ojha

The 2015 earthquake destroyed many schools, as well as classrooms and WASH facilities because schools were unprepared for the impending disaster and limited capacity for school safety. School safety tools were scattered in some geographical locations throughout the country.

Several policies drafted since 2015, including the Safe School Policy (draft) 2075, School Improvement Plan Development Guideline 2074, Disaster Risk Reduction and Management Act 2074, Local Government Operation Act 2074, Local Disaster and Climate Resilient Planning Guideline draft 2074, and the School Sector Development Plan 2073/74-2079/80.

National initiative on Comprehensive School Safety (NICSS) has come up with a Comprehensive School Safety (CSS) Implementation Guide and Comprehensive School Safety (CSS) Communication and Dissemination Guide. There have also been capacity building and awareness campaigns in 14 earthquake affected districts. Training manuals were created, and schools have been assisted with making their safety strategies.

The initiative is focused on using the most effective tools to reach different audiences, and on promoting synergistic relationships while avoiding duplication. The NICSS helps to achieve SDG 4 as well as the targets of the Sendai Framework for Disaster Risk Resilience.

Nature Connect: Learning Through Head, Hands And Heart **Ms. Sanjeevani Yonzan (Wildlife Conservation Nepal)**

August 25, Day 2

MODERATED BY : Ms. Swastika Basnet

The main cause of illegal wildlife trade is lack of awareness. We need an education system that addresses the real problems of the world today, including the conservation and protection of natural resources and environmental education.

We live in an increasingly individualistic society where most people are stuck in jobs that they don't like. A disconnect with nature is also linked to high levels of depression and anxiety in children. Teaching kids the importance of nature conservation in basic needs, medicine, mental health and culture is important.

Nature studies should be integrated in the curriculum since grade 1. Currently Health, Population and Environment studies starts only in grade 6, when students are entering their adolescence, which is a time characterized by rebellious behaviour. To actually create behaviour change, HPE should start in the earlier grades so that students will be aware of the effects of their actions on the environment and make informed decisions.

Rethinking and Recycling Waste in Schools **Brinda Dewan and Stuti Sharma (Doko recyclers)**

August 25, Day 2

MODERATED BY : Ms. Swastika Basnet

Kathmandu valley produces about 1000 ton waste per day. All of this waste goes to the landfill at Sisdole. A lack of awareness and practice, adequate planning, reliable private parties, and policies and guidelines contribute to the problem of waste in Kathmandu.

A green curriculum will be able to establish practices for recycling at schools so that the students can learn to be aware of the consequences of their actions and act more responsibly. Waste education is interdisciplinary. Implementing segregation at source helps students understand the source of the wastes and what actions can be taken to minimize it.

Doko does awareness workshops where they teach about linear economies (where goods are produced, used, and then end up in landfills) and circular economies (in which goods are repaired, reused, and recycled), places segregation bins in schools and workplaces, and takes recyclable waste during scheduled pick-ups. They also make waste impact reports, which help clients learn what resources and how much they've saved by recycling.

Role Of Community Radio to Enhance Quality Education **Mr. Deepak Acharya, Mr. Shreedhar Neupane and Mr. Bhola Sharma** **(ACORAB)**

August 25, Day 2

MODERATED BY : Mr. Bolaram Pandey

There are 350 Community radio stations in Nepal. These stations focus on information sharing, education, entertainment, persuasion, motivation, and entertainment. Radio can be a very important and effective medium of informal education. Interesting models of using the radio for education have been implemented in Mali, Nigeria, Rwanda, and Burundi.

There are many examples even here in Nepal, where the radio has been effective as a platform for discussion, as well as a medium for the dissemination of information. There are examples in many districts where radio stations have helped schools raise money for a new building, just by disseminating news about the construction. Often, radio stations also prepare reports about good practices in local schools, so that other schools may emulate these practices. It helps because it is easy to pass along information in the midst of playing music.

The Association of Community Radio Broadcasters (ACORAB) has announced that doors will always be open for teachers who want to use the radio for teaching purposes, or to raise awareness about educational issues. They are also open to broadcasting interviews with experts and successful teachers about effective learning. Radio is also a good platform for parenting education.

Along with being cost efficient, radio is effective because it can spread information and connect people even in hard-to-reach rural areas. It makes learning accessible to the masses. In addition, it can generate awareness, be a medium for news, and spread positivity and information about things such as effective parenting. Both teachers and students can get advice and learn about new opportunities through the radio. And the best thing is, that anyone can work at a community radio to make these changes.

Learning and Nature

Dr. Tirtha Bahadur Shrestha

August 25, Day 2

MODERATED BY : Ms. Swastika Basnet

Who am I? Students should not forget that they are a life, a human. We only have one life, one earth and endless opportunity.

Quality education should help students connect a point to the universe. In a federalized state, much priority is given to the local curriculum, and the purpose, importance and need of a local curriculum has been discussed extensively. Schools have started making their own local curricula and using local materials.

For example, in Devdaha, Rupandehi, local curriculum surrounds the study of the Buddha's times. In Rasuwa, local curriculum has been made around the Langtang mountain range. Such local curricula has to educate children about local cultures, natural resources, and climate change.

Nature is the source of all cultures. Children must not fear the forests, but experience them. A study of nature should include discussions and field trips, and must include local plants as well as agriculture.

All Kinds of Minds in the Classroom

Ms. Sonya Phillip

August 25, Day 2

MODERATED BY : Ms. Swastika Basnet

All children are different and have different learning profiles. If we teach everything in one way, we disregard most of our students.

Children are sent to school to learn academic skills such as reading and writing, but also to learn subskills which allow them to decode words and understand texts. Our schools do not cater towards children who have attention problems, appear tired, yawn, are unable to sit still, work in spurts, and miss information. In addition, schools are skewed towards students who are linguistically capable. We don't have patience for weaknesses in spelling or order. There are also students who have problems in their neuromotor functions or social abilities. Students with compromised fine motor skills are often unable to use scissors and don't have good handwriting. Others take time to grasp abstract concepts such as democracy or irony.

Even though we have different minds in the classroom, we judge them all the same way. In essence, we judge a fish by its ability to fly. As educators, we should be more humane towards children who are not able to do something and ask what it is that's preventing them from excelling at it, rather than goading them to it, as we often do.

Complaint Response Mechanism

Mr. Laba Raj Oli

August 26, Day 3

MODERATED BY : Ms. Amita Koirala

We decided to have a Complaint Box in Schools, as an opportunity for students to voice their concerns and give suggestions to the school administration. The complaint box itself cost Rs. 500. Complaints would be addressed by a committee consisting of a teacher, a student, and a member of the management committee.

Part of the goal of employing the complaint box and CRM was to understand the children, to teach them how to speak out for themselves, and for the prevention of small incidents within the school as well as bigger incidents such as self-harm and suicide attempts. It was also expected to increase the active participation of students, such as girls in sports.

CRM was identified as the perfect measure because it can work with limited technology, is sustainable, easy to set up, and promotes two way communication. It is especially important for girls and marginalised students. It also ensures a safe environment for students, as envisioned by the law, and is a part of the strategy for equity. A three-day training about counselling is needed before setting up the system.

This practice was started in specific schools, and then adopted by the Nepal Government. It is now compulsory for secondary schools in the local units where it has been adapted.

The success of CRM depends on seven key assumptions, including an environment which allows students to realize what their dissatisfactions are, the belief that their concerns will be addressed, an environment that encourages discourse, the assurance of immediate actions as far as possible, the belief that key decisions will be passed onto a higher authority, a comfortable environment for students, and trust that the process is made for the benefit of children.

Complaints and feedback span a variety of issues, including school facilities (lack of proper furniture and toilets), the quality of instruction (when students don't understand something), teacher behaviour (good and bad), bullying, sexual harassment, and child marriages. There are differences between the kinds of complaints made based on student qualities such as gender, disability status, and economic conditions. For example, female students often complain about the lack of clean toilets.

CRM mechanisms bring around changes such as cleaner toilets, better drinking water facilities, decrease in corporal punishment, and increased transparency for both teachers and students in schools. Teachers have been able to stop child marriages and dropouts because of this mechanism. It has failed to make a difference in factors such as teacher and student attendance.

The process has taught us that we had knowledge gaps, especially concerning gender based violence and corporal punishment. It has also taught the importance of building an environment that encourages students to use mechanisms such as the complaint box. In addition, we have realised how important it is for students that the library and toilets be accessible to the students, and not in front of the teachers' room.

Education for Sustainable Development in Secondary Schools of Nepal

Ms. Dipesh Dulal

August 26, Day 3

MODERATED BY : Ms. Amita Koirala

Education for Sustainable Development (ESD) is not a new term any more. Education has been seen as a promising tool for sustainable and equitable transformation of the world. The fieldwork conducted in schools and government's offices revealed that Nepal's attempts in implementing ESD in secondary schools have neither been properly planned, nor been properly implemented. In fact, Nepal has been passively accepting agendas set by global institutions like UNESCO and submitting to directions set by the global architecture of education.

Some positive aspirations in schools and individual teachers were visible; however their attempts in occasional pedagogic interventions and institutional partnerships have not proved capable of providing a mainstreaming framework for the contextualised- and successful implementation of education for sustainable development. On one side, Nepali schools and communities are observed to serve as living laboratories for inculcating stu-

dents with knowledge, skills, and values for enabling them to take informed decisions for further enrichment. On the other side, the majority of Nepali teachers seemed to need capacity-building in the ESD agendas.

While ESD itself as agenda can not be end for global utopia, place-based and critical approaches in teaching have proved to be positive steps in achieving the same desired good.

Perception of School Actors on Corporal Punishment

Ms. Priti Shrestha Thapa

August 26, Day 3

MODERATED BY : Ms. Amita Koirala

There is a huge gap between policy and practice in terms of corporal punishment, especially in the secondary level. Punishment is still used as a tool for inciting fear; regardless of whether students are personally punished or not, it incites fear in them.

During open-ended interviews, one Principal said that corporal punishment brings good discipline into the school. A teacher said that it is an effective mechanism to set an example; once students see someone getting punished, they are more likely to be respectful in class. Of course corporal punishment has more negative effects, such as on academic performance, students' motivation, and mental health. One student reported that it was hard for them to concentrate on their studies after seeing someone being punished. "It made me want to leave school."

The gap between policy and practice only bridges when we change our way of thinking and practicing. As teachers and school leaders, we should take proactive action and think about why certain children behave the way they do. As adults, we should try to see things from childrens' perspective, and act in a more just and empathetic way.

How Does Access to Education Predict the School Girls from Marginalized Families?

Mr. Sandesh Dhakal

August 26, Day 3

MODERATED BY : Ms. Esha Thapa

The lower class and marginalized families do not have the same opportunity for education or career as their wealthier counterparts. This study looks at the differences between higher, middle and lower class girls in terms of ambitions and career options.

Our participants (N = 259, MAge = 14.35) were divided by class, as well as by the type of school they attended (private and public, high diversity and low diversity), and were from a rural area in Nepal. They were asked different questions about their lives in school (eg their favorite subject), their career goals, and their self-efficacy, as well as their family background.

Results showed that girls from private schools achieved significantly higher exam scores as compared to government schools, independent of their socio-economic status. However, girls from low SES families in private schools were more likely to report lower academic self-efficacy compared to girls from low SES families in government schools. Girls from low SES families that attended prestigious, profit-oriented private schools had more ambitious career orientations than low SES girls in government schools; they were more likely to mention jobs with higher prestige and showed higher confidence in achieving these jobs than low SES girls in government schools. However, while this difference was marked between government schools and low-diversity private schools, they were not found between low SES girls attending high diversity private schools (where a large number of minority groups students received scholarships) and low SES girls attending government schools.

Perhaps the most serious question to consider from these results is the implications of high diversity in the school or classroom. How do diversity factors change the behaviour of adolescent girls from marginalized backgrounds?

Recommendation for Enhancing Quality in Education

Mr. Mahashram Sharma

August 26, Day 3

MODERATED BY : Ms. Esha Thapa

Student achievement is not only about the outcome as measured by grades but the output to society, family and friends. These recommendations are based on the problems that educators in our conference face in their daily lives. They highlight what our next steps should be to improve the quality of education in the country.

At the Conference on Quality in the Classroom (2013), we came up with a similar commitment to address the needs of students and their basic right to education according to the context of Nepal. A similar commitment will be released this year, based on the following suggestions that were received. The Kathmandu Commitment (2013) included the following recommendations and commitments:

- Define quality and revisit policy accordingly,
- Create an outline of what quality education entails,
- Focus teacher professional development on how to treat the students as well as the subject. Encourage the teachers to love the students not just the subject,
- Ensure on-the-field support for teachers,
- Make relevant curriculum,
- Respect students. Treat all students equally despite who they are and what their family background is.

There have been a number of important achievements after that year, the most important being the promulgation of the new Constitution, the implementation of the School Sector Development Program, and the insurance of free and compulsory education upto the secondary level.

However, many issues remain, such as inadequate investments in education, ineffective pedagogical methodology, lack of uniformity in structure, lack of trained teachers and facilitators especially for early childhood, lack of learning by doing methods, and high reliance on textbooks, exam-focused learning, lack of effective school leadership and/or training for school Principals, misuse of funds in the field of education, lack of investment by local governments, lack of good governance, etc.

At this conference, we have discussed many important questions about building a strong educational foundation in the early ages, closing the gaps between schools, strengthening the role of the local government based on the constitutional provision, etc.

The recommendations that came up repeatedly were to: formulate an education policy based on quality, develop research-based pedagogical approaches, and work on the capacity development of local governments to take responsibility for education. The full version of the Conclusions and Recommendations will be released at the Closing Ceremony.

Creating Sustainable Book Ecosystems Through Let's Read **Ms. Shameera Shrestha (Let's Read)**

August 26, Day 3

MODERATED BY : Ms. Sheelu Karmacharya

Geographical difficulties and tax reasons make books supply to remote regions difficult. The Asia Foundation's Let's Read is a digitization of books by Nepali writers to make it available all over and outside the country. The

app's motto is "Connect, Create [new books keeping children's emotions and needs into account], Read, Thrive."

In their mission to nurture reading habits among the Youth, Let's Read promotes local talent (writers and illustrators). They translate books in a way that the text is understandable and relatable to the children reading it. So far, Let's Read has translated over 2200 books in 22 languages and is used in 144 countries. There are 330 stories in Nepali for children of age 3-15 years, and stories are also being translated into languages such as Rai and Tharu.

Let's Read is building sustainable books ecosystems by supporting pathways for creatives, such as writers, translators, and artists, and creating opportunities in collaboration with publishers. They support meaningful reading opportunities by focusing on quality children's books that help develop the brain. The platform also helps bring international content into Nepal, while at the same time giving local writers an international platform.

In Nepal, Let's Read's partners span publishers such as Rato Bangala Kitab, Room to Read (which has published over 10000 books worldwide), and Sri-janalaya, organizations that work in education, such as Sikshya Nepal, and the Dilliraman-Kalyani Regmi Memorial Library, which hosts book translation events. In Cambodia, their biggest partner is Sipar, a publication that has published 6000 books in 2 languages.

Let's Read can be downloaded easily on mobile phones, and books have an open license, which means they can be downloaded, stored and printed.



1-10. Workshops and Presentations delivered by international presenters Dr. Naila Khan, Ms. Samara Gupta, Ms. Rachel Manandhar, Ms. Sara Levine, Ms. Mingrui Yang, Ms. Lavina Chong, Ms. Sonya Phillip, Ms. Judith Gold, Ms. Rianne Wiggers and Mr. Stephen Truax Eckerd



11-18. Participants engaging in the 3 days workshops and presentations



19-26. Participants engaging in the 3 days workshops and presentations



27-28. Participants engaging in the 3 days workshops and presentations **29-33.** Panel Discussion on Public Private Partnership, Transformative STEAM Education, Education Journalist: Issues in Education and Role of Community Radio to Enhance Quality Education



Conference Closing

Milan Dixit
Vice Chairperson
Rato Bangala Foundation

I am happy to share the summary of the Second International Conference on Quality Education (ICQE 2019) with you today. On the last day of this conference, I am hopeful that ICQE 2019 is not just the beginning, but the continuation of our communal efforts to bring quality into all classrooms of this country. Our goal isn't just "education for all"; it is learner-centered quality education for all.

These three days have proved that our teachers are motivated and determined. The participants' interactions at every presentation and workshop, as well as their curiosity and willingness to learn from each other at this conference has proved that teachers are willing to learn the learner-centered approach and further develop their skills.

More than 300 participants have come to this conference from public schools. The Rato Bangala Foundation is happy to be a part of this small effort to strengthen public schools, in collaboration with the Ministry of Education, Science and Technology. And we are grateful to you for aiding our attempt to spread the teaching techniques that we know in many directions.

Education plays a transformative role in lifting people out of poverty, raising living standards, and improving human development. It is important to transform our education sector to make sure that Nepal is a middle-income country by 2030, as per our country's development goals and Sustainable Development Goals.

The world is changing fast. Educators should think about what kind of education is most useful for the 21st century. The new age requires a modern curriculum and new patterns of thinking. We must change our approaches in the classroom to prepare children for this new world, so that they can succeed in an ever-changing world.

Right now, the world is undergoing many political, economic, social, and environmental challenges. Today's education should be able to help solve these problems. Students should be taught to live and prosper in a changing world. We need to think about what kinds of skills will be necessary in the future. What kinds of learning approaches and curricula should we adapt so our children can become capable in a changing world?

This is the day of information technology. The industrial age has long ended, but we are still creating a human resource that will follow orders without thinking. It is not enough to keep creating a workforce for the factory economy. Therefore, it is important to change our old-fashioned classrooms, and to start preparing students to function in the age of information, think logically, and take responsibility.

ICQE 2019 is part of a campaign to move forward in that direction, and an effort to create change in Nepal's education sector. We hope that this conference will be able to benefit Nepal's education system. Many of the participants of the conference are attending from different parts of Nepal. Here, you have gained some insight into international issues in education and best practices.

Like the previous conference, this conference had quality education as its central subject. The following six were its themes:

1. Learner Centered Early Childhood Education
2. Learning by Doing
3. Role of Leadership
4. Education Financing
5. Private Sector in Education
6. Education for Sustainable Development

First, the developments made in teaching techniques were presented, along with research, socio-political changes, and examples of quality education from within and outside the country. The following questions on quality education were discussed by the presenters and representatives who attended the conference:

- What are the things that we may be able to do to ensure that every child has access to quality education?
- What are the human and economic resources we might need to meet this end?
- How to ensure the availability of necessary resources?
- Which new techniques should we adapt?
- How will education be structured under the federal structure of governance to ensure quality education?
- What are the roles of the federal, provincial, and local governments?

The Sustainable Development Goals are interrelated. In Nepal, it is necessary to build structures that will allow us to take advantage of Public Private Partnerships. If the organizations and experts in Nepal work in close collaboration, our education sector and other sectors will benefit. Because those who work hard to bring change know their country.

Goals and Objectives of the Conference

This conference has given national, regional, and international practitioners and experts in education the opportunity to share their knowledge and skills regarding equitable quality education and contextual teaching and learning, so that we may be able to meet the goals of the School Sector Development Programme by 2030.

It has given us a platform to talk about quality education in the local and international arenas. A lot of sharing has happened. We have collected advice on how to strengthen the educational environment for quality and equitable education. We have also gotten the commitment to focus on early childhood education and development, with the understanding that education creates a strong foundation for the lives of people. We have discussed the ways in which to truly make schools child-centered and to come up with classroom approaches that work that will also strengthen Nepal Government's School Sector Development Program.

We have also started a network of stakeholders for quality education and made recommendations for the enhancement of quality education, which we released as the Kathmandu Commitment. We have talked about the role

of Nepal Government, Development Partners, local communities, school management committees, teachers, etc for the development of quality education, and discussed the indicators for early childhood development programmes.

At the opening ceremony, many speakers argued that it is important to transform Nepal's education as per the needs of the 21st century.

- Many developing countries allocate 20% of their national budget to education, but in Nepal's case that number lies at just 10.2%.
- School leadership must move forward with a dream. We can only have a successful education system if the government, Municipalities and Rural Municipalities, private sector, community, and guardians all work together. Like the African proverb says and keynote speaker John Snyder quoted, It takes a village to raise a child.
- The chief guest at the opening ceremony was honorable Minister of Education, Science, and Technology, Giriraj Mani Pokharel. He opined that it is very important to talk about education in today's context, with the new three tiered government system, and said that this conference was being held at the right time.
- The Secretary of Education informed us that such a conference was going to be held in all of Nepal's provinces. We have made the decision to do all these regional conferences by June.
- He opined that we need a training that works on only on the knowledge and skills of teachers, but also on their attitudes, and expressed his hope that this conference would be able to make everyone think hard and put forward the challenge: does anyone have a teacher training module that will change teachers' attitudes? I would like to humbly inform you that the team here at the Rato Bangala Foundation has trainings that change attitudes. We would be happy to spend our time and energy for the country.

There were a total of 75 presentations and 60 workshops at ICQE. The largest number of workshops were under the Learning By Doing category. Facilitators and presenters were present from all over the world, and all workshops under this category were based on interaction and experience. The workshop facilitators kept the 21st century skills in mind as they facilitated their sessions. They encouraged critical thinking and teaching methodology, which helps include the different intelligences of children in any classroom.

Many workshops were centred on Learner Centered Early Childhood Development and many presentations also focused on early childhood edu-

cation. The workshops focused on using age-appropriate materials and on focusing on learning through play methods. According to research, the experiences that children have during their early years has a deep and lasting effect on their brains. The experiences build the foundation for all education and life. But many early childhood programs go against what cognitive research says. This conference has shed light on the fact that educators need to pay attention to the whens and hows of childhood brain development.

Workshops on Linguistic skills, Social Studies, Math and Science education have shed light on the importance of the opportunity to collaborate, think creatively, sharpen critical thinking, and learn. Workshops and presentations on music and the arts have shed light on the importance of an integrated curriculum, and the important role of arts in developing the unique skills of different children. Math, Science, and STEAM presentations and workshops also focused on these topics, and the importance of teachers to understand these skills.

Another attraction of the conference were workshops on the leadership of educational institutions. Discussions were centered on the concept of school culture, and the values of school leadership as well as how school leadership affects school culture. School leaders shared the best ways to deeply listen to their colleagues and help them solve their problems.

We discussed many important topics during the panel discussions and plenary sessions, like investments in education, public-private partnerships, transformative education models, the role(s) of the media, the necessity to pay attention to brain development research while designing programs for early childhood, nutritious food for children, and debates about school improvement.

During the discussions, we came across a few conclusions about learning strategies that cater to the 21st century:

- It is important to employ child-centered, learning by doing and project-based learning strategies.
- We should be mindful of what cognitive research says about the kinds of curriculum to create, what kinds of experiences to create in classrooms, and what kinds of activities help create these experiences.
- We should create safe, risk-free child-centered environments for learning.
- We should work with parents to improve teaching and learning processes.

- We should foster logical thinking and analysis skills in children.
- We need to facilitate the research that children do.
- It is very important to ensure that children get nutritious meals. It was suggested that we ban junk food in schools.
- Age appropriate curricula should be employed.
- It is important that we have clarity about our learning goals, as well as what kind of skills we need to teach our children, and to what end.
- We must employ inclusive policies in school.
- Principals must work with the understanding that school leadership is an indicator of school culture.
- It is important to take advantage of public-private partnerships.

Recommendations

1. There must be indicators and national standards for early childhood education programmes.
2. We must think about how best to prepare early childhood teachers and facilitators. Currently, they are underpaid, yet they do the most important job of all.
3. Study the effects of classroom practices that are still used, despite being contrary to research about early childhood development, and get rid of such practices.
4. Develop indicators for early childhood classrooms. It is necessary that these indicators follow developmentally appropriate practice.
5. Make sure to implement learning by playing methods in the classroom.
6. Stop expecting children to read and write during early childhood, and stop using examinations to measure learning.
7. Use the knowledge gained from research to make sure that children gain the socio-emotional skills that will help them prepare for the ever-changing world.

The next Conference on Quality Education will happen in two years. We hope that we will be able to share many stories of success when we meet again. We hope that you will return for that conference. We also hope that a network of teachers will be developed from within this group.

I would like to end with the four points for enhancement of school education that our keynote speaker, John David Snyder talked about.

“these can be thought of as the “primary colors” of school improvement – by mixing and matching these four themes, each individual school improvement effort is more likely to move the effort in the desired direction.”

- Clarify your aims/ goals
- Improving schools is human development
- Context matters
- You cannot do it alone

In the end,

"If we teach today's students as we taught yesterday's, we rob them of tomorrow." - John Dewey

Thank you

Mahashram Sharma
Former Secretary
Government of Nepal

As an advisor to the steering committee, at the closing of a successful conference, I have many people to thank. I have been working in education for 35 years, first as a teacher, and then as a bureaucrat. In my time working in education, all over the country from Kalikot, where I started my career in education, to Lalitpur, I have had the chance to closely watch the Rato Bangala Foundation since 2054, and been able to work in close collaboration with them. This conference is an example of that collaboration. So when the Principal of Rato Bangala School made a commitment to do this conference every two years, I was very happy. I would like to thank her for this commitment made by the private sector.

Education is definitely the big priority of the government. A large part of the budget goes to education. However, regardless of that, after the earthquake of 2015, the actual first priority of the government has shifted to construction.

When the teacher appointment adjustment committee (shikshak darbandi punarbitaran karyadal) went to talk to the Minister of Finance, he said, and I want to share this today, that even though the focus has been on construction so far, it would shift soon. When the Minister of Education spoke to us a few days ago, he also hinted at the same. And the reason I shared the Finance Minister's words is because we all know that unless the Finance Ministry wills something to happen, it is very difficult to make it happen. But that is not enough. The Chairperson of the Parliament's Education and Health Committee is here today, and I feel like there should be some further commitments from the Nepal Government, to ensure quality education.

Miss Milan Dixit has already summarized many of the events of the last three days. We have received lots of suggestions from you over the last three days, and not all of them have been written down to be included in this speech. But I assure you that we will make a record of all of those suggestions and pass them onto the Minister of Education and to the Secretary, through the Chairperson of the steering committee. However, I would like to say a few things.

The first thing, which we have all agreed on, is that quality is not just big buildings and attractive infrastructure, but the learning levels and achievement of children. So while we do need to build buildings, it is now important for us to think about what happens inside the classroom. We cannot say we have quality education until we transform classrooms. We have to focus not only on input, but also to strengthen the learning processes in the classroom. Here, we talked about two things.

One was leadership and decision-making. We cannot make surface level decisions without considering the evidence. This suggestion was directed to all the people who work at a policy level within the government at the federal and local levels.

The second one was to promote learning by doing methods in the classroom. These were the two major messages of this conference.

The conclusions of this conference, and the commitment that participants have made together – the Kathmandu Commitment– will be discussed by the Ministry with all other stakeholders for implementation. The Ministry has made that commitment. And for that, I would like to express my gratitude to the Government.

I am going to read some of the conclusions of the conference. And beyond that, we will also put in writing the suggestions we have received from you, and create a document of the Conference Proceedings and distribute it among all participants. That is the commitment made by the steering committee. And once you receive that document, you can use it to monitor whether or not the movement is moving forward or not, and give feedback, and do your own work accordingly.

1. The first is to define quality clearly. We have still not talked about what quality education is. And even though we have worked to define some of these indicators through the Ministry of Education, we have yet to talk about the roadmap for that. Therefore the federal government must define the indicators of quality, and the local units must work on this roadmap.

2. Prepare basic infrastructure. The second suggestion was that it is not possible to achieve quality education without basic infrastructure. So we should build buildings, train teachers, have a uniform curriculum, and good textbooks.
3. The third is that all schools should get equitable resources. Right now, we focus a lot of our efforts on model schools, but all schools should get basic resources to enable them to do well. Students should be taught in a way that enables them to deal with the changing world. Right now, we are in the process of updating our curriculum. But what we need to remember is that as long as we can't direct our efforts in terms of how we want our children to be, we can not move forward with both the global context and the local curriculum in mind.
4. In the same way, we need to make a structure for the transformation of government schools based on the participation of stakeholders. Governance is a big problem in our education system and therefore it should be given top priority. We have talked about problems in the local governance of schools as well as national school leadership. If we can treat governance as an important issue and move forward, we can make progress on ensuring quality education for all.
5. Another recommendation is to strengthen the role of the local government in the transformation of public schools. The Nepal Government has organised different conferences in which there are conversations about strengthening the role of local government. It is important for us to learn from each other and start adopting best practices.
6. Similarly, we should place priority on the wholesome development of children through quality pre-primary education. Pre-primary education is the foundation of all education, and unless we are able to pay attention to the brain development and wholesome development of children, we cannot have quality education. We need to spend considerable energy on improving the foundations of education. If we focus on strengthening pre primary education, higher levels of education will see an effect of that. The topic of pre-primary education has come up time and time again during this conference. One of the conclusions for this conference is that pre-primary education should also be of a priority issue.
7. The other issue is that when we make policy, we should be based on evidence as to what policy interventions so far have achieved, and what needs to be changed. This was also one of the recommendations given to the Nepal Government by the participants of this conference.
8. Currently, education is the responsibility of the local government. The Federal government can only tell the local government to take action and support the local government. The education system cannot improve without collaboration between the Federal, provincial, and local governments. We also need to develop the capacity of the local govern-

ment. The way in which many of the mayors and vice mayors of municipalities have been providing leadership is praiseworthy, but in many places, it is not enough. Many local governments have not given enough priority to education. In some provinces, elected local representatives have also asked that the word education be removed from their list of responsibilities. Therefore, it becomes the responsibility of the federal government to work on capacity development of the local governments.

9. Another recommendation was to increase the appeal of the field of education as a higher education subject. We need to attract the best and brightest students into the field of education. What kind of students currently study education? After their SEE, what kinds of students take up education as a subject and then move on to studying education in University? We need to move towards attracting the best students towards education; that was one of the other recommendations of the conference.
10. Another recommendation was that graduates of University should spend at least 6 months teaching in rural areas.
11. Another suggestion was that education policy should be geared towards making adjustments for students with disabilities, rather than having the same cookiecutter notions of quality education for students.
12. The Government should focus on taking good practices, and communicating them to schools all over the country.
13. Another conclusion of this conference was that the government should focus on technical and vocational education, in order to meet the need for qualified human resources inside the country.
14. The government should give priority to promoting the sustainable development goals as it relates to the school environment, protection of schools, and quality education, in a clear, well-directed manner.
15. Participants of the conference also brought up proper utilisation of the education budget, teacher management, an increase of the education budget. There should be no instances where two teachers are running a whole High School, for example.
16. To meet the expectations of students who come to our school everyday and to allow them to have a safe and secure future, it is important for all stakeholders in the education sector to work together to ensure quality education. In this conference we have concluded that all stakeholders who are present today shall work together to ensure that these goals are met.

I would like to thank all of you for being present at this conference, many of you travelling long distances to be here and for sharing what you know. Thank you so much, Namaste.

Gita Satyal
Deputy Mayor
Lalitpur Municipality

I am very happy to be here today and would like to thank the Rato Bangala Foundation for organizing this conference. In fact these types of conferences should now be organized by the local government, but Rato Bangala has taken the lead, and their work is praiseworthy.

So what is quality education? Quality education should be seen in the context of children, of the conditions that they are living in. That is very important. In the three days of this conference, we have learned a lot of things and many of these are very important things.

But there are challenges in our education sector. The federal government currently allocates 10.2% of their budget for education. The local government has been working with education for only the past 2 years. Before that we did not allocate any budget to education, and even now, we allocate only about 5% of our budget to education. So where are we headed?

We talked about improving the quality of education. In reality there's an improvement in the quantity, but I really don't think that we have been able to make much progress in terms of quality. I believe that to make progress in terms of quality education, we first have to make budget commitments to education. In other countries, enough budget is allocated for education, and the goals for the education sector as well as for improvement are then decided on. In our country, education does not get enough investment. In these circumstances, regardless of how much emphasis we put into quality education, we are not able to deliver. Many of us here today work in the public sector. We know what the quality of education is like in our schools. When we talk about quality education, we need to think primarily about these schools.

When we were in school we used to have a subject called moral education. We used to study Sanskrit. We had technical education for 50 marks. And that has really helped those of us who went into agriculture or animal husbandry. Today, it is not the same. Our children go to school with books that are heavier than they can possibly carry, but I don't think that they are good getting an education that is relevant to their lives.

Quality education is determined by infrastructure, well-trained teachers, the curriculum, and textbooks. Part 8 of the Constitution gives local government the responsibility for basic and secondary education. But the Min-

istry of Education has sent us a notice saying that local governments are not eligible to make education policies. It has created a huge confusion for us, because while the Constitution gives us the right to take charge of up to secondary education, the Ministry tells us that they will make the policies. We are only allowed to implement them.

In these circumstances, how are we able to use our rights to do our duties? If we cannot make policies how are we expected to make work plans and how are we expected to implement them? In the presence of the Chairperson of the Education and Health Committee of the House of Parliament, as well as the Secretary of the Ministry of Education, I thought it was the best time to share our grievances regarding this. Because while we are talking about quality education at an international conference today, we also have to recognize that in these two years, we haven't been able to do much in education because of these restrictions. The Ministry and the Parliamentary Committee have to work to undo these restrictions as soon as possible. If you tell the local government to go ahead and yet have chains around its ankles, it cannot do anything. If we cannot think about these things when we talk about quality education, the education goals that we have for 2030 will remain goals.

At the end, I would like to thank the Rato Bangla Foundation again for organizing this conference, where national and international experts have gathered, in our Lalitpur municipality, and thank the Government for their commitment to taking this conference to all seven provinces of the country. Thank you for allowing me time to express myself!

Mahesh Dahal
Secretary
Ministry of Education, Science and Technology

First I would like to thank the co-organizers of this conference. I think conferences like these are in themselves good news for the country.

I am here for about two hours after becoming the Secretary of Education to express solidarity with you. I had heard about your event yesterday and came expecting that I would be able to learn something. And I have in fact learned a bit from Mahashram Sharma's presentation. The suggestions that we have received are energizing. They must be implemented. And while all of us have a role in implementing them the government needs to take the lead, acting as the roadmap, managing the necessary resources, monitoring, and supporting other actors. The work is for all of us to do- the public

sector, private sector, and cooperatives in education. The suggestions that have come up are actually of good quality, they are worth thinking about. I would like to talk about some of them here.

What is quality? What are the criteria for quality? One important suggestion was that it is important to define that. So far, the private and public sector probably have their own criteria for what quality education is. But as a state, we need to come up with a universal criteria for what quality means in our circumstances.

The curriculum. We are looking for a curriculum that focuses on learning. What are the best practices like nationally, and what are international practices like? What should it be nationally, given our unique circumstances? What does it mean for public schools and what does it mean for the private sector? We need to think about that because discussions have pointed to the idea that if the curriculum is good, that will contribute to better education.

But more important than that is the issue of good governance in education. I feel like that is the most important issue. Have we really been able to ensure accountability? Have we followed good governance to the extent that it can help improve education? What are the measures that we have in place to ensure accountability? How do we ensure that the resources given by the government, or those that have been raised from the community have been used transparently? I feel like the recommendation to build mechanisms for ensuring accountability is sound.

The Vice Mayor has just brought up the issue of the role of the local government in solving educational issues. There are a few conflicts, and I think it is normal for there to be some conflict. We are at a transitional phase, and there are some weaknesses. But let's sit together, the federal government, provincial government, and local government and come up with the solutions. Let's work together and develop a culture of collaboration. Quality education is possible if we work together.

Similarly, pre-primary education. If we teach children the right things, they can excel and become good citizens. And if we have good citizens, then the country will also develop. So the issue of early childhood education, I feel, is also an important one.

Another very important issue that has actually been felt all over the education sector is the lack of evidence-based policy-making. It is evident in other sectors too. So we should start the practice of actually looking at the

research that we ourselves have done before we make policies. Not just the local, provincial, and federal governments, but the school management committee should ensure that this is happening.

I was at the Ministry of Labour, Employment and Social Security before this, where we talked about creating 5 lakh jobs. The Ministry was mainly responsible for this, but trying to bring other actors into a collaborative relationship. Education is also an important factor for employment. So we need to think about whether the education that we are giving our children teach practical and employable skills? Is it education for life or not?

About 5 lakh of our total workforce comes from abroad, and about 4 lakh Nepali brothers and sisters work abroad. To end this rather unfortunate situation, we need to develop employment-oriented education. Education for work. We have also made some global commitments for education. Education is important for us to meet the Sustainable Development Goals, and to become a middle-income country by 2030.

We must work together. The proposal to do such kinds of conferences in all seven provinces is very good. We will talk to the provincial governments and work with them to make this happen. I am also excited to hear that the third ICQE will be organized in two years. I hope that at that conference, we will be able to share the progress that has happened after this conference. As Secretary of Education, I pledge to do whatever I can from the federal government's side to aid the implementation of the Kathmandu Commitment. Thank you.

Jayapuri Gharti

Chairperson

Education and Health Committee, House of Representatives

The speakers before me have said a lot of important things. Many discussions here have focused on quality education in universal terms, as well as in the Nepali context. The Secretary of Education and former Secretary have both made very promising speeches. I feel very hopeful about quality education initiatives in Nepal and about how they can contribute to making the lives of the Nepali people better.

Nepal has gone through relatively recent political change, and we have just promulgated a new Constitution. We are in the process of making laws according to that Constitution. All three levels of government are working on new initiatives.

Although Nepal is behind on educational development at the moment, we can hope for a fast-paced progress from now onwards. In the past, the Nepali education system was not very practical or based on life skills. Currently we are trying to move forward with an education system that is more technical, occupational, and life-skills based. I would like to request the Nepal Government and also the Education and Health Committee to take this forward.

I'm encouraged by the commitments that were released at this conference, organized jointly by the Ministry of Education, Science and Technology and the Rato Bangala Foundation. You have made the commitment to organize this conference in all seven provinces, and I am hopeful that it will have an impact on all 753 municipalities and rural municipalities.

Education is the foundation for the development, social change, and economic development of any country. We cannot move forward without education. And by education, we are not only talking about certificates, but of learning and skills and the practical use of what we study in school. If we do not give priority to such kinds of education, then we will not be able to meet the goals that we have set for ourselves as a socialism-oriented country. We will not be able to develop.

I did not have the opportunity to study like most of you did. I was born in a village, and there were not many opportunities for education. I share this story a lot in seminars and conferences; but in our whole VDC (Village Development Committee), there was only one woman, Kamala, who had been to school. There was the assumption that girls should not be sent to school. When I was in school, I had one female friend, Tara. It makes me very happy to see the Chairperson and Vice Chairperson of the Rato Bangala Foundation, Shanta and Milan Dixit. There is much prejudice against women in Nepal, and many differences between them that come from economic, social, and cultural factors. To some extent, the perception still exists in the fields of health and education, and every other field, that women are second-class citizens. I feel like Shanta and Milan Dixit are role models. It makes me happy to see women who have been able to get rid of, to some extent, these prejudices.

And I am proud of myself, because regardless of the fact that I was born in the village and did not get good educational opportunities, I am chairing of the Education and Health Committee of the Parliament. I am responsible for setting education laws, laws, and programs.

Many teachers and local representatives from all over the country are here today, and I have heard that we have guests from countries like India, China, America, Bangladesh and other countries. I am hopeful that this conference will play a big role in the transformation of education in Nepal.

The Secretary of Education talked about an education system that would be technical and life-skills focused. We need to proceed to think about how we can do that. It is also important for us to consciously make efforts to make sure that our children study things that are close to our lived realities. It is important for us to teach our students in cities where milk comes from, and our students in mountains what computers are.

According to the data, even today, 80% of our schools are public schools and only 20% of our schools are private schools. Our parliamentary committee is currently debating why over 80% of our schools are not quality schools, and we are in discussion with the Ministry too. If we can ensure the quality of 80% of our public schools, then more and higher-quality students would go on to higher education and lead successful lives. We need all of you to be a part of this discussion and to be excited about this effort.

When we discuss why we don't have quality education, some people point to teachers and others point to the state, and many point to other factors. But my understanding is that we don't have quality education in Nepal due to the problems of all actors, including the state, teachers, parents, and students.

I hope that all of us can be determined in this cause to have quality education— technical, life-skills oriented, practical education in Nepal, so that we can direct the country towards a prosperous and happy future. I would like to give thanks to the Chairperson of the Rato Bangala Foundation and members of the steering committee for organizing the conference, I hope that whatever you have learned in this conference, you can take it back to your schools, communities and regions. Thank you.

Baburam Poudel
Director General
Center for Education and Human Resource Development

I am just here to convey my thanks to all of you. Thank you honorable Chairperson. Through you, we have received some commitments from the state. As the co-organizer of this event, I would like to thank you for this commitment and for the valuable time that you spent here with us today.

I would also like to thank from the bottom of my heart, Mr Secretary, who is here today, as soon as he accepted the role of Secretary of Education, as our guide. From the side of both the co-organizers of this event, I would like to express my gratitude to Mr Secretary for the dedication that he expressed, on behalf of the state, to implement the commitments made at this conference. Mr Secretary's tenure at the Ministry of Education, Science and Technology has begun with this commitment. On behalf of all the stakeholders present at this conference today, as well as educators from around the world, I would like to express our commitment to do what we can to make this campaign successful under his leadership.

I would also like to thank, on behalf of both of the co-organizers of this event, the Minister of Education, Science and Technology, who was here with us during the opening ceremony of this conference.

The former Secretary of Education, who is from today the Secretary of Health, who played an important role as a special advisor to the steering committee of this conference and led us through these three days. Thank you Mr. Secretary.

I would also like to think the local representatives who are here today with us. The Mayors and Vice Mayors from places as far as Dhangadi are with us today, or have been with us during this conference. Their presence has given us additional energy and the hope that these lessons will go to all 753 local units of the country.

The Nepal Teachers' Association has sent a lot of teachers here, and committed to help take the lessons learnt at this event into classrooms. For this, I would like to thank the Teachers' Association.

On behalf of the organizers of this event, I would also like to thank the media persons who are taking what we say and spreading our message all over the country.

I would also like to thank the guests whose presence has inspired us, especially guests like John David Snyder, as well as facilitators from within the country and beyond. Our teachers have been sharpened after your sessions. I'm sure this newly-acquired knowledge will help transform their classroom pedagogy.

I would also like to thank all participants, and especially the Principal of the Rato Banagla School Miss Milan, her team, her extremely disciplined students and dedicated staff who have proved that it is possible to organize an

international conference inside Nepal. I would like to thank all the trainers and staff of the Rato Banagla Foundation, and all the members of my team, especially Mr. Deepak Sharma, who took charge of all the coordination necessary for this event.

Mr Secretary, the Rato Bangala Foundation has proved to us that they can find the resources, and if only the government supports their efforts, they can organize conferences like this again and again. It makes me very happy to see the Rato Bangala Foundation work with the belief that if everybody is strong– that if all their neighbors are strong– they will be stronger. They focus that energy not just for their own benefit and development, but also on that of others. Their team spirit has impressed me. I would like to thank them for this.

Thank you to all our sponsors including NCELL, Rato Bangala School, Rato Bangala Kitab, the European Union, Asian Development Bank, Janata Bank, BO2 and all our media sponsors. Shanta ji will probably do the formality of thanking me.

There is a shlok in Sanskrit “byaye krite vardhate ewam nityam, bidhya dhanam, sarva dhanam pradhanam”, which means that learning multiplies, the more you share it with others. I would like to appeal to you to distribute the skills that you have learned at this workshop with all 753 units, and all 25000 schools, and each classroom. I wish you good luck and a good trip back home.

Thank you.

Note of Thanks

Dr. Shanta Dixit

Chairperson

Rato Bangala Foundation

Greetings to all the guests and participants of this three day International Conference on Quality Education, initiated by the Ministry of Education, Science, and Technology, and thank you for making this conference a success.

We have been hearing from presenters and facilitators that the participation at this conference is very good. Participants are very active and eager to learn. Thank you to all the teachers and school leaders who are here with us from all seven provinces and 55 districts.

I would like to thank the members of the steering committee as well as my colleagues at the Rato Bangala Foundation, Rato Bangala School family, and Rato Bangala Kitab and our energetic student volunteers and interns. The Director General of the Center for Education and Human Resource Development and Chair of this Steering Committee Mr Baburam Poudel is also deserving of many accolades.

In addition, I would like to thank NCELL for financial sponsorship of this program, and especially for helping us register 300 participants from community schools. I would also like to thank the Rato Bangala School, Rato Bangala Foundation, the Rato Bangala Kitab, the European Union, Asian Development Bank, Lalitpur Municipality, Janata Bank, and The Asia Foundation for their support.

I would also like to thank the Conferences' media partners, Association of Community Radio Broadcasters, Studio Aakar, and Himal Media.

Nature dictates that everything must and, so shall our three-day long time together. We have already started feeling nostalgic but we are also feeling excited. There is a lot more to do.

In the opening ceremony, the Honorable Minister of Education, Science, and Technology, former Secretary of Education, as well as the Director General of the Center for Education and Human Resource Development and Chair of this Steering Committee Mr Baburam Poudel assured us that the transformation of public education would happen within the next decade.

John Snyder talked about how if we want to develop the education system, we must focus on our energy within the classroom and within the school, rather than on the outside environment, education office, Ministry, or Department of Education. He explained that the way we will be able to practice learner centred education is if we are able to produce skilled teachers and school leaders who are able to carefully observe what goes in the classroom.

In fact, the transformation of public education means that we are able to empower every child to make a good living for him or herself, regardless of the changing social, environmental and physical challenges of the 21st century. There is no alternative to quality education for this. The last three days we have all gained a lot of energy. I hope you will all continue to think about how you can change yourselves, and encourage your students to move ahead.

In her presentation, Milan ji showed that we have learned a lot during the last few days. The 60 workshops that qualified facilitators from within and outside the country facilitated, as well as the numerous presentations have provided you with an opportunity to learn more about the topics of your choice. That will help you to change the quality of education from your respective classrooms, schools, and places of work.

When I heard the suggestions for the Improvement of Quality Education that former Secretary Mahashram Sharma just presented, I feel that all of us now have increased responsibilities. We have become more serious about them. With the support of the Ministry of Education, Science and Technology, we will work hard to bring a change in learner centered early childhood education, learning by doing, and educational leadership.

On the one hand is this biannual conference, and on the other hand is our commitment to take this conference to all seven provinces within two years, and to try to develop an excellent education system throughout the country, bolstered by federalism as assured in the new Constitution. I see a future where provinces will organize these kinds of conferences and invite us. We have a dream where conferences in the provinces and the center will give participants opportunities to teach and learn and move forward in our campaign to transform Nepali education.

The changes that you bring to your workplace will be the real evaluation of this conference. I wish you lots of success for this delightful and promising undertaking.

I would like to once again thank the organizers and all present participants of this conference. This vast network for quality education has been able to set a milestone for the transformation of the education system and showed us a roadmap for the immediate future. We have a lot to do, and our bright future will motivate us to move ahead. I would like to invite you to lunch and formally announce among all of you that this conference has officially ended.

Thank you.



1. Three days conference review delivered by Principal of Rato Bangala School Ms. Milan Dixit
2. Concluding remarks by Former Secretary of Ministry Education, Science and Technology Mr. Mahashram Sharma 3-7. Closing remarks by Secretary of Ministry of Education, Science and Technology Mr. Mahesh Dahal, Deputy Mayor of Lalitpur Metropolitan City, Ms. Gita Satyal, Chairperson of Education and Health Committee House of Representatives Ms. Jayapuri Gharti, Director General, Centre for Education and Human Resource Development, Mr. Babu Ram Poudel and Chair of Rato Bangala Foundation Dr. Shanta Dixit 8-9. Closing Ceremony of Second International Conference on Quality Education 2019



1-3. Closing Ceremony of Second International Conference on Quality Education 2019
4. Certification of Primary Teacher Training Program (PTTP)



Feedback

Experience

Overall, participants felt that the conference was extremely fruitful and necessary. Words used to describe the conference included refreshing, composed, energizing, approachable and respectable. Many commented that it was run smoothly and provided a unique and important opportunity for educators from diverse backgrounds to come together and exchange ideas about quality education. One participant even said the conference was a turning point in their career.

These responses make it obvious that there is a demonstrated need for these types of gatherings. Educators and stakeholders plan to take the lessons learned from the conference back to their classrooms. Participants particularly enjoyed Lavina Chong's workshop, Stephen Eckard's workshop, and the perspective of Dr. Shanta Dixit. Participants were also glad that the conference would be conducted every two years.

While the conference was run smoothly, some participants expressed disappointment in the quality of workshops and presentations, expecting more experienced experts and more government participation. Some also wished workshops and presentations gave more in-depth information rather than vast overviews. Furthermore, participants felt overwhelmed at times by the number of presentations and workshops offered, making it harder to choose which ones to attend. The workshops were better received than the presentations. That said, some participants also couldn't attend the

workshops they wanted to because they were full. Some mentioned that because of the gap in the quality of schools between the private and public sector, certain sessions were more fruitful for certain populations than others, and many sessions were more catered towards public school teachers. In a similar vein, the language ability between presenters and participants was different, both among Nepalis and also with English speakers. Despite this, participants felt they knew how to translate what they learned to the field level. Presenters were grateful for the opportunity to share their own work as well.

Because of the incredible opportunity presented by ICQE to gather diverse stakeholders, it seems that participants were eager for more. There was great respect and admiration for RBS/RBF and gratitude for the opportunity to attend. For some, it was their first time attending a conference of this scale. Others felt it was better organized than many conferences in Nepal.

Suggestions

Most often, participants expressed issues with the online registration system and noted confusion prior to the conference about early bird dates and registration. There were also suggestions to improve communication throughout the conference, such as announcing where the rooms were located and communicating schedule delays. Furthermore, participants felt that too many parallel sessions were happening at once, and fewer would have been better to help narrow down choices. Some participants expressed confusion in finding the workshop rooms.

Many suggested a better selection of presenters and more representation from the government given the conference was jointly organized by MoEST. One person suggested that the government could provide transportation and residence for participants. Participants also asked for more international speakers/participants, more public school teachers (especially from marginalized areas), and college students as attendees. Participants expressed the need for the program to be conducted entirely in Nepali or provide translation in all sessions.

The workshops were better received than the presentations, yet some did feel that the workshops could be improved and some workshop leaders were inexperienced. Many were disappointed by the presentations as they were more theory based than experience based. Concrete suggestions included writing the presenter's organization on the schedule, uploading the presentations to the pen drives provided, printing a new schedule for every day, and having someone greet important guests at the gate.

Content-related suggestions included a session on principal performance, a focus on secondary teachers, a session on moral values and personal goals, for RBF to share their managing and quality education process, success stories from across the country, and to have a workshop on parental engagement in quality education. It was felt that a stronger focus on ECD would be more helpful.

Other suggestions included improving IT and sound management in the workshops (making sure all rooms had necessary materials), having more interactive plenary sessions, managing the time of the Inauguration ceremony and providing longer breaks and better parking. It was also suggested that more interactive booths or opportunities for discussion among participants be organized next time. Many suggested longer question and answer sessions. Smaller comments included a less expensive registration fee, providing funds for private school participants and more experienced moderators. While some felt well prepared to take the lessons back to the classroom, others wished that the conference focused more on skill and ability to carry out what was learned. More volunteers at the gate on the first day would have been helpful.

Lastly, there is room to improve the resources offered before, during, and after the conference so that participants are better equipped to choose the right sessions, have background information, and then use the information given at the conference in their own experiences. A few participants suggested sending the presenter information/slides in an email. Another suggested printing out government documents (such as curriculum) related to education. More clear information on the website about what would be covered in the conference was also suggested. There was also a call for the speakers and conference organizers to better understand the background, needs, and linguistic and technological abilities of the participants. Finally, there was a repeated suggestion to conduct similar programs at the province level.



Way Forward and Commitment

Conclusions of the conference

The following are the conclusions of the conference, made by compiling suggestions on how to ensure learner centered education received at the three-day Second International Conference on Quality Education. The conference's workshops, presentations, and discussions focused on creating a roadmap for the next steps for the improvement of education. The conclusions highlighted and questions raised in this section are very important in terms of their implementation.

Review of the Kathmandu Commitment on Quality Education, 2013

The Kathmandu Commitment on Quality Education was the documentation of all the learnings of the 2013 Conference on Quality in the Classroom, and a commitment by all the participants of the conference that from their respective positions, they would try to keep up the progress made in the common goal of ensuring quality education centered on learners' needs. The main points of the Kathmandu Commitment on Quality Education 2013, made at the conference are as follows:

- Define quality clearly
- Revisit policy
- Prepare a framework for "quality"
- Focus on Professional development of teachers

- Give teachers field support
- Make relevant curricular and learning materials, and
- Respect students

Achievements made after the Kathmandu Commitment on Quality Education

Some important changes have happened since the Kathmandu Commitment on Quality Education was made in 2013:

- Structural changes have happened in different levels (of government) since the promulgation of Nepal's Constitution in 2015 and implementation of the federal structure
- In the field of education, the Constitution itself mandates compulsory education and dictates that it should be free
- Although free and compulsory education has been practiced since the beginning of the School Sector Development Program, it has been not yet being ensured in the practical sense.

The Second International Conference on Quality Education followed up on improvements on these fronts and has provided a roadmap for the way forward.

The Conclusions of the Second International Conference on Quality Education 2019

The educational issues raised on the six sub topics during the different discussions at the Second International Conference on Quality Education, and the conclusions of the discussions have been highlighted below:

1. Learner Centered Early Childhood Education

- Minimal government spending: It is a note-worthy achievement that Early Childhood Education has now been included in school education. However, the government invests very little money in early childhood development and education. There is a need to increase the federal government investment, create funding partnerships for the provincial and local governments, and create an environment to ensure the safety of funding from parents and other stakeholders.
- Ineffective teaching methodology: So far, we have been unable to make, or work with, the kinds of curricula or lessons that have been proven by cognitive science research to aid the wholesome development of chil-

dren. We need to implement methods such as learning through play, use of materials, interactive learning, learning through peer interaction, etc. in order to address this.

- Lack of uniformity in structure: There is no uniformity in the structure of early childhood education in our education system. Therefore, when kids enter grade one, they are not all equally ready. Therefore it is necessary to have specific indicators for early childhood education, based on the developmental stages of children.
- Professional development of facilitators and teachers: So far, we have been unable to focus on the professional development of facilitators and teachers for active learning based on the principles of child development. Training along with monitoring and support is necessary.
- Lack of school lunch programs in all places: Our inability to manage a healthy and nutritious daily meal for all schools has been affecting the quality of education. Empty foods, such as instant noodles and biscuits should be banned, and nutritious meals should be given in all schools.
- Increasing the involvement of local governments: School education is the responsibility of local government. However, local governments have been unable to pay much attention to education issues. With the involvement of all stakeholders, local governments should clearly define their principles and policies for early childhood development/ education.
- Lack of effective participation by parents: It seems like parents are not giving enough attention to issues like what kind of environment to give their children in a changing world and how to make them proactive. Parent education is necessary to make parents aware of these issues.

2. Learning by doing

- Rote learning and using the curriculum as textbook: Currently, learning has been limited to memorizing facts and passing exams. Teachers should make and implement learning-by-doing lesson plans that include skills, as directed by the Curriculum.
- Exam-centered learning and assessment of quality: Exam-centered assessments cannot assess the all-round development of children. Students' learning should be measured everyday and not just during exams. Our practices regarding this have to be changed.
- Create a curriculum for age-appropriate learning: Classroom experiences that are based around children's developmental stages give them deep learning experiences and teach important skills. Children learn by reading, watching, doing, interacting with each other, teaching others, and teaching themselves. It is important to create curricula that allow children these experiences.

- Increase child-centered learning experiences: We have not yet been able to change our traditional teacher-centered education. Learner centered education of the 21st century is synonymous with skills-based education. It is important that kids are compassionate, collaborative, critical thinkers, and creative.

3. The importance of leadership

- Lack of principals with minimum qualifications: Currently, there is no separate position in schools for principals. A teacher from among the existing teachers is given the responsibilities of a Principal. Therefore, not all principals are qualified to be leaders of their schools. It is important for us to prepare these leaders. A separate role should be set out for principals, along with responsibilities, so that qualified and trained principals are in place.
- Qualification and leadership roles of principals: Currently, many principals are engaged only in administrative work. Unless a school has good educational and academic leadership, it does not have a clear roadmap to success. Since principals play an important leadership role, it is important to design a high level training package or degree program on school leadership for Principals, and implement it.
- Not enough value placed on building a positive school culture: School culture is a reflection of leadership. A school that has good leadership has good school management and good academic achievement. Positive school culture encourages moving forward with all stakeholders. As a result, students get a school environment that encourages their wholesome development. School leaders should be encouraged to pay attention to school culture.
- The need for a strong local government: the increasing positivity and activity of the local government should be utilised to prioritise the professional development of elected leaders and bureaucrats who work in education. This will make the local government capable to lead the education sector with competence.

4. Investment in education

- Inadequate investment for quality education: Current government investment in education is not enough. Schools have yet to meet the minimum requirement of subject teachers, which is one reason why we have not been able to ensure the quality of education.
- Formulaic investments unable to give optimal results: Investments that are based on mechanical formulas are unable to take into account the

reality of the situation. Therefore, many children don't have access to the investments that are made in the education sector. It is important to do the necessary homework and ensure that investments are made in an equitable manner according to actual needs.

- The mismanagement of investment- Investment is not always utilised. When teacher-student ratios are not equitable, there are a large number of teachers and a very small number of students in some schools. In these cases teachers have very few classes and their teaching time is wasted. On the other hand, many schools with lots of students have very few teachers. In these cases, students cannot get enough time with teachers, and the investments that have been made for them don't yield results.
- Lack of fiscal discipline: Reports by the Office of the Auditor General report that there is a lot of unaccounted expenditure in the education sector, which proves that there is a lack of fiscal discipline in the sector. The fact that there is a problem with fiscal discipline in the education sector, which receives such little funding to begin with, means that children are being cheated of their right to quality education. To solve this problem, fiscal discipline should be implemented strongly to stop educational detriment. Every rupee invested in the education sector should be utilised fully.

5. Private sector in education

- Lack of proper regulation: Because of weak governance mechanisms, there is a lack of regulation of private schools. If we are able to work according to the constitutional provision to encourage the participation of the private sector, problems of regulation can be solved easily.
- Inability to accept the private sector's role: One big problem is that the government has not been able to accept the role that the private sector has played to promote quality education. The first step towards strengthening this role is to accept it.
- No clear structure for public-private partnerships: Public and private schools have not been able to learn from each other and work with each other. If we are able to accept the strengths of each of the two players, learn from each other, and work with each other, Nepal's education sector would greatly benefit.

6. Education for sustainable development

- Lack of an education-sector roadmap for the achievement of Sustainable Development Goals: There will be sustainable development in the

education system if we are able to make positive changes in the five points mentioned above. The curriculum should be revisited time and again to update it. Since students cannot have successful livelihoods without technical and skills-based education, we must ensure that they have access to those kinds of education. Education must be inclusive. We must ensure environmental friendly education methods. We must move forward in these ways to ensure that the Sustainable Development Goals are met by 2030.

The Major Recommendations of the Second International Conference on Quality Education

- Define and set the standards for quality, and bring these standards into practice,
- Help in the capacity development of local governments to implement early childhood education that will ensure wholesome development of children,
- Clarify the roles of the federal, provincial, and local governments so that basic necessities are met in each school,
- Build a learner centred curriculum that enables children to adjust to the changing world around them,
- Develop a structure for good governance of schools based on participation by different stakeholders,
- Improve the local government's role in the transformation of public education,
- Design education policy and programs based on research, and put them into practice,
- Put into practice skill-based learning methods, keeping in mind that such learning methods aid technical and vocational education,
- Implement parent education programs for the active participation of parents in schools, keeping in mind that improved relationship between school and parents increases parental involvement in schools and aids school improvement.



Program Schedule

Presentation and Workshop Schedule

Day 1 (24 August 2019)

8:30-10:00	Registration	
10:00-11:45	Inauguration Ceremony	
11:45-12:30	Lunch Break	
	Presentation	Workshop
12:30-2:00	<p>P1.1.A Leadership in Public Education – Ms. Richa Singh</p> <p>Education for Respect of Diversity: Integrating Teacher Development & Curriculum Reform – Ms. Mingrui Yang – Dr. Ora Kwo</p> <p>Charcha Paricharcha with author of Sikaune Salai – Mr. Khaga Raj Baral</p> <p>10 steps to Radically & Rapidly Improve Public Education in Nepal – Mr. Rajan Maharjan – Mr. Sagendra Shrestha</p> <p>Question & Answer</p>	<p>1.1.A Defining Learning Centered – Ms. Judith Gold</p> <p>1.1.B Geoboard To Teach Math – Ms. Anshu Hyoju – Ms. Rati Maharjan</p> <p>1.1.C Understanding Trigonometry Through Games & Puzzle – Mr. Binaya Raj Shrestha – Mr. Kishor Bista</p> <p>1.1.D Introductory Session of Hands-on Learning to Foster Critical Thinking – Mr. Sonam Tamang – Mr. Rupesh Bhattarai</p>

	Presentation	Workshop
	<p>P11.B Role Of Leadership – Ms. Sudha Ojha</p> <p>Experience Sharing – Malika Secondary School, Bajura – Bhanudaya Hi. Sec. School, Bajura – Mahadeb Basic School, Kalikot – Adhunik Rastriya Secondary School, Makawanpur – Balbikas Secondary School, Bajura – Orwang Basic School, Dhading – Siddha Bahira Balak ko School, Surkhet – Dailekh School, Dailekh</p> <p>Practice and Perception of School Principals on Instructional Leadership – Mr. Subash Shrestha</p> <p>Question & Answer</p> <p>P11.C STEAM – Ms. Jenny Manandhar</p> <p>Use of Geogebra for Teaching and Learning Geometry (Circle): Initiation For Quality Education – Mr. Niroj Dahal – Mr. Raju Thapa</p> <p>STEAM Pedagogy as an Appropriate Approach for Integrated Curriculum – Mr. Binod Pant</p> <p>Early Grade Math Development in Nepal – Mr. Ranjit Mahato</p> <p>Reflection on a Year of Hands-on Learning Experiences – Mr. Sunoj Das Shrestha – Ms. Tashi Dolma Lama (Karkhana)</p> <p>Question & Answer</p> <p>P11.D Video Screening & Discussion – Mr. Sangay Sherpa</p>	<p>11.E Collaboration to Promote Learning – Ms. Vani Rana</p> <p>11.F Learning by Doing – Mr. Shaurab Lohani</p> <p>11.G Multi Grade Multi Level (MGML) – Mr. Kedar Tamang – Mr. Chandra Shrestha</p> <p>11.H Reading With Your Children – Ms. Kalpana Parajuli</p> <p>11.I Stress Management – Dr. Pushpa P. Sharma</p> <p>11.J छन्दको आनन्द – Mr. Tikaram Sharma</p>

	Presentation	Workshop
	Artisan – Mr. Stephen Truax Eckerd	
2:00-2:15	Break	
2:15-3:45	P1.2.A Policy & Practice – Ms. Kausalya Khadka Teacher Service Commission – Dr. Tulasi Thapaliya Assessment of Curriculum – Mr. Lekhnath Poudel Teaching Learning Assessment – Mr. Sudip Neupane Effective Ways to Improve the Quality of Education for Marginalized Girls in Nepal – Mr. Ananda Paudel – Mr. Nabin Lamichhane (DFID) Question & Answer P1.2.B Art in Education – Mr. Sangay Sherpa Nepal's Living Traditions: Observation & Imagination – Mr. Stephen Truax Eckerd The value of steady beat and form in music-making with young children – Ms. Lavina Chong Wei Li Question & Answer P1.2.C Inclusion in Education – Ms. Archana Rai RNDA Internationally & in Nepal – Dr. Naila Khan – Dr. Shanta Dixit Study of Psychological Problems in School Children – Dr. Pashupati Mahat	1.2.A Children as Music Makers – Ms. Sonya Phillip 1.2.B Overcoming Math Trauma for Students – Mr. Midesh Maharjan 1.2.C Being Scientist – Mr. Basanta Yadav 1.2.D Setting up Literacy Centers in the Classroom – Ms. Kiran Khadka – Ms. Milan Sharma 1.2.E Critical & Creative Thinking Skills in Nepali Classroom – Ms. Anne Brown 1.1.F Storytelling – Ms. Chanda Tamang – Ms. Rajshri Nirala 1.2.G Using Centers as an Effective Classroom Tool – Ms. Rati Maharjan – Ms. Bandana Upreti 1.2.H Developing an Integrated Curriculum – Ms. Sheelu Karmacharya 1.2.I Using Mentor Text to Teach Writing – Ms. Kiran Rana – Ms. Rochana Ghimire

	Presentation	Workshop
	Question & Answer P1.2.D Video Screening & Discussion – WCN Environment Video – WCN	1.2.J Am I A Good Leader? Self-Assessment for School Leaders – Ms. Vaishali Pradhan
3:45 - 4:00	Break	
4:00-5:00	Plenary Address " The Implications of Brain Development in Early Childhood" – Dr. Shanta Dixit – Ms. Milan Dixit	

Day 2 (25 August 2019)

8:00-9:00	Registration	
9:00-9:50	Plenary Address by keynote speaker Mr. John David Snyder (What We Have Learned About Improvements Schools)	
9:50 - 10:00	Break	
	Presentation	Workshop
10:00–11:30	P2.1.A Public Private Partnership – Ms. Bushraa Rehman Public Private Partnership – Mr. Sakar Pudasaini – Dr. Shanta Dixit – Mr. Shishir Khanal – Mr. Sudarshan Ghimire Private Schools In Nepal: Choice, Performance, & Equity – Mr. Bishnu Bahadur G.C. Showcasing Snowyak Foundation – Mr. Binod Shahi Question & Answer P2.1.B Education for Sustainable Development – Ms. Bilquees Banu	2.1.A Why Are Materials the Textbook of Early Childhood Classroom – Ms. Judith Gold 2.1.B Doing Science – Mr. Basanta Yadav 2.1.C Using Literature in Teaching Math Theme – Ms. Shilpa Rimal – Ms. Mamata Rana 2.1.D Skills on Note Taking – Ms. Margaret Singh 2.1.E 21 st Century Education in Nepali Public School – Ms. Meekha Mathema

	Presentation	Workshop
	<p>Education for Economy & Environment & Janajagriti Basic School – Dr. Madan Rai – Mid Term Review Of SSDP – Mr. Deepak Sharma</p> <p>Question & Answer</p> <p>P2.1.C Early Learning – Monita Gurung</p> <p>Ecological Framework for ECD in Nepal – Ms. Bhima Rai</p> <p>Transformative Power of Early Childhood Education: Cultivating 21st Century Skills – Ms. Meenakshi Dahal</p> <p>Blocks – Ms. Sarita Rana</p> <p>Linking Brain Research to Classroom Practices – Ms. Samara Gupta</p> <p>Question & Answer</p> <p>P2.1.D Experience Sharing – Ms. Amita Koirala</p> <p>Experience Sharing – Ms. Mohanmaya Dhakal (Deputy Mayor of Birendranagar Nagarpalika, Surkhet)</p> <p>Experience Sharing – Mr. Mamata Prasad Chaudhary (Mayor of Ghoda Ghodi Nagarpalika, Kailali)</p> <p>Experience Sharing – Ms. Sristi KC (Blind Rocks)</p> <p>Teacher Management in Federal Nepal: A Policy Perspective – Mr. Min Bahadur Shahi</p>	<p>2.1.F Engaging Students by Embracing Questions Rather than Answers – Mr. Shaurab Lohani</p> <p>2.1.G Musicking in the Early Childhood Classroom – Mr. Kedar Tamang – Mr. Chandra Shrestha</p> <p>2.1.H Experiencing Art – Mr. Stephen Truax Eckerd</p> <p>2.1.I Principles of Interactive Environmental Education and How We can Practice in Big Classrooms – Ms. Sanjeevani Yonzon</p> <p>2.1.J कथाका लागि पात्रो चरित्र चित्रण – Ms. Bandana Aryal – Ms. Sadikchya Bajracharya</p>
11:30-11:45	Break	

	Presentation	Workshop
11:45 – 1:15	<p>P2.2.A Education For Sustainable Development – Ms. Kausalya Khadka</p> <p>Education Financing – Dr. Hari Lamsal – Mr. Pramod Bhatta – Dr. Megh Raj Dangal</p> <p>Life skills education and resilience in children for better future – Dr. Gunjan Dhoju</p> <p>Question & Answer</p> <p>P2.2.B Learner Centered Approach – Ms. Archana Rai</p> <p>Quality Circle For Quality Education: A Learner Centered Approach – Ms. Tina Saud</p> <p>Student Centered Learning – Ms. Nitu Kedia</p> <p>Remedial Education – Ms. Seema Acharya</p> <p>Aptis Action Research Mentoring Scheme – Mr. Bhogendra Lamichhane</p> <p>Question & Answer</p> <p>P2.2.C Transformative Education – Ms. Munni Pandey</p> <p>Showcasing Learning by Doing – Ms. Milan Dixit – Ms. Margret Singh – Ms. Shilpa Rimal</p>	<p>2.2.A Learning Through Centres: A Learner Centered Approach – Ms. Shanta Nepal – Ms. Shweta Khanal</p> <p>2.2.B Use of Geogebra for Teaching & Learning Geometry Circle – Mr. Niroj Dahal – Mr Raju Thapa</p> <p>2.2.C Technology Moderated Design Thinking Theme – Ms. Nilima Manandhar</p> <p>2.2.D Movement to Enliven the English Language Curriculum – Ms. Samara Gupta</p> <p>2.2.E Comprehension Through Reciprocal Teaching – Ms. Amardeep K. Bista</p> <p>2.2.F Thinking with Our Hands – Ms. Rachel Manandhar</p> <p>2.2.G Metacognition & Comprehension Strategies – Ms. Richa Singh</p> <p>2.2.H A Quest for Identity Awareness for Learner-Centred Education: Insights from Narrative Inquiry – Ms. Mingrui Yang</p> <p>2.1.I Occupational Business Technology – Ms. Meekha Mathema – Ms. Aayusha Kapali</p>

	Presentation	Workshop
	<p>Transformative STEAM education – Prof. Dr. Bal Chandra Luitel <i>With Panalist:</i> – Mr. Binod Prasad Pant – Ms. Parbati Dhungana – Mr. Shree Krishna Wagle – Ms. Roshani Rajbanshi – Ms. Bineeta Baral – Mr. Indra Mani Shrestha</p> <p>Question & Answer</p> <p>P2.2.D Video Screening & Discussion – Mr. Sangay Sherpa</p> <p>Artisan – Mr. Stephen Truax Eckerd</p>	<p>2.1.J Leadership Dilemmas: Using the Consultancy Protocol to Make Smart Leadership Moves – Ms. Sara Rebecca Levine</p>
1:15-2:15	Lunch Break	
2:15-3:45	<p>P2.3.A Strengthening School Through Partnership – Ms. Sudha Ojha</p> <p>Showcasing RBPOP – Dr. Shanta Dixit – Mr. Midesh Maharjan – Ms. Milan Dixit – Ms. Kalpana Parajuli – Bibek Dahal</p> <p>Disaster management in school – Mr. Dev Kumar Maharjan – Ms. Smriti Pokharel</p> <p>CSSF Policy and Practice in Nepal: An Effort under the NICSS 2018/19 – Ms. Pratistha Pyakurel</p> <p>Question & Answer</p> <p>P2.3.B Environment & Education – Ms. Swastika Basnet</p> <p>Nature Connect: Learning Through Head, Hands and Heart – Ms. Sanjeevani Yonzon</p>	<p>2.3.A Benefits of Child Led Play Based Learning – Ms. Rianne Wiggers – Ms. Rojina Pathak</p> <p>2.3.B Setting Up Steam Challenges in the Classroom – Ms. Sabita Manandhar – Ms. Tara Nepal</p> <p>2.3.C Concrete and Pictorial Approach for Fraction Concepts – Mr. Indu Kumar Lama</p> <p>2.3.D Experiential Learning of Scientific Skills – Ms. Sunita Adhikari</p> <p>2.3.E Focusing on Story Elements in A Writer's Workshop – Ms. Bandana Aryal – Ms. Nripa Malla</p>

	Presentation	Workshop
	<p>Rethinking and Recycling Waste in Schools – Ms. Brinda Dewan – Ms. Stuti Sharma</p> <p>Learning and Nature – Dr. Tirtha Bahadur Shrestha</p> <p>Occupations Business & Technology Education Nepal – Ms. Meekha Mathema</p> <p>All Kinds of Minds in the Classroom – Ms. Sonya Phillip</p> <p>Question & Answer</p> <p>P2.3.C Media in Education – Mr. Bolaram Pandey</p> <p>Education Journalist: Issues in Education – Mr. Makar Shrestha <i>With panelists:</i> – Mr. Shreedar Poudel – Mr. Roshana Subba</p> <p>Role Of Community Radio to Enhance Quality Education, ACORAB – Mr. Deepak Acharya – Mr. Shreedhar Neupane – Mr. Bholu Sharma</p> <p>Question & Answer</p> <p>P2.3.D Video Screening & Discussion – Mr. Sangay Sherpa</p> <p>Artisan – Mr. Stephen Truax Eckerd</p>	<p>2.3.F Co-Creating Background Knowledge: Using Images, Artifacts & Short Texts – Ms. Rachel Manandhar</p> <p>2.3.G Planning and Organising Effective Field Trips – Ms. Kalina Pradhan – Ms. Eli Kawas</p> <p>2.3.H Encouraging Creativity Through & Music Movement – Ms. Lavina Chong Wei Li</p> <p>2.3.I Creating A Gender Responsive Classroom – Ms. Jenny Manandhar – Ms. Sheelu Karmacharya</p> <p>2.3.J विद्यार्थीलाई अरु बुझाऔं, पाठबाटै नाटक सिकाऔं – Ms. Amita Koirala – Ms. Bandana Uprety</p>
3:45-4:00	Break	
4:00-5:00	<p>Plenary Discussion on Nutrition – Dr. Aruna Upreti</p>	

Day 3 (26 August 2019)

8:00-9:00	Registration	
	Presentation	Workshop
10:00-11:30	<p>P3.1.A Improving Education – Ms. Esha Thapa</p> <p>Thoughts about Assessing School Leaders – Mr. John David Snyder</p> <p>How does Access to Education Protect the School Girls from Marginalized Families? – Mr. Sandesh Dhakal</p> <p>Recommendation for Enhancing Quality in Education – Mr. Mahashram Sharma</p> <p>Question & Answer</p> <p>P3.1.B Reading in Education – Ms. Sheelu Karmacharya</p> <p>Are Early Reading Gains Scalable and Sustainable? – Ms. Rashmi KC <i>With panelists:</i> – Ms. Seema Acharya – Mr. Netra Dahal – Mr. Narayan Shrestha</p> <p>Sustainable Book Supply Chains through Let's Read – Ms. Shameera Shrestha</p> <p>Question & Answer</p> <p>P3.1.C Quality Education – Ms. Amita Koirala</p> <p>Complaint Response Mechanism – Mr. Laba Raj Oli</p> <p>Education for Sustainable Development in Secondary Schools of Nepal – Mr. Dipesh Dulal</p>	<p>3.1.A Using Blocks in the Classroom – Ms. Sadikshya Bajracharya – Mr. Midesh Maharjan</p> <p>3.1.B Experiencing Place Value Through Base-10 Blocks – Ms. Nucche Maharjan – Ms. Niva Manandhar</p> <p>3.1.C Let's Play Math Games – Ms. Kalpana Parajuli</p> <p>3.1.D Experiencing Art – Mr. Stephen Truax Eckerd</p> <p>3.1.E Literary Panel – Ms. Munni Sharma Pandey</p> <p>3.1.F Literacy Learning in Pre-School – Ms. Judith Gold</p> <p>3.1.G Learning by Doing: Seed Exploration – Ms. Sarita Rana</p> <p>3.1.H Critical Thinking Manifest in Many Forms: Strategies to Foster Deep & Active Learning – Ms. Kausalya Khadka</p> <p>3.1.I Leadership: The Values that Drive us & the Culture we Create – Ms. Sara Rebecca Levine</p> <p>3.1.J नेपाली कवितामा विभिन्न शैलीको प्रयोग – Ms. Sudha Ojha</p>

	Presentation	Workshop
	<p>Perception of School Actors on Corporal Punishment – Ms. Priti Shrestha Thapa</p> <p>Question & Answer</p> <p>P3.1.D Video Screening & Discussion – WCN</p> <p>Environment Video – WCN</p>	
10:30-11:00	Break	
11:00-1:00	Closing Ceremony	



Participants

Presenters

Deepak Acharya, is the chief of Community Information Network (CIN), a network of 335 community radio stations run by ACORAB, Nepal. With 19 years working experience in the community radio sector, Mr. Acharya is an expert in the field. He also serves as General Secretary of Shikshalaya Nepal, an NGO working in the Education sector.

Seema Acharya has 17 years' experience in formal and non-formal education. She is experienced in providing technical support on Improving learning outcomes of community schools, Early Grade Reading and Math activities, teacher training and fidelity, MTB-MLE and Inclusive Education to project teams, implementing partners, and national and local level government bodies. She has lead the Association of International NGOs Nepal's Education Working Group and actively contributed to the SSDP development process through the Technical Working Group.

Sunita Adhikari is a Secondary Science Teacher at Rato Bangala School and a Science trainer for the Primary Teachers Training Program at the Rato Bangala Foundation.

Bandana Aryal has been a member of the teaching faculty at Rato Bangala School since 1993. She has been a trainer for 17 years and worked as a teacher trainer for the PTTP program since its inception. She has a B.Ed. in Nepali from Sanskrit University and a BA from Tribhuvan University.

Birbansha Baitha is a Head Teacher at Adhunik Rastriya Secondary School. He has been countably contributing in the field of school education. As leader of the school, he has made his school a model education center.

Sadikshya Bajracharya has been working as a trainer at RBF since 2017. She holds a Bachelor's degree in Management and Post Graduate Diploma in Primary Education.

Topendra Bahadur Bam is a teacher at Mahadeb Basic School, Kalikot. He has been engaging in the field of teaching for 5 years. As a teacher he is contributing in creative teaching learning methods.

Bineeta Baral is a research assistant at Kathmandu University School of Education.

Hirachandra Baral is a teacher at Bal Vikas Secondary School, Bajura.

Khaga Raj Baral is the former secretary of the Ministry of Education, Science and Technology (MoEST). He was also one of the members in the ICQE 2019 steering committee.

Pramod Bhatta is an Assistant Professor of Sociology at Tribhuvan University, Kathmandu. Prior to this, he was a senior researcher at Martin Chautari and has been engaged with the Asian Development Bank and other development agencies as a consultant supporting/evaluating school education reforms in Nepal.

Rupesh Bhattarai is an educator and a spoken word poet living in Kathmandu. He is currently a teacher at Karkhana. Before working at Karkhana he worked as a primary school teacher for four years. Currently, he designs hands-on learning experiences for middle school students and takes hands-on science-based classes in several schools in Kathmandu every week. A member of the "Word Warriors Nepal" community, Rupesh has performed spoken word poetry in various national and international platforms.

Kishor Bista is a teacher at Rato Bangala School.

Annie Brown works with the Kathmandu International Study Center Education Quality Improvement Plan (KISC EQUIP) on Teacher Professional Development Programmes. She has over 30 years' experience in the field of Education, as a Teacher, Researcher, Education Advisor, and Project Leader.

Mamata Prasad Chaudary is the Mayor of Ghoda Ghodi Nagarपालिका, Kailali.

Lavina Chong is a classroom teacher, teacher trainer, professional development trainer, consultant, curriculum specialist, lecturer and an associate University professor. She is the founder of Wigglepods Pte Ltd, a compa-

ny that specializes in creative music and movement education for young children. She has a Masters in Science (Early Childhood Education) from Wheelock College, Boston and has professional qualifications in Music & Movement (OrffSchulwerk & Kodaly), Yogakids, Speech and Drama and Storytelling.

Bibek Dahal is an education research professional currently working for Rato Bangala Foundation. Research is a professional passion for him and his interest has extended to Research Ethics. He was also a selection committee coordinator in the ICQE2019.

Dr. Meenakshi Dahal has worked as an early child development expert and child rights advocates for the past eighteen years. Her research interests focus on early reading, child rights, child development, instructional design and quality of education. She is a trainer, a researcher, a presenter, and a teacher. She has been involved in designing policies, strategies, guidelines, programs, training packages and resource books / materials on ECCD, child rights, basic education focusing on girls' enrollment and inclusiveness in ECED centers and schools. She has received recognition as an "Emerging Leader" and also working as an Ambassador for Decade of Childhood.

Niroj Dahal is a visiting faculty member of Nepal Open University, Faculty of Social Sciences and Education MPhil program. His research areas are ICT in Education, Mathematics Education, Open and Distance Learning and ICT and e-Research. He has been teaching graduate and undergraduate students for over a decade.

Dr. Megh Raj Dangal is an Associate Professor at the School of Arts and Office of the vice chancellor, Kathmandu University. He has knowledge and experience related to measurement of quality of education outcomes within Education Sector Plans (project evaluation, conducting baseline survey, posttest analysis, research), and extensive experience and knowledge on financing, policy and planning, aid effectiveness, and governance in the education sector.

Brinda Dewan is the Urban Waste Manager at Doko Recyclers. She is a Master of Environmental Education graduate from the University of Minnesota, Duluth (UMD), where she focused on teachers' perceptions of environmental education in Nepal and ways to improve the current system. Brinda is also a published author, co-authoring publications like Learning About Waste - An Activity Guide and Water - The Drop of Life - Teacher's Manual. She has over 10 years of professional experience in the field of environmental and sustainability education.

Sandesh Dhakal currently works at the Central Department of Psychology, Tribhuvan University, Kathmandu, Nepal. He does research in Adolescent Psychology, Developmental Psychopathology, Social Psychology, and Abnormal Psychology.

Dr. Gunjan Dhoju is a child and adolescent psychiatrist, currently working at Kanti Children's Hospital's Child and Adolescent Psychiatry Unit. He completed my MBBS and MD Psychiatry from Nepal, followed by Post-doctoral Fellowship in Child and Adolescent Psychiatry from NIMHANS, India. He is involved in developing a Life Skills and Personality Development Curriculum

Milan Dixit is the co-founder and Principal of Rato Bangala School, and the Vice President of Rato Bangala Foundation. Ms. Dixit holds a Masters of Science in Education Administration and Supervision from City University, New York, and attended the Bank Street College of Education in New York as a visiting faculty. She has collaborated extensively with the College and the Bank Street School for Children to develop education and teacher training opportunities in Nepal.

Dr. Shanta Dixit is the co-founder and Director of Rato Bangala School. She holds a Doctorate in Public Health from Columbia University, New York. Dr. Dixit lead the establishment of the Rato Bangala Foundation to bring the child-centered teaching methods of RBS to the community of schools in Nepal. Together with the parents of the school, the Rato Bangala Partnership for Outreach Program was set up in 2003.

Dipesh Dulal is a teacher who attempted project works, and collaborative approaches for the achievement of individual students' curricular goals. He is interested in how children feel a sense of belonging with the learning community, despite the traumatic experiences that most Nepalese students go through during their school days.

Stephen Truax Eckerd is the Coordinator of the ImaginAsia Family Program at the Smithsonian Institution in Washington D.C. The original teacher trainer for Rato Bangala School, he previously worked in Nepal as a member of and trainer for the Peace Corps. Mr. Eckerd has been referred to as a "walking encyclopedia" of Nepal.

Bishnu Bahadur G.C. is the Director/Principal at Elite Grand School. He has an MA in Economics, a Masters of Public Administration and an MPhil in Education.

Rochana A. Ghimire has been working as a primary grade teacher in Rato Bangala School since 2011. She completed a Post Graduate Diploma in Education in 2012. Besides teaching, she conducts different kinds of workshops for children.

Sangden Ghising is a teacher at Karkhana. She finds happiness in teaching young girls that they don't have to be afraid of these Maths and Sciences. Nowadays, she is a strong advocate to bring more girls in subjects like Science, Technology, Engineering, Arts and Maths (STEAM).

Sudarshan Ghimire is the Associate Editor of Shikshak Magazine, a monthly Nepali journal for teachers and educators.

Judith Gold currently serves as Adjunct Professor of Literacy for the Center for International Education, Leadership, and Innovation, a program of Wheelock College in collaboration with SEED Institute and Singapore Institute of Technology. She has taught graduate courses in reading instruction, directed two National Service Projects and worked on a national scale, assisting schools and districts in creating integrated literacy and social studies curricula.

Samara Gupta has over ten years of global experience in the field of learning and teaching.. She is committed to her continued professional development and has attended several courses including those at the Harvard Graduate School of Education, Bank Street College of Education and Reggio Emilia Malaguzzi Centre. Samara conducts regular workshops for educators and parents on the neuroscience of learning.

Anshu Hyoju is a teacher at Rato Bangala School. Her other role includes PTPP trainer in Mathematics at the Rato Bangala Foundation. She works as a Math and Science trainer in Level 1 training program provided by the Foundation. She holds a PGDE from Kathmandu University and Bachelor in Science from Tribhuvan University.

Mr. Nandalal Jaisi is a head teacher at Shree Malika Secondary School, Bajura.

Aayusha Kapali is the Education Coordinator at Daya Foundation. Over the past 9 years, she has been working as a Teacher, Trainer, Manager, and Administrator in renowned public and private educational institutions.

Chandra Bahadur Karki is a head teacher at Siddha Bahira Balak ko School, Surkhet.

Sheelu Karmacharya is a teacher at RatoBangala School, teaching Grade 1 since April 2012. She is also a trainer at RatoBangala Foundation where she trains Level-one trainees on Child-centered Education Philosophy and is a PTPP graduate from the same foundation. Sheelu holds a Bachelor's degree in Computer Science. She is currently doing her PGDE at Kathmandu University. She is the author of two children's storybooks titled "Ke Ho Tyo Aawayj" and "Haami Sabai Milee jooli " published by RatoBangala Kitab.

Amar Dip Kaur Bista is a teacher at Rato Bangala School where she works as a primary level teacher. She holds a Bachelor's degree in Commerce from Tribhuvan University.

Eli Kawas is a Teacher at Rato Bangla School.

Sristi K.C. is the founder of Blink Rocks, an organization established by a group of like-minded people who had a common goal of empowering blind people. She has organized various workshops in Nepal and India and conducted motivational speeches for which she has received many awards.

Nitu Kedia has a Post Graduate Diploma in Computer Application from Sunrise University India. She currently teaches in New Don Bosco Academy, Putalisadak, Kathmandu.

Kausalya D. Khadka has been working in Rato Bangala School since 2009. She has worked in several institutions in India and Nepal for the past two decades. She did her Master's in Sociology from Tribhuvan University and Master's in Education from Kathmandu University. She is a recipient of the Fulbright Teaching Excellence and Achievement Program 2014.

Kiran Khadka has been a part of the teaching field for the past 20 years. She joined Rato Bangala School in 2007 as a primary grade teacher. She holds a Bachelor's degree from Tribhuvan University in Arts with English as a major subject.

Udgum Khadka is a teacher by profession. While pursuing a Master's degree in Finland, he grew immense interest in Education, more specifically, learning science. After returning, he has been working in the education sector. Udgum works with Empowerment Academy to empower and equip teachers to become better educators.

Prof. Dr. Naila Khan is the Director of the Clinical Neurosciences Center (CNC) at the Bangladesh Protibondhi Foundation (BPF). Professor Khan has dedicated her career to improving Children's health services: in 1992, she founded the first Department of Pediatric Neuroscience in Bangladesh to exist within a national hospital. Today she has successfully established 26 Child Development and Neurology Services, all of which apply an interdisciplinary approach.

Shishir Khanal is a Co-Founder and CEO of Teach for Nepal. He worked as the Executive Director of Sarvodaya USA, a Madison, Wisconsin-based non-profit organization that supports grassroots social movements around the world. As Executive Director, Shisir managed the operations, programs, donor relations, communications and fundraising efforts for Sarvodaya USA.

Shweta Khanal is an Early Childhood Teacher at the Rato Bangala Early Childhood Centre. She has been working with preschool children for more than 9 years. Early childhood education is her passion.

Amita Koirala is a teacher at Rato Bangala School. Her other roles include advisor to the PTPP students and trainer at the Rato Bangala Foundation.

Dr. Anil Koirala is a teacher of Technical Education in Bhanodaya Secondary School, Bajura. His favorite method of teaching includes self experience.

Dr. Ora Kwo is an Associate Professor in the Department of Curriculum Studies at the University of Hong Kong. Her lengthy list of publications centers around Teacher Learning and Education, but for the past several years, her interest has extended to the escalating global phenomenon of private supplementary tutoring and how this affects the school curriculum and the students' learning.

Tashi Dolma Lama is currently a BeeCreative Teacher at Karkhana. She was a Teach for Nepal fellow, where she realized that she loved being in the classroom, sharing what she knows, letting the students explore the things and exploring herself as well.

Indu Kumar Lama is a mathematics teacher and In-charge of mathematics department from grade I to X at Rato Bangala School. He has been teaching mathematics for the past 20 years. Mr. Indu holds a Masters' degree in Mathematics Education from Kathmandu University School of Education. He is passionate about creating games and project works for making mathematics classrooms more engaging and interesting.

Bhogendra Lamichhane is currently working as English for Education System (EES) programme manager in British Council Nepal. He has a wide range of experience in Education project management, English Language teaching, training, material development and research. He has done masters' degree in ELT and literature, and CELTA.

Nabin Lamichhane is a Senior Manager in the development field since 15 years and has significant experience in education, child protection, child-centered disaster risk reduction and youth engagement. He is a certified child counsellor and worked in this field for a decade, leading psychosocial interventions with refugees, children affected by armed conflict, marginalized girls and people living in the high Himalayas.

Dr. Hari Lamsal is currently serving the Nepal government as Joint Secretary at the Ministry of Education, Science and Technology. He is the former spokesperson for the ministry of education, science and technology in Nepal.

Sara Levine, Senior Program Officer at the Rogers Family Foundation, has worked in the non-profit sector for more than 15 years before joining RFF in 2016. In her role she leads the Foundation's strategic initiative to create the conditions for quality public schools in Oakland, California. She has consulted nationally and internationally with superintendents, school leaders, and central office leaders to transform their local education systems. Sarah has experience working with community projects and as a teacher. She holds a BA from Yale University and an MA in International Affairs from George Washington University.

Prof. Dr. Bal Chandra Luitel is a professor at Kathmandu University. He is a transformative education researcher. Prof Luitel's research program enables education researchers to engage with a host of research paradigms together with new analytics arising from dialectical, metaphorical, poetic and narrative logics and genres as a means for conceiving, expressing and implementing visions of an inclusive and life-affirming mathematics and science education in Nepal.

Dev Kumar Maharjan serves as Chief Executive Officer at Earthquake Safety Solutions (ESS). He is an earthquake engineer by profession. Mr. Maharjan has completed Masters degree in Earthquake Engineering and Engineering Seismology from Rose School, University of Pavia, Italy and University of Patras, Greece. He is a member of Global Earthquake Model (GEM) and Earthquake Engineering Research Institute (EERI).

Midesh Maharjan has been a Training Coordinator and Trainer at Rato Bangala Foundation since 2005. Midesh holds a Bachelor's degree in Botany and Post Graduate Diploma in Primary Education. He is the author of three children's story books published by Rato Bangala Kitab and save the children.

Nucche Maharjan is a teacher at Rato Bangala School. She has 19 years experience of teaching in primary grades. She has Successfully participated in may teacher's training program conducted by Rato Bangala School. She holds PGDE and Bachelor in Environment Science from Kathmandu University. She has worked as an assistant trainer of Mathematics in Primary Teacher Training Program for two years.

Rajan Maharjan, is the Co-director of Collaborative Schools Network (CSN). He currently works as School Manager and has been looking after 3 public schools in Budhanilkantha Municipality managed by CSN since 2015.

Rati Maharjan has been a trainer of Rato Bangala Foundation (RBF) since 2017. She holds a Master degree in Education with Mathematics from Tribhuvan University and PGDE from Kathmandu University. She has been working as an ECD and Primary teachers' trainer since 2012.

Dr. Pashupati Mahat, Senior Clinical Psychologist, has been leading Centre for Mental Health and Counselling Nepal since 2003. He has been actively working on providing child mental health support in schools. He is also leading and implementing psychosocial and mental health intervention research projects in schools to establish evidence-based cost-effective mental health services for children, adolescents and adult populations as well. He has contributed in the development of mental health policies of Nepal, training course on children friendly classroom management tools, positive disciplinary approaches in classroom and school based psychosocial counselling.

Ranjit Mahato is currently working as an Early Grade Mathematics Officer in World Education and is responsible for developing math packages to improve the quality of mathematical learning outcome of Nepal. He is a firm believer that improving a primary education is the key to achieve quality education in the long term.

Nripa Malla has been a teacher in Rato Bangala School since ten years. She is a teacher of grade four and five. She is also a Language Arts and Social Studies trainer and advisor for the Level 1 Teachers Training at RBF. She has undergone training for teaching special needs children in Israel.

Jenny Manandhar is currently working as the primary grade coordinator at Rato Bangala School. She is also a teacher trainer for primary grade teachers at the Rato Bangala foundation. She is a passionate educationist with the experience of 12 years in classroom teaching. She holds a PDGE from Kathmandu University, Bachelor in Humanities and Diploma in Architectural Engineering.

Nilima Manandhar is a Teacher of Computer Science at Rato Bangala School. She received her degree in BIT from Purbanchal University and MPA from Purbanchal University. She has attended a 48-hour long Maker-space training program, receiving the crucial ideas on STEAM.

Niva Manandhar is a teacher at Rato Bangala School.

Rachel Manandhar has more than 15 years of experience in special education. She has taught students of all ages with strengths and needs across academic, social, emotional, and behavioral realms. Rachel is dedicated to addressing institutional bias and reversing expected outcomes based on socio-economic disparities by utilizing equity-based educational practices that engage all learners, regardless of their race/ ethnicity, gender, sexuality, or ability.

Sabita Manandhar works at Rato Bangala School as a teacher. She has completed her Masters degree. She also holds PTPP from Rato Bangala

Foundation and is a trainer for Child Centered Level 1 training. She serves as an Award leader of The Duke of Edinburgh's International Award.

Meekha Mathema is the vice president of Daya Foundation. She is a dedicated elementary and adult literacy educator with over 20 years of experience in early childhood education.

Shanta Nepal is an Early Childhood Teacher at the Rato Bangala Early Childhood Centre. She has a Masters Degree in Early Childhood Education from Macquarie University, Australia. She has been working with children for more than 10 years.

Tara Nepal is a teacher at Rato Bangala School and Award Leader of Duke of Edinburgh's International award. She has a Bachelor of Engineering in Electronics and Communication. Currently a teacher in Makerspace (STEAM lab), she facilitates project based learning focus on Science and Technology. She has completed the Primary Teacher Training Program from Rato Bangala Foundation.

Shreedhar Neupane has been in the development communication sector for more than 13 years, working in print media, radio, and television. He is trained in Rural Development and works mostly with issues relating to the development sphere and socio-political situation of Nepal.

Sudip Neupane is pursuing his MPhil in English Language Education at Kathmandu University. He has been working as a Teacher Educator at the British Council in association with EDGE Project, and as course facilitator at Nobel Academy for the plus two level. His interest areas in research are assessment, language learning, and Teacher Professional Development (TPD).

Rajshree Nirala is a teacher at Rato Bangala School. She has completed her Masters in Sociology from Jammu University.

Sudha Ojha is a Nepali teacher at Rato Bangala School and teacher trainer at the Rato Bangala Foundation. She has written, edited, and translated children's books for children of various ages. She has a Masters degree in Nepali.

Labu Raj Oli has 18 years of experience in the field of Education, Gender Equity and Girl's Education, where he has worked in networking, advocacy, lobby, and awareness campaigns on social issues such as inclusion and gender equality. He is currently the Program Director for the project transitioning Complaint Response Mechanism and SZOP to Palikas in the federal context, done jointly by UNICEF, CEHRD and Educational Pages.

Bec Ordish has been involved with education in Nepal for almost 20 years. She is currently editing her English text book series, which will be published for classes 1-8 in Nepal later this year.

Nawaraj Pande is a teacher at Orwang Basic School, Dhading.

Binod Prasad Pant is an Assistant Professor of Mathematics Education at Kathmandu University, School of Education (KUSOED), Nepal. He is also a subject committee member of Science, Technology, Engineering, Arts and Mathematics (STEAM) Education at KUSOED. He has been involving in developing textbooks and teachers' manual for the school level. He has been working with a number of Nepali teachers and teacher educators who examine their lived experiences as students, teachers and teacher educators.

Kalpna Parajuli has been teaching Early Childhood in various reputed International Schools around the world for over 20 years. More recently, she has worked as the lead Trainer in BBF/RBPOP's Lead Schools of Lalitpur initiative to improve the Early Childhood sections of Government schools in Lalitpur. She has a Masters in Education and has authored picture books for young children.

Rojina Pathak is an experienced Early Years teacher at TBS who specializes in a play-based approach and carefully planning for opportunities.

Dr. Ananda Paudel has long working experiences (30 Years) in the field of education, where he has worked as a teacher, school supervisor, curriculum expert, teacher trainer and educational manager. Since the last 3 years, he has been working in the field of non-governmental organization. Currently, Dr. Paudel is working in VSO, where he leads two major girls education projects under girls' education challenge window. Dr. Paudel did his MPhil from Danish University of Education, Denmark, Doctor of Philosophy in child/human rights from Tribhuvan University and advanced degree in rights-based approach to development from Switzerland.

Sonya Phillip is the founder/ president of the Learning Matters Foundation. She has over three decades of teaching experience. She has taught at The American School in New Delhi and at The Lab School of Washington in DC. She regularly works with students, consults with parents and conducts workshops for school educators.

Smriti Pokharel has been working in Rato Bangala Foundation since 2013. She is currently the Fundraising Manager at the Foundation.

Lekhnath Poudel is the Assistant Professor in the Central Department of Linguistics, Tribhuvan University. He has developed curriculum for Tribhuvan University, Mid Western University and Nepal Open University and has conducted studies on language and cognition in Nepal, India and Norway taking part in many national and international conferences. He runs his Cognitive Science and Psycholinguistics Lab in Tribhuvan University and also trains students and teachers on Quality Circle in Education.

Shreedhar Poudel is an editor at Edukhabar.com.

Vaishali Pradhan has over 10 years of experience in the education sector. She is currently the Head of English and Education at British Council in Nepal. Apart from managing the Education portfolio, Vaishali also develops and delivers teacher training courses on communicative teaching practices, project-based learning and school leadership. She has a recent DELTA from Cambridge University and a master's in Mass Communications and Journalism.

Sakar Pudasaini is a technologist and educator. He is the founder of Karkhana, a makerspace and education company, based in Kathmandu, Nepal.

Pratistha Pyakurel is a Project Officer at the National Disaster Risk Reduction Center, Nepal. She has been involved in the formulation of national Comprehensive School Safety (CSS) Implementation Guidelines and CSS Communication and Dissemination Strategy. She is interested in research works and has been engaged in research related to children since 2012.

Bhima Rai is a Resource Person/Trainer on Early Childhood Development since 1998 A.D. She has been involved in various ECD training, workshop or seminars. She has worked with young children in different districts through Seto Gurans, Save the Children and other organizations.

Kalina Rai Pradhan is a member of the teaching faculty of Rato Bangala School since 2008. She has been teaching for the last 18 years. She holds a Bachelors of Arts from North Bengal University, and has undergone Teachers Training Certificate Course from Mount Hermon College of Education. She is a graduate of the Primary Teacher Training Program at RBF.

Madan Rai is an agriculturalist who has worked inside and beyond. Since 1996, Madan has been dedicated to several developmental activities and pilot tests based in Khotang district, including alternative education. He founded the Shubhadra Madan Foundation, which manages a basic level school called Janajagriti Basic School located at Dadagaon of Diktel Rupa-kot Majhuwagadi Municipality 2, Khotang.

Dr. Roshani Rajbanshi is a post doc fellow at Kathmandu University School of Education.

Shameera Rajbhandary (Shrestha) is a Program Officer in The Asia Foundation Nepal (TAF) for the Books for Asia Program, the signature program of TAF. She has a decade long intensive and diverse working experience in the development sector, and has played a key role in strengthening community and public libraries of Nepal by managing the donation and distribution of more than 4,60,000 books to public libraries; and capacity building support.

Kiran Rana has been teaching in Rato Bangala school since 2003. She has been conducting Social Studies classes in Child Centered Learning and is a guide and supervisor for PTTT trainers. She has also conducted many workshops for children.

Mamata Rana has been teaching in Rato Bangala School since 2014. She has attended many workshops at Rato Bangala. She completed Child Centered Learning in Education in 2015 and she is currently enrolled in Primary Teachers Training Programme.

Sarita Rana has 25 years' of work experience at RBS. She has worked as a class teacher and coordinator of the primary school. At present she is coordinating the RBECC. She has been working as a teacher trainer in the Level One Teacher Training Programme and PTTT for over a decade now. Along with attending a semester at Bank Street College of Institution in 2000, and the International Study Group at Reggio Emilia in 2017, she has participated in various workshops, seminars and conferences.

Vani Rana is the Head of Elementary School (I – VIII) at the United World School. She has extensive experience in teaching and academic administration, particularly in the elementary level. She has two Master's degrees, one in Educational Leadership from Bank Street College of Education, USA and another in Sociology from TU. She also holds a Professional Development certificate from Teacher's College, Columbia University, USA specializing in the development of reading-writing abilities in young children.

Shilpa Rimal is a teacher at Rato Bangala School and has been teaching the primary grades since April, 2006. She is also a trainer at Rato Bangala Foundation, facilitating Mathematics and has been an adviser to the PTTT participants for the past four years. Shilpa holds a Bachelor's degree in Business Administration and has completed her Post Graduate Diploma in Education from Kathmandu University.

Tina Saud is currently a PhD scholar in Kathmandu University School of Management (KUSOM). She works as a visiting faculty of BBA and MBA in KUSOM, Global College and SAIM college, Kathmandu.

Binod Shahi is a founder of Snow Yak Foundation.

Min Bahadur Shahi is the executive director and co-founder at ECC Nepal. He has worked in the education field for over 30 years.

Rosy Shakya has been working education focused on child friendly processes and practices in both formal and non-formal education decade. She is the Program Coordinator at Samunnat Nepal, a national NGO which has been providing technical support for the program on flexible learning cent-

ers for out-of-school children (Kheldai Sikne Kendra or KSK and Ghumti Sikai Thalo or GST), conceptualized in 2014, and running successfully in different municipalities after a pilot in 2015.

Deepak Sharma is the spokesperson of the Ministry of Education Science and Technology (MoEST).

Mahashram Sharma is the former Secretary Government of Nepal at the Ministry of Education, Science and Technology.

Milan Sharma is an engineer by training but her passion towards teaching brought her into the teaching field. She has been teaching the young grades at Rato Bangala School since 2002.

Munni Sharma Pandey is a teacher at Rato Bangala School. She has been associated with this school for the past eleven years. She holds a PGDE from Kathmandu University and Bachelor in Arts from North Bengal University. Her other roles include the PTTTP Language Arts Trainer and Level One Social Studies at the Foundation.

Prof. Dr Pushpa P. Sharma is a Professor and the Head of Department at the Department of Psychiatry at Kist medical college, Kathmandu.

Stuti Sharma is the Communications and Advocacy Coordinator Doko Recyclers, a social enterprise that manages and recycles dry waste, and provides complete waste management solutions.

Tikaram Sharma is a Nepali teacher at Rato Bangala School with 35 years of experience in teaching. He has written, edited, and translated many books for children of various ages and has written and edited many nepali chanda kabitas.

Binaya Raj Shrestha is a mathematics teacher at Rato Bangala School. He also works as a part time lecturer at DAV college. He is a M.Ed. graduate in mathematics education from Kathmandu University School of Education. He conducts workshops for mathematics teachers focused on activity based classrooms. He conducts maths fair and maths quiz for students at different levels.

Chandra Shrestha is working as a Program Coordinator at German Nepalese Help Association (GNHA), Nepal.

Indra Mani Shrestha is a faculty member of Kathmandu University School of Education.

Khagendra Shrestha is a public school teacher. He has been teaching for 31 years. Currently he is working in Deepshishu Basic School as a Head Teacher and teaches languages and arts.

Makar Shrestha is an education journalist working as a valley bureau chief at Kantipur Daily.

Priti Shrestha Thapa has been involved in the education sector for the past 15 years. She is currently a full time teacher at Kathmandu World School and also associated with Kathmandu University as a visiting faculty member.

Rohan Shrestha works at the Wildlife Conservation Nepal (WCN). He supports development and implementation of Campaigns that addresses current environmental issues with relevant information and innovative ideas, and back-stopping support. He also participates as a facilitator for the Eco Smart School Program.

Sagendra Shrestha is the Co-director of Collaborative Schools Network. He has been managing Bhanodaya Basic School situated in Lalitpur since 2016.

Subash Shrestha has been working in the education field from the past 18 years as a private school principal. He is interested in the roles principal can play in improving quality of education. Mr Shrestha is also involved in Kathmandu University as a visiting faculty member, and pursuing his M.Phil. in the School Leadership program.

Sunoj Das Shrestha is an educator by passion, an engineer by degree and a maker at heart. He designs learning experience through Karkhana, an education company and a makerspace at the heart of Kathmandu, where he has taken a unique approach of integrating making with STEAM (Science, Technology, Engineering, Arts & Design, and Mathematics) and 21st century skills (Creativity, Communication, Collaboration and Critical Thinking).

Dr. Tirtha Bahadur Shrestha is the leading authority in Nepal's biodiversity and taxonomic classification. He has devoted his professional life to the conservation of East Himalayan biodiversity and ecosystems. With a lifetime of dedication to the preservation and appreciation of Nepal's biodiversity, Dr. Tirtha Bahadur Shrestha is rightly known as a hero of environmental conservation in Nepal.

Umes Shrestha is currently working as an Assistant Professor of Communication at King's College and also heads the empowerment wing. Shrestha believes in empowering teachers and students by helping them uncover their personal assumptions, and by enabling them to learn, unlearn, and relearn their teaching beliefs and methodologies. He has presented and conducted workshops in Nepal, Japan, UK, and Finland.

Lalit Singh is the Education Joint Secretary of Birendranagar, Surkhet.

Margaret Singh has taught school children of all age groups, from pre-primary level till grade 10. She is currently a middle-school Language Arts teacher, and enjoys writing workshops, readers theatres, as well as helping children prepare plays for the class assembly.

Richa Singh is an educator, counselor and a children's book author. She is currently working as a College Counselor and General Paper teacher at Rato Bangala School. Two of her books, 'Diuso ko Nindra' and 'Sani Meera' have been published by Rato Bangala Kitab.

John David Snyder is the Executive Director of the Stanford Center for Opportunity Policy in Education (SCOPE). He began his career as a primary grades school teacher in Vancouver, Washington. He has also worked in curriculum development and as a staff developer.

Roshana Subba is an Education Journalist working for Shikshak Magazine and a member of education journalists' group

Gita Subedi, is the Training and Research Manager at Rural Educational and Environment Development Center (REED- Nepal. She has worked with a number of public and private development organizations and has been affiliated with various networks and issue-based alliances at regional, national, and international levels. Her experience includes international coordination, project management, ensuring compliances, program development, policy and advocacy, and experiential learning.

Chanda Tamang is a teacher at Rato Bangala School. She is a teacher trainer for Level 1 at Rato Bangala School and a Trainer of Trainers for Gender and Socialization. She has a Bachelors from North Bengal University, India and a PGDE degree from Kathmandu University.

Kedar Tamang is the Country Representative of German Nepalese Help Association (GNHA), Nepal.

Sonam Tamang has worked as an educator for three years. His favorite part of being a teacher is having his students realize that creativity is not just one moment of inspiration but it comes with practice, patience, and dedication. Sonam believes that the secret to a healthy life is creating and practicing one's art every day. He puts this belief into action as a dedicated painter who works on his canvas almost every day.

Esha Thapa is the director of Rato Bangala Foundation. She was one of the members in the ICQE 2019 steering committee.

Raju Thapa is a teacher at Cambridge University's GCE A Level Mathematics, Kaasthamandap A Level Academy, and Saipal College. Over the course

of his career, he has worked for many schools, some of which adhere to traditional teaching methods and some of which adopt progressive teaching philosophy. After witnessing both, he believes that teachers should try to incorporate the most recent pedagogy-- so he has worked to create an interactive, stimulating, and collaborative classroom.

Dr. Tulasi Thapaliya is the Under Secretary at the technical education section of the Ministry of Education. Thapaliya holds a PhD in education leadership from Kathmandu University and has been contributing in the education sector as a key member of the technical team to the development of National policy and Strategic Planning.

Dr. Aruna Uprety has been actively involved in issues of public health, women rights, and nutrition. She has worked as a public health specialist in several developing countries including South Sudan, Iran, Sri Lanka, Laos, India, and Afghanistan. She is a strong advocate of public health policies.

Bandana Uprety is a trainer of Rato Bangala Foundation since 2017. She holds a Bachelor Degree and PGDE from Kathmandu University. She has been engaged in the education sector since 2007 as a teacher and trainer.

Rianne Wiggers is Assistant Head of Primary and Early Year coordinator at the British School in Kathmandu. She is passionate about the benefits of Child-led play-based learning in the Early Years.

Basanta Yadav is a Science teacher at Rato Bangala School. He has been involved in conducting workshops and training for science teachers who teach Science to children of different grade levels.

Mingrui Yang has been teaching in the College of Foreign Languages of Honghe University since 2001. Her research and publications mainly focus on curriculum and teacher development, with special interest in critical discourse on learning empowerment, narrative inquiry, building of learning communities, and education for diversity.

Sanjeevani Yonzon, is an eminent Environmentalist who wears many hats including Conservationist, Educationist, Writer and Humanitarian Responder. Ms Yonzon is working as the Director at Wildlife Conservation Nepal, and is involved in developing community-based, innovative solutions to mitigate the repercussions of climate change, and create viable local business solutions for these issues as well.

Overview of Participants

Participants from within Nepal

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From Outside Nepal

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The Participants are Classified Below According to Their Work Description

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Participant Detail

S.N.	Prefix	Name	Title	Organization	Designation
1		Stuti	Sharma	Doko recyclers	
2		Brinda	Dewan	Doko recyclers	
3	Dr.	Ananda	Paudel	DFID	
4	Mr.	Nabin	Lamichhane	DFID	Senior Manager
5	Dr.	Gunjan	Dhonju	Kanti Children's Hospital	Child & Adolescent Psychiatrist
6	Mr.	Pramod	Bhatta	Tribhuvan University	Assistant Professor
7	Mr.	Madan	Rai	First agro-based Tourism Model	Seed specialist
8	Dr.	Naila	Khan	Bangladesh Protibondhi Foundation	Director
9	Dr.	Pashupati	Mahat	Centre for Mental Health and Counselling	Senior Clinical Psychologist
10	Dr.	Pushpa P.	Sharma	KIST Medical College	Professor
11	Dr.	Shanta	Dixit	Rato Bangala Foundation	Director
12	Dr.	Tirtha Bahadur	Shrestha		
13	Dr.	Tulasi	Thapaliya	Ministry of Education	Under Secretary
14	Mr.	Hirachandra	Baral	Shree Balbikash Secondary School, Bajura	Teacher
15	Mr.	Khagendra	Shrestha	Deepshishu Basic School, Dailekh	Teacher

16	Dr.	Anil	Koirala	Bhanudaya Secondary School, Bajura	Teacher
17	Mr.	Basanta	Yadav	Rato Bangala School	Teacher
18	Mr.	Bhogendra	Lamichhane	English for Education System	Programme Manager
19	Mr.	Binaya Raj	Shrestha	Rato Bangala School	Teacher
20	Mr.	Kishor	Bista	Rato Bangala School	Teacher
21	Mr.	Binod	Pant	Kathmandu University, School of Education	Assistant Professor
22	Mr.	Binod	Shahi		
23	Mr.	Birbansha	Baitha	Adhunik Rastriya Secondary School, Makawanpur	Teacher
24	Mr.	Bishnu Bahadur	GC	Elite Grand School	Director/ Principal
25	Mr.	Chandra Bahadur	Karki	Siddha Bahira Balak ko School, Surkhet	Teacher
26	Mr.	Deepak	Sharma	MoEST	
27	Mr.	Dev Kumar	Maharjan	Earthquake Safety Solutions	Chief Executive Officer
28	Mr.	Indu Kumar	Lama	Rato Bangala School	Teacher
29	Mr.	John David	Snyder	Stanford Center for Opportunity Policy in Education	Executive Director
30	Mr.	Kedar	Tamang	GNHA	
31	Mr.	Chandra	Shrestha	GNHA	

32	Mr.	Khagaraj	Baral		
33	Mr.	Laba Raj	Oli		
34	Dr.	Lekhnath	Poudel	Tribhuvan University	Assistant Professor
35	Mr.	Mahashram	Sharma	Ministry of Education	Secretary
36	Mr.	Makar	Shrestha		
37	Mr.	Midesh	Maharjan	Rato Bangala Foundation	Lead Trainer
38	Ms.	Sadikshya	Bajracharya	Rato Bangala Foundation	Trainer
39	Ms.	Sheelu	Karmacharya	Rato Bangala School	Teacher
40	Mr.	Niroj	Dahal		
41	Mr.	Raju	Thapa		
42	Mr.	Nitu	Kedia	New Don Bosco Academy	Teacher
43	Mr.	Rajan	Maharjan	Collaborative Schools Network	Co-director
44	Mr.	Sagendra	Shrestha	Collaborative Schools Network	Co-director
45	Mr.	Sakar	Pudasaini	Karkhana	Founder
46	Mr.	Sandesh	Dhakal		
47	Mr.	Shaurab	Lohani	Toastmasters International	Area Director
48	Mr.	Shishir	Khanal	Teach for Nepal	Co-Founder and CEO
49	Mr.	Shreedhar	Neupane	ACORAB	
50	Mr.	Deepak	Acharya	ACORAB	
51	Ms.	Gita	Subedi	ACORAB	
52	Mr.	Sonam	Tamang		
53	Mr.	Rupesh	Bhattarai	Karkhana	Teacher
54	Mr.	Stephen	Eckerd		

55	Mr.	Subash	Shrestha	New Leera School	Principal
56	Mr.	Sudarshan	Ghimire	Shikshak Magazine	Associate Editor
57	Mr.	Sudip	Neupane	British Council	Master Trainer
58	Mr.	Sunoj Das	Shrestha	Karkhana	Co-founder
59	Ms.	Tashi Dolma	Lama	Karkhana	Teaching Associate
60	Mr.	Tikaram	Sharma	Rato Bangala School	Teacher
61	Mr.	Udgum	Khadka		
62	Mr.	Umes	Shrestha	King's College	Assistant Professor
63	Mrs.	Rosy	Shakya		
64	Ms.	Kiran	Khadka	Rato Bangala School	Teacher
65	Ms.	Milan	Sharma	Rato Bangala School	Teacher
66	Ms.	Amardeep Kaur	Bista	Rato Bangala School	Teacher
67	Ms.	Amita	Koirala	Rato Bangala School	Teacher
68	Ms.	Bandana	Uprety	Rato Bangala Foundation	Trainer
69	Ms.	Annie	Brown		
70	Ms.	Anshu	Hyoju	Rato Bangala School	Teacher
71	Ms.	Rati	Maharjan	Rato Bangala Foundation	Trainer
72	Ms.	Bandana	Aryal	Rato Bangala School	Teacher
73	Ms.	Nripa	Malla	Rato Bangala School	Teacher
74	Ms.	Bec	Ordish		
75	Ms.	Bhima	Rai	Seto Gurans	Resource Person/Trainer

76	Ms.	Chanda	Tamang	Rato Bangala School	Teacher
77	Ms.	Rajshri	Nirala	Rato Bangala School	Teacher
78	Mr.	Dipesh	Dulal		
79	Ms.	Jenny	Mananandhar	Rato Bangala School	Teacher
80	Ms.	Sheelu	Karmacharya	Rato Bangala School	Teacher
81	Ms.	Judith	Gold		
82	Ms.	Kalina	Rai Pradhan	Rato Bangala School	Teacher
83	Ms.	Eli	Kawas	Rato Bangala School	Teacher
84	Ms.	Kalpana	Parajuli	Rato Bangala Foundation/Rato Bangala School	Early Childhood Educational Consultant
85	Ms.	Kausalya	Khadka	Rato Bangala School	Teacher
86	Ms.	Kiran	Rana	Rato Bangala School	Teacher
87	Ms.	Rochana	Ghimire	Rato Bangala School	Teacher
88	Ms.	Lavina Chong	Wei Li	Wigglepods Pte Ltd	Director
89	Ms.	Margaret	Singh	Rato Bangala School	Teacher
90	Ms.	Meekha	Mathema	Daya Foundation	Vice-President
91	Ms.	Aayusha	Kapali	Daya Foundation	
92	Ms.	Meenakshi	Dahal	Kathmandu University School of Education	Visiting Faculty
93	Ms.	Milan	Dixit	Rato Bangala School	Principal
94	Ms.	Mingrui	Yang	Honghe University	Lecturer
95	Dr.	Ora	Kwo		

96		Lalit	Singh	Education Officer	Birendranagar Municipality
97	Ms.	Munni	Sharma Pandey	Rato Bangala School	Teacher
98	Ms.	Nilima	Manandhar	Rato Bangala School	Teacher
99	Ms.	Nucche	Maharjan	Rato Bangala School	Teacher
100	Ms.	Niva	Manandhar	Rato Bangala School	Teacher
101	Ms.	Pratistha	Pyakurel	National Disaster Risk Reduction Center	Project Officer
102	Ms.	Priti	Thapa	Kathmandu World School	Teacher
103	Ms.	Rachel	Manandhar		
104	Ms.	Rashmi	KC	World Bank	Consultant
105	Ms.	Rianne	Wiggers	The British School, Kathmandu	Assistant Head of Primary
106	Ms.	Rojina	Pathak	The British School, Kathmandu	Teacher
107	Ms.	Richa	Singh	Rato Bangala School	Teacher/College Counselor
108	Ms.	Sabita	Manandhar	Rato Bangala School	Teacher
109	Ms.	Tara	Nepal	Rato Bangala School	Teacher
110	Ms.	Samara	Gupta	Learning Matters Foundation	Learning Coordinator & Special Educator
111	Ms.	Sara	Levine	Rogers Family Foundation	Senior Program Officer
112	Ms.	Sarita	Rana	Rato Bangala School	RBECC Coordinator
113	Ms.	Seema	Acharya	World Education	
114	Ms.	Shameera	Shrestha	The Asia Foundation	Administration/ Books for Asia

115	Ms.	Shanta	Nepal	Rato Bangala Early Childhood Center	Early Childhood Teacher
116	Ms.	Shweta	Khanal	Rato Bangala School	Teacher
117	Ms.	Shilpa	Rimal	Rato Bangala School	Teacher
118	Ms.	Mamata	Shah	Rato Bangala School	Teacher
119	Ms.	Smriti	Pokharel	Rato Bangala Foundation	Program Officer
120	Ms.	Sonya	Phillip	Learning Matters Foundation	Founder & President
121	Ms.	Sristi	K.C.	Blind Rocks	Dancer
122	Ms.	Sudha	Ojha	Rato Bangala School	Teacher
123	Ms.	Sunita	Adhikari	Rato Bangala School	Teacher
124	Ms.	Tina Rawal	Saud	Kathmandu University School of Management	Faculty
125		Lekhnath	Sharma Pathak	Central Department of Linguistics, Tribhuvan University	Assistant Professor
126	Ms.	Vaishali	Pradhan	The British Council	Head of English and Education
127	Ms.	Vani RS	Rana	Kathmandu World School	Vice Principal
128		Nandalal	Jaisi	Malika Secondary School, Bajura	Teacher
129		Nawa Raj	Pande	Orbang Basic School, Dhading	Head Teacher
130	Prof. Dr.	Bal Chandra	Luitel	Kathmandu University	Professor
131		Topendra Bahadur	Bam	Mahadeb Basic School, Kalikot	Teacher

132		Rohan	Shrestha		
133	Ms.	Sanjeevani	Yonjon	WCN	Eminent Environmentalist
134	Dr.	Aruna	Uprety	Public Health Foundation	Public Health Specialist
135		Min Bahadur	Shahi	Tribhuvan University	PhD Scholar
136		Mamta P.	Chaudhari		
137		Sangden	Ghising	Karkhana	Teaching Team Lead
138		Jagdeep	Bantha	Rural Women Upliftment Association (RWUA)	Field Officer
139		Nitu	Kedia	Rising Rays Boarding School	Secondary Teacher
140		Niroj	Dahal	Nepal Open University	Visiting Faculty
141		Subash	Shrestha	New Leera School, Kathmandu University	Principal/visiting Faculty
142		Priti	Thapa Shrestha	Kathmandu World School	Teacher
143		Udgum	Khadka	King's College	Educational Designer, Faculty
144		Prem Bahadur	Katuwal	United Academy	Student
145		Bishnu Bahadur	GC	Director/Principal	Elite Grand School
146		Chandra Kumar	Shrestha	German Nepalese Help Association	Program Coordinator
147	Dr.	Pashupati	Mahat	Centre for Mental Health and Counselling Nepal	Technical Director/ Senior Clinical Psychologist
148		Pratistha		NDRC	Project Officer

149	Dr.	Tara N.	Poudel	RTI International	Sr. Monitoring & Evaluation Specialist
150		Rosy	Shakya	Samunnat Nepal	Program Coordinator
151		Annie	Brown	KISC EQUIP	Teacher Trainer
152		Nitu	Kedia	Shreekul school	Teacher
153		Kedar Bahadur	Tamang	German Nepalese Help Association	Country Representative
154		Bhima	Rai	Seto Gurans National Child Development Services	Program Coordinator
155		Rojina	Pathak	Teacher	The British School
156		Raju	Thapa	Kaasthamandap Vidhyalaya	Teacher/ Educator
157		Sandesh	Dhakal	Tribhuvan University, Central Department of Psychology	Lecturer
158		John	Rinker	LiconIn School of Kathmandu	ES Design/Art
159		Ranjit	Mahato	World Education	Program Officer
160		Shisir	Khanal	Tech for Nepal	CEO
161		Bineeta	Baral	Kathmandu University	Research Assistant
162		Indra Mani	Shrestha	Kathmandu University School of Education	Faculty
163		Roshani	Rajbanshi	Kathmandu University School of Education	Post-doc

164		Anil Chandra	Poudel	Rato Bangala School	Teacher
165		Archana	Rai	Rato Bangala School	Teacher
166		Mamata P.	Chaudhari	Ghodaghodi Municipality	Mayor

167.	Devi Ram Acharya	Education Review Office	Teacher
168.	Binita Tamang	Kanya Devi basic School	Teacher
169.	Kamala Pandit	Panchakanya Basic school	Teacher
170.	Naresh Pandey	Mahendra Barahi Secondary School	Teacher
171.	Nanu Maya Parajuli	Sishu Vidyashram	Teacher
172.	Indira Ghimire	Nawajyoti Basic School	Teacher
173.	Ambar Bahadur B.K.	shree Tuteswor natha Secondary School	Teacher
174.	Tek Bahadur Malla	Veritriveni Secondary School	Teacher
175.	Bal Ram Bhandari	Bhawani Secondary School	Teacher
176.	Sarita Ghimire	Bidhyadhishwari Secondary School	Teacher
177.	Pream K. Ghimire	Shree Janata Secondary School	Teacher
178.	Madhu Shudan Pokhrel	Bal Kalyan Model Secondary School	Teacher
179.	Naresh Pandey	Mahendra Barahi Secondary School	Teacher
180.	Indra Prasad Paudel	Satyawati Sec School	Teacher
181.	Krishna Dhungana	Terse Secondary School	Teacher
182.	Kavita Kumari Mahato	Shree Secondary School	Teacher
183.	Rupa Acharya	suryadaya Basic School	Teacher
184.	Bipin Kumar joshi	Shree Laxmi Narayan Secondary School	Teacher
185.	Ganesh Chandra Basnet	Nirmal Secondary School	Teacher
186.	Netra B. Bhattarai	Shree Panchkanya Secondary School	Teacher
187.	pemchhiri Shrepa	Shree Phujing Bsic school	Teacher
188.	Prem Raj Lamichhane	Ram Shah Secondary School	Teacher
189.	kumar Ghimire	Shree Janahit Nandalal Secondary School	Teacher
190.	Sabita Gurung	Kalika Sharan Basic School	Teacher
191.	Nirmala Subedi	tripura Sundari Basic School	Teacher
192.	Rajesh Sunam	Ram Shah Secondary School	Teacher
193.	Sushila Gurung	Sepding Devi Basic School	Teacher
194.	Nila Devi Jirel	Jiriswori Basic School	Teacher

195.	Kirti Bahadur Sunuwar	Mathillo Sikkri Basic School	Teacher
196.	Anil Shrestha	Satyawati Secondary School	Teacher
197.	Tejendra P. Bhusal	Shree Sajhapur Secondary School	Teacher
198.	Netra Bahadur Gaire	Shree Pashupati Basic School	Teacher
199.	Mahendra Neupane	Nirmal Secondary School	Teacher
200.	nayan Krishna tripathi	Shree bhupaleswor Basic school	Teacher
201.	Priyanka Rai	Kinderpillar School	Education consultant
202.	Pramod Thapaliya	Bright Horizon Children's Home School	Principal
203.	Milee Shrestha	Ncell	Sr. Specialist
204.	Bhusan Chandra Sen Gurung	CG EDUCATION	Academic Head
205.	Khem Raj Dewan	Campion Kathmandu Secondary School	Principal
206.	Chandrayan	Caribbean School	Principal
207.	Ahana Adhikari Gyawali	CG Education Pvt. Ltd.	Pre school Coordinator
208.	Rajendra Prasad Koirala	NINOS Preschool, CG Education Pvt. Ltd.	Principial
209.	Shree Krishna Thapa	Rural Community Foundation Nepal	Founder/Executive Director
210.	Reeta Tamang	Save the children	Program coordinator
211.	Birangana Maharjan	Sudeshia School	Principal
212.	Som Raj Paneru	The Chandbagh School	Vice Principal
213.	Pritee Rai	Kaasthamandap Vidhyalaya	Academic Coordinator (Senior school)
214.	Sunila Maharjan	United Mission to Nepal	Project officer- Education
215.	Ayushma Rana Shah	Kaasthamandap Vidhyalaya / KIDPROOF Nepal	Director/ Management
216.	Paban Kumar Adhikari	United Mission to Nepal	Education Trainer
217.	Anantika Thapa	Kaasthamandap Vidhyalaya/Kidproof Nepal	Director/ Management
218.	Anjana Chitrakar	United Mission to Nepal	Programme Officer

219.	Avinash Kumar Mahato	Ratauli Yuwa Club (RYC) Mahottari	Field Officer
220.	Kshitiz	Street Child of Nepal	Manager, Strategy and Growth
221.	Kedar Dyola	GNHA	Education Officer
222.	Kamdev Yadav (changes)	Community Family Welfare Association (CFWA)	Field Officer
223.	Mandan Kumar Barma	Rural Women Upliftment Association (RWUA)	Field Officer
224.	Thakur Prasad Paudel	GNHA	Education Officer
225.	Chandra Kafle	GNHA	Social Mobiliazar
226.	Indra Bahadur Lama	GNHA	Filed Officer
227.	Dipak Rokka	GNHA	Training coordinator
228.	Aruna Sherchan	Fulbari Montessori Cottage Pre & Basic School	Founder Principal
229.	Rose Upadhaya	Adhyayan School	Director
230.	Sharan Kumar Aryal	Adhyayan School	Director
231.	Depasna Shah	Kaasthamandap Vidhyalaya	Director
232.	Ela Piya	Kaasthamandap Vidhyalaya	Director
233.	Ajit Lama	Triyog High School	Executive Director
234.	Dharmananda Thakur	Community Family Welfare Association	Field Officer (Education)
235.	Shiv Shankar Tharu (Chaudhary)	Community Family Welfare Association (CFWA)	Education Officer
236.	Shubha Poudel	Puku Didi Foundation	Board Chair - Puku Didi Foundation
237.	Gopal Parajuli	Orchid School	Academic Director
238.	Rajya Laxmi Nakarmi	Seto Gurans National Child Development Services	Treasurer
239.	Dr. Prem Narayan Aryal	Seto Gurans National Child Development Services	Executive Director
240.	Radhika Tumbahangphey	Seto Gurans National Child Development Services	Executive Member
241.	Madhu Bilash Khanal	center For mental Health and Counseling Nepal- CMC Nepal	school psychologist
242.	Prabha Kumari Chaudhary	Baha'i Teacher Training Program	Program Coordinator
243.	Arjun Thapa Magar	Kalika Self Relf Reliance Social Center	Sr. Program Officer

244.	Ishwor Khatry	Save the children	Sr. Program Coordinator - Education
245.	Ashbir Saru	Save the children	Project Officer
246.	Khem Raj Paudel	Save the children	Resource Person (RP)
247.	Laxman Bashyal	Sarwardari Municipality	Under Secretary
248.	Sunita Belbase	Lumbini Integrated Development Organization - LIDO	Program Coordinator
249.	Janu Pandey	Sunshine Social Development Organization	Education Officer
250.	Shiva Thapa	Nirmal Batika Academy	Principal
251.	Nir Bahadur Ale	Sabal Nepal Rajbiraj (Supported by Save the children)	Field officer
252.	Atma Ram Bhattarai	Save the Children	Technical Manager, Education
253.	Upendra Rawal	Social Service Center(SOSEC) Nepal, Dailekh Sahayataru II Project	Education Coordinator
254.	Pramod Neupane	Save the Children	Project Coordinator -Education
255.	Keshav Kumar BC	Panchtara Yuwa Samrakshak Manch, Jajarkot	Program Coordinator
256.	Tika Ram Nepali	Save the Children	Project Coordinator -Education
257.	Rachel Manandhar	Independent	Educator
258.	Gopal Prasad Chaudhary	Save the Saptari	Program coordinator
259.	Kalpana Giri	University School	Principal
260.	Manjita Koirala	Nitin Memorial School	Teacher
261.	Roshan Kumar Singh	Bal Batika School,Pepsicola	Director
262.	Sagendra Shrestha	Collaborative Schools Network	Co-Director
263.	Harka Bahadur Karki	Navodaya Shishu Sadan School	Supervisor
264.	Ram Shrestha	Navodaya Shishu Sadan School	Teacher
265.	B.K. Sherstha	Global Action Nepal	Director
266.	Pramindar Yadav	Saraswoti Budhha Joyti PS	Teacher
267.	Kamala Rayemajhi	Nepal Rastriya LSS, Mugari	Teacher

268.	Om Prakash Baniya	Global Action Nepal	Resource Trainer
269.	Lal Chandra Pandey	Nepal Rastriya SS	Teacher
270.	Bishnu Devi Sharma	Ramujagir PS	Teacher
271.	Satyendra Mani Tripathi	GAN	Resource Trainer
272.	Menuka Chaulagain	Kamane Academy	Teacher
273.	Rama Dahal	Kamane Academy	Teacher
274.	Anjana Pudasaini	Kamane Academy	Teacher
275.	Laxmi Kunwor	Kamane Academy	Vice-Principal
276.	Surendra Bajracharya	Samunnat Nepal	Finance Officer
277.	Umesh Kumar Bishwokarma	Save the children International	Project Coordinator- Education
278.	Sangita Khanal	Samunnat Nepal	Class Mobilizer
279.	Laxmi KC	Samunnat Nepal	Class Mobilizer
280.	Kabita Ramtel	ECEC	Teacher trainer
281.	Prem Prasad Lohani	Elite Grand School	Academic Director
282.	Poonam Yadav	Happyland Secondary School	Teacher
283.	Shiv Kumar Barai	Suraj Agriculture Cooperative Organization Ltd	Manager/Member
284.	Santosh Kumar Yadav	Happyland Secondary School	ordinator
285.	Pujari Raidas	Dumara Poverty alleviation Agriculture Cooperative Organization Ltd	Member/Manager
286.	Maihibuddhin Sheikh	Banshkor Community Learning Center	Chairperson
287.	Sudha Pandey	Balmiki Women Development Saving & Loan Cooperative Ltd	Chairperson
288.	Ammar Bahadur Basnet	Siddhartha Social Development Center	Finance Officer
289.	Sarad Chandra Rawal	Spring Dell Academy	Principal
290.	Sujit Rai	Early Childhood Education Centre	Teacher Trainer
291.	Subarna Kesari Maharjan	Bal Raman Batika School	Principal

292.	Leena Shrestha	ECETA	President
293.	Jayanti Lama	Teach For Nepal	English Teachers Trainer and Impact Manager
294.	Bimal Kumar Chhetri	Small Heaven Model School	Principal
295.	Prakash Ghimire	Siddhartha Social Development Center	Member
296.	Anupama Mukhia	ECEC	Teacher trainer
297.	Bina Sharma	Fairy's World ECD	Principal
298.	Bijaya Mani Paudel	Teach For Nepal	Deputy Director of Training and Support
299.	Sabita Thapa	ECEC	Team leader
300.	Agatha Thapa	Seto Gurans National Child Development Services	Founder/Vice-chairperson
301.	Bibek Shakya	Early childhood education center	Teacher Trainer
302.	Sanyukta Suman	Karkhana	Teaching Associate
303.	Vinita Sharma	Kids Care International Pre School	Director
304.	Mamata Gurung	Whitehouse School	Primary Coordinator
305.	Sabina Dahal	Bibhuti Pathshala	Director
306.	Madhu Kumari Rai	Sarita Indra Pre-Primary Teaching School	Principal/ Teacher
307.	Pratik Ghimire	Teach For Nepal	Math Teacher Trainer
308.	Hom Bahadur Thapa	Teach For Nepal	Science Teachers trainer
309.	Uddab Bhattarai	Save the Children	Education Coordinator
310.	Shak Bahadur Budhathoki	Mercy Corps Nepal	Education Coordinator
311.	Goma Oli	Backward Society Education (BASE)	Education Officer
312.	Lal Bahadur Chaudhari	World Education Inc.	Program Officer
313.	Bishwonath Kandel	Pathshala Nepal Foundation	Principal
314.	Anita Tamang	Pathshala Nepal Foundation	Founder Principal
315.	Mrs. Lalita Prasai	Wendy House School	Founder and Chair Person
316.	Mrs. Bijayta Shrestha	Wendy House School	Primary coordinator

317.	Bhakta Bahadur Khadka	Kopila Valley School	Lower Secondary Math Teacher
318.	Samjhana Neupane	Kopila Valley School	Primary Level Teacher
319.	Bindrawati Dubey	Shree Janta PS, Pipara	ECD Facilitator
320.	Fajale Raihman	Shree Satkumari serchan Lower Secondary School	Principal
321.	Narendra Bahadur Kurmi	Shree Chhatrapali Tirthdevi Higher Secondary School	Principal
322.	Ghanshyam Chaudhary	Shree Nepal Rastriya LSS, Bimiha	Principal
323.	Ila Rana Thapa	GEMS	Coordinator
324.	Shelly Thapa Koirala	GEMS	Vice Principal
325.	Arvind Lal Karna	Birgunj Metropolitan City	Under Secretary
326.	Anju Pradhan	Sanepa	Academic Supervisor
327.	Kapil Dev Regmi		Chairman
328.	Arbindra Lal Karna	Educational Pages	Officer
329.	Nila Jha	ECEC	Teacher
330.	Sumana Shrestha	ECEC	Tecaher
331.	Shramika Bhandari	Rato Bangala School	Teacher
332.	Bhawani Panthi	Rato Bangala School	Teacher
333.	Astha Rijal	Rato Bangala School	Teacher
334.	Kalpana Shrestha	Rato Bangala School	Teacher
335.	Anju Piya	Rato Bangala School	Store Supervisor
336.	Nikki Shakya	Rato Bangala School	Librarian
337.	Rashmi Uprety	Rato Bangala School	Teacher
338.	Manju Pradhan	Rato Bangala School	School health nurse
339.	Sagarika Khadka	Rato Bangala School	Administrator
340.	Dipa Maharjan	Rato Bangala School	Front Desk
341.	Prakriti Karmacharya	Rato Bangala School	Administrator
342.	Sunita Basnet	Rato Bangala School	Accountant
343.	Mamata Manandhar	Rato Bangala School	Administrator
344.	Archana Joshi	Rato Bangala School	RBPOP Coordinator
345.	Nilima Manandhar	Rato Bangala School	Teacher
346.	Chandra Dangol	Rato Bangala School	Graphic Designer
347.	Ramesh Upadhyaya	RBPOP (Dullu Municipality, Dailekh)	Computer Operator
348.	Mamata Sharma	Rato Bangala School	Librarian

349.	Kanchan Rimal	Rato Bangala School	Librarian
350.	Subadra Sapkota Pokhrel	Rato Bangala School	Lab Incharge
351.	Pragya Mathema	Rato Bangala School	Teacher
352.	Shanta Nepal	Rato Bangala School	Teacher
353.	Sanchita Pandey	Rato Bangala School	Teacher
354.	Bhawana Goldie	Rato Bangala School	Teacher
355.	Krishna Maharjan	Rato Bangala School	Teacher
356.	Top Kumari Ghimire	Rato Bangala School	Office Assistant
357.	Rhitika Shrestha	Rato Bangala School	Intern
358.	Mahima Manandhar	Rato Bangala Foundation	PR and Documentation Officer
359.	Saraswati Rajbhandary	Rato Bangala Foundation	Coordinator
360.	Sakuntala Pun	Rato Bangala School	Teacher
361.	Binu Timalisina	Rato Bangala School	Teacher
362.	Manju Gopali	Rato Bangala School	Teacher
363.	Sheila Shrestha	Rato Bangala School	Counsellor
364.	Riju Poudyal	Rato Bangala School	Counsellor
365.	Eli Khawas	Rato Bangala School	Teacher
366.	Ram P Dhakal	Rato Bangala School	Admin
367.	Ganesh Duwadi	Rato Bangala School	Maintenance Incharge
368.	nilima shakya	rato bangala school	teacher
369.	Muskan Shrestha	rato bangala school	teacher
370.	Dipendra Raj Dhakal	rato bangala school	teacher
371.	Zapocho tetseo	rato bangala school	teacher
372.	Ruja Shrestha	rato bangala school	
373.	Ayush Regmi	rato bangala school	
374.	Esha Thapa Dhungana	rato bangala school	RBF director
375.	Rojja Kharel	rato bangala school	
376.	Swastika Basnet	rato bangala school	Teacher
377.	Santa Hitang	rato bangala school	Teacher
378.	Hari Prasad Pudasaini	rato bangala school	
379.	Bharat Ghimire	rato bangala school	
380.	Sarita Pradhan	rato bangala school	