





A Multi-Modal Approach to Teacher Professional Development to Address Evolving Educational Changes in Low Resource Settings

LANDSCAPE MAPPING STUDY

Afghanistan | Maldives | Nepal

Country Report - Nepal 2022



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CETE/2023/Feb/RP/2

The Centre of Excellence in Teacher Education (CETE)at the Tata Institute of Social Sciences, Mumbai (bit.ly/cetewebsite), aims to enable Right to Quality Education for all children in India by helping teachers respond to diverse and changing needs. Built around the central premise that professional qualified teachers can create lasting impact, the centre focuses on empowering teachers, improving professional development standards, supporting the teacher education ecosystem, and advocating the strengthening of policy on teaching and teacher education. Research at the centre is on the themes of quality in teaching, policy and scaling innovations, inclusion, curriculum and pedagogy, and EdTech. Academic teaching programmes include B.Ed.-M.Ed., M.A. Education, doctoral research, short term programmes through blended learning, and online offerings to enhance capabilities of teachers and teacher education faculty (www.tissx.tiss.edu). Key field action projects are focused on improving inclusive teaching-learning at schools and employing technology thoughtfully in professional development of teachers. The Connected Learning Initiative (www.tiss.clix.edu), was awarded the UNESCO King hamad Prize for the Use of ICTs in Education in 2018. CETE received seed support from the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Government of India, and TATA TRUSTS.

The Multimodal Approach to Teacher Professional Development in Low Resource Settings (MATPD) is a collaborative design-piloting implementation – research-based project which was awarded the Regional IDRC KIX GPE Grant (2021-2023). MATPD aims to develop practice, engage in research and inform policy on teacher professional development using distance learning modalities, social learning communities and practice-based and action-research based professional learning and development. MATPD draws on TPD strategies developed and implemented in India, by the Centre of Excellence in Teacher Education, through its Connected Learning Initiative and Integrating Technology in Education Projects. MATPD is being implemented and researched in the Maldives, Afghanistan and Nepal. MATPD is led by Villa College, the Maldives with the Centre of Excellence in Teacher Education, Tata Institute of social Sciences as technical lead and implementing partner for Nepal, and the Swedish Committee for Afghanistan.



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Report is available for download at http://bit.ly/cetewebsite,
Any questions, suggestions or queries may be sent to us at: chair.cete@tiss.edu

Centre for Excellence in Teacher Education (CETE) Tata Institute of Social Sciences (TISS)
V.N.Purav Marg, Deonar,
Mumbai- 400088, India
chair.cete@tiss.edu
http://bit.ly/cetewebsite

Phone: +91- 22- 25525002/3/4/5

Authoring and Research:

Dr. Ruchi Kumar, Assistant Professor, CETE, TISS (Co-Principal Investigator)

Dr. Ajay Kumar Singh, Associate Professor, SOE, IGNOU (Advisor)

Ms. Reema Govil, Research Manager, CETE, TISS

Ms. Dhwani Bafna, Consultant-Program Design and Implementation, CETE, TISS

Mr. Anirudh Agarwal, Research Assistant, CETE, TISS

Report Design and Formatting: Villa College, Maldives

Founding Partner



RESEARCH TEAM

Dr. Ruchi Kumar, Assistant Professor, CETE, TISS (Co-Principal Investigator)

Dr. Ajay Kumar Singh, Associate Professor, SOE, IGNOU (Advisor)

Ms. Reema Govil, Research Manager, CETE, TISS

Ms. Dhwani Bafna, Consultant-Program Design and Implementation, CETE, TISS

Mr. Anirudh Agarwal, Research Assistant, CETE, TISS

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ACRONYMS

ARNEC All Round National Education Committee

B.Ed. Bachelor of Education

CBS Central Bureau of Statistics

CEHRD Centre of Education and Human Resource Development

CERID Research Centre for Educational Innovation and Development

CETE Centre of Excellence in Teacher Education

CoP Communities of Practice

CPD Continuous Professional Development

CWSN Children with Special Needs

DFID Department for International Development

DoE Department of Education

DTL Distance Teaching and Learning

ECED Early childhood education and development

ETC Education Training Centre

FY Financial Year

GON Government of Nepal
GPA Grade Point Average

Global Partnership for Education Knowledge and Innovation Ex-

change

GDP Gross Domestic Product

IDRC International Development Research Centre
 HESSA Handbook of Education Systems in South Asia
 ICT Information and Communications Technology

IGNOU Indira Gandhi National Open University

INGO International Non-Governmental Organization

KMO Kabul Management Office

Local Government

MATPD Multimodal Approach to Teacher Professional Development

M.Ed. Master of Education

MoEST Ministry of Education, Science and Technology

MOOC Massive Open Online Courses

MOU Memorandum of Understanding

M.Phil. Master of Philosophy

NASA National Assessment of Student Achievement

NCED National Centre for Educational Development

NEC National Education Commission

NELTA Nepal English Language Teachers' Association

NEP National Education Policy

NEPC National Education Planning Commission

NESP National Education System Plan

NFE Non-Formal Education

NGO Non-Governmental Organization

NNEPC Nepal National Educational Planning Commission

NPR Nepalese Rupee

OER Open Educational Resources

Political, Economic, Social, Technological, Environmental, and

PESTLE Legal

PhD Doctorate of Philosophy
PTC Provincial Training Centre

PETC Provincial Education Training Centre

RBA Rights Based Approach

SCA Swedish Committee for Afghanistan
SEE Secondary Education Examination

SIDA Swedish International Development Agency

SC School Leaving Certificate
SSRP School Sector Reform Plan

SSDP School Sector Development Plan

SSDP TA SSDP Technical Assistance

SESP School Education Sector Plan

SOP Standard Operating Procedure

STR Student Teacher Ratio

TE Teacher Education/Teacher Educators
TEMP Teacher Educator Master Programme

TISS Tata Institute of Social Sciences

TOT Training of Trainers

TPD Teacher Professional Development

TSC Teachers Service Commission

TU Tribhuvan University

UGC University Grants Commission

UN United Nations

UNICEF United Nations Children's Fund

UNESCO United Nations Educational, Scientific and Cultural Organization

USD United States Dollar

VC Villa College

MATPD CONSORTIUM

The project, A Multimodal Approach to Teacher Professional Development in low resource settings (MATPD) is a collaborative endeavour. A South South collaboration of higher education institutions and a global non-profit entity, the consortium is addressing the poor quality of teacher professional development for distance teaching and learning through this project. Villa College, Maldives is the lead partner of the consortium. The Tata Institute of Social Sciences (TISS) is the co-lead and knowledge partner for the proposed innovation; while the Swedish Committee of Afghanistan is the third partner, implementing the project in Afghanistan. The learnings from TISS's award winning and globally recognized initiatives on TPD developed in and for underresourced and developing contexts will be adapted, piloted, researched in Afghanistan, Maldives and Nepal.

Villa College is the first and largest private higher education institution in the Maldives offering a variety of academic programmes. The teacher training programs offered by Villa Collage at the Faculty of Educational studies are known to be popular. The Swedish Committee for Afghanistan (SCA) has been involved in implementation of education projects that include capacity development, advocacy and service delivery since 1984. The SCA Teacher training aims at building teachers' capacities in subject knowledge and pedagogy which are geared towards teacher professional development in short courses.

Tata Institute of Social Sciences, Mumbai, India (www.tiss.edu) is among South Asia's premier research and teaching universities in social Sciences. The Centre of Excellence in Teacher Education (CETE), an Independent Centre on the TISS Mumbai Campus engages in teaching, research, and field action, and has multidisciplinary expertise in the use of ICT in Education for quality reform at scale. CETE envisages its role as a "Catalyst for Transformation in Teacher Education" through multiple activities. The Centre has hosted several UNESCO award winning field action research projects including Integrated

Approach to Technology in Education (ITE)¹ and Connected Learning Initiative (CLIx)². The Centre's in-service teacher education programmes and Communities of Practice were also awarded a certificate of appreciation. The centre has also had international project of Teachers Education Masters Programme (TEMP³) in the space of Teacher educators' professional development for Afghanistan Teacher educators in collaboration with SCA.

¹ https://tiss.edu/view/11/projects/integrated-approach-to-technology-in-education-ite/

² https://tiss.edu/view/11/connected-learning-initiatives-clix/

³ https://tiss.edu/view/11/projects/teachers-education-masters-programme-temp/

EXECUTIVE SUMMARY

The Landscape Mapping Study aims to understand the space of teacher education system in the country especially, teacher professional development and how the insights from the report will help (a) inform the projects' strategy, design and activities and (b) identify available resources and contextual factors that may impact implementation, discussion on adaptive management/risk mitigation strategies in case of a change in conditions.

The study is based on extensive in-depth interviews with a set of diverse stakeholders comprising university faculty, non-profits, government functionaries, consultants and funding agencies who are engaged in the space of Teacher Education. In addition, secondary sources such as ministry websites, policy documents, research papers, impact studies were also looked at.

Nepal is a landlocked country with a diverse topography. There are 7 provinces and 753 local governments. The country has recently undergone a change in governance system from unitary to federal. This has shifted the responsibility of school education from the centre to the local level. There are 3 types of schools in Nepal: community, private and religious. Community schools form the largest conglomerate with around 3 lakh teachers in the system. Nepal's school structure comprises 8 years of basic level education and 4 years of secondary education.

Teacher Education is the responsibility of Universities for pre-service and the apex teacher training body-Centre for Education and Human Resource Development (CEHRD) for various professional development activities. The training vertical at CEHRD conducts different kinds of professional development programs for the teachers in the system namely: refresher training, certificate training and local need-based training. These are based on the teacher competency framework and the teacher professional development framework developed by CEHRD. Action Research and Lesson Plan creation are mandatory tasks required to be completed by the teachers as part of the certification training program.

The training is carried out at the provincial level Education Resource Centres (ETCs) by CEHRD and roster trainers. With a change to federal structure, the number of functioning ETCs reduced from 29 to 7 ETC, thereby reducing the capacity for in-service training and teacher support and thus impacting the number of teachers trained. With decentralization, in addition to TPD activities at the provincial level, there is a policy mandate to carry out continuous professional development of teachers at the school level. These would comprise modalities such as customized training, workshops, seminars, collaborative research, observation tours, reflections, teacher networks, mentoring, coaching, etc.

Professional development of teachers is a key focus area for policy makers as reflected in the national education policy and several education sector plans like SSRP, SSDP and SESP though the budgetary allocations are quite low. For instance, the SSDP 5 year plan earmarked only 1.9% of the total budget for teacher management and TPD.

The learnings from these professional development programs have not translated into effective quality classroom instruction and practice. These include factors such as reduced number of training centers, unclear division of labor between government departments, centrally designed training programs, low capacitated roster trainers, weak monitoring and evaluation, poor infrastructure and low budgetary allocation. As a result, SSDP TA in collaboration with CEHRD has recently initiated a Teacher mentoring program to provide teachers with a comprehensive and sustainable continuous professional development approach to strengthen teacher education at the systemic and school level.

The covid-19 pandemic has had a serious impact on students' learning as well as their social, emotional and psychological well-being. A significant number of students did not have access to devices or the internet. Several local governments launched various radio and TV programs and distributed self-learning packs so that the students could continue with their studies in some form during the school closures.

Professional Development of teacher educators does not find a mention in the policy. Additionally, there is no budgetary allocation for the same. Their training is not formalized and there does not seem to be a robust process in place for their selection. One also sees very few platforms available for their own professional development.

SECTION I.

1.1 Introduction to the MATPD Project

A Multi-Modal Approach to Teacher Professional Development to Address Evolving Educational Changes in Low Resource Settings.

The MATPD project aims to influence policy, practice, and further research in distance Teacher Professional Development in South Asian countries.

Specific Objectives

- Generate knowledge about the enablers for an integrative distance teacher professional development model in low resource settings.
- Enhance the capacity of teacher educators and teachers by developing their leadership skills and knowledge in constructive use of new media and technology to enhance their practices.



• To mobilize support of and share insights with relevant stakeholders on adapting, adopting, and sustainability of pedagogically rich TPD approaches.

Research Questions

The research questions will pave the way to delve deeper and progress towards the core intended outcomes of the initiative. They are as follows:

- How can Teacher Educators and Teachers be enabled to take ownership of adapting and adopting the proposed innovation along with the support of relevant stakeholders in the education system?
- What are the levers for and barriers to delivering pedagogically rich distance teaching and learning experiences at scale?
- How can media and technology be used to enhance and develop leadership skills in TEs and teachers?

Project Activities

The Project aims to implement elements of two innovative approaches on Teacher Professional Development (TPD) developed by the Centre of Excellence in Teacher Education (CETE), Tata Institute of Social Sciences. It is designed for under-resourced and developing contexts with a collaborative adaptation to suit the national contexts of the participating countries in South Asia (Afghanistan, Maldives, Nepal). With the usage of diverse technologies modalities for TPD that are context-appropriate and combined with action research and social change through the formation of Professional Learning Communities while building on the communities of practice that exist or get developed through mobile-based chat groups.

The main activities of the project are:

- **I.** A Landscape Mapping Study will be organized in two stages. The first stage entails in-depth interviews with key informants in each country including policy makers, teacher educators, and teachers. The second stage comprises extensive secondary research on Teacher Professional Development. The study will help:
 - a) To inform the projects' strategy, design, and activities.
 - b) To identify available resources and contextual factors that may impact implementation, discussion on adaptive management/risk mitigation strategies in case of a change in conditions.
- **II.** BASK research study of change in Beliefs and attitudes, skills and knowledge of TEs. This will entail conducting a pre and post-test to understand the development in content, pedagogy, inclusion, and distance education concerning TEs perceptions, attitudes, skills, and behaviour.
- III. Research fellows to undertake the training program as well as carry out an Action Research Project. They will also be expected to record and analyze interventions with approximately 5-10 school teachers with whom they are collaborating for conducting action research.
- IV. A compendium of case studies/action research reports will be prepared based on selected action research report of research fellows mentioned in the previous activity. The compendium will present emerging insights and provide a deep dive into some of the reflections of the fellows based on the professional development activities and peer-to-peer interactions.
- **V.** A guideline document comprising perspectives for policy and practice of distance TPD in the South Asian region will be developed.

Expected Outcomes

- Based on the analyses of comparative data, this study will generate knowledge relevant for improving the quality of Distance Teaching and Learning (DTL) in developing country contexts.
- The professional development opportunities provided to teacher educators during the program will enhance TEs' competency and skills as they will get an opportunity to engage in hands-on practices and knowledge sharing with teachers. This is in addition to the coursework on a meaningful integration of new media and technology for DTL, action research, mentoring, design thinking and leadership.

- It will also foster the 21st-century skills of critical thinking, problem-solving, collaboration, and digital literacy in learners, thereby, making space for iteration and dynamism in the TE's and teachers' practice.
- The case studies and action research reports will provide emerging insights and a deeper understanding of the reflections of the fellows based on the training program and peer interactions. Also, it gives an opportunity for TEs to get authorship and showcase their work as a knowledge product.
- Lastly, the guideline document will supply a conscious observation and recommendations for governments and other stakeholders tasked and involved in distance teaching and learning.

Project Partners

The study is funded by IDRC under the Global Partnership for Education Knowledge and Innovation Exchange (GPE-KIX). The consortium comprises Villa College in Maldives, Swedish Committee for Afghanistan, and the Centre of Excellence in Teacher Education (CETE), Tata Institute of Social Sciences, India which serves as a technical partner.

Villa College is the first and largest private higher education institution in the Maldives offering a variety of academic programmes. Villa College has established a strong foothold in the Maldivian community and has a strong collaboration with international partners in the UK and Malaysia. Villa College is recognized by international accreditation bodies such as the APQN, INQAAHE, IAU, and the ACU. The Institute of Research and Innovation at the college is a first of its kind in the country, dedicating itself to promote, undertake and foster research. The college has undertaken successful research projects for local clients and agencies such as the United Nations. It has also introduced Research grant schemes to provide opportunities for more people to undertake research. The teacher training programs offered at the Faculty of Educational studies are known to be popular. VC Faculty of Educational Studies have always had a role in contributing to the policy formulation, by attending and engaging in discussions with the Ministry of Education and National Institute of Education. It is one of the key institutes that provides an accessible education to all islands throughout the country via their Atoll Campuses or through the Outreach Learning centers.

The Swedish Committee for Afghanistan (SCA) has been operational in Afghanistan for over 35 years. Currently, SCA operates in 17 out of 34 provinces in Afghanistan. SCA'S presence in Afghanistan consists of the Kabul Management Office (KMO), five Regional Management Offices and three Liaison Offices. SCA receives funds from various international and private donors, mainly from the Swedish International Development Agency (SIDA). With more than 6,000 Afghan employees, it is one of the largest organizations in Afghanistan. SCA implements education, health, and disability programmes in rural and remote areas through the Rights-Based Approach (RBA). It also builds the capacity of individuals and civil society organizations to enhance their capacity to advocate for their rights. SCA also supports the empowerment and rights of women throughout its programmes. SCA has been involved in the implementation of education projects that include capacity development, advocacy, and service delivery since

1984. Currently, the programme is being implemented in 745 districts across 14 provinces. Through the Education Programme SCA aims to provide equal access to quality educational opportunities. SCA's Education Programme aspires to: Improve students' access to education and provide an inclusive learning environment for all children; Enhance effective teaching and quality in education; Support community-based organizations in target communities and professional associations to be more self-organized, representative, and fulfill their responsibilities in the promotion of, and advocacy for accountable and responsive education services and; Provide support to Education authorities to enable them to have the required capacity to ensure sustainable, inclusive and effective education services in Afghanistan. The SCA Teacher training is probably the most important part of the SCA Education Programme intervention. It aims at building teachers' capacities in subject knowledge and pedagogy/ which are geared towards teacher professional development in short courses. Teacher Educator Master Programme (TEMP) is another activity under SCA teachers' capacity development. The focus of TEMP is teacher educators drawn from all over the country.

Tata Institute of Social Sciences, Mumbai, India (www.tiss.edu) is among South Asia's premier research and teaching universities in social sciences. The Centre of Excellence in Teacher Education (CETE), an Independent Centre on the TISS Mumbai Campus engages in teaching, research, and field action, and has multidisciplinary expertise in the use of ICT in Education for quality reform at scale. It has designed the TPD innovations whose elements will be piloted in this project. Centre was awarded the UNESCO King Hamad Prize for Excellence in Use of ICTs in Education in 2018 for its flagship initiative connected learning initiative as well as the OER Award.

The leadership team for the MATPD project is as follows:

- Principal Investigator: Ms. Fathimath Saeed (Villa College, Maldives)
- Co Principal Investigators: Dr. Ruchi Kumar (TISS, India), Mr. Mohammad Tahir Ismat (SCA, Afghanistan)
- Convener, Steering Committee: Ms. Dhwani Bafna, TISS India
- Advisor: Prof. Ajay Singh, IGNOU, India
- Research Team Anchors: Ms. Reema Govil (TISS, India), Dr. Aishath Nasheeda (Village College, Maldives), Mr. Charles Osaka Kesa (SCA, Afghanistan).

1.2 Research Methodology and Data Collection

The landscape mapping for the 3 countries (Afghanistan, Maldives and Nepal) was done based on primary data gathered from interviews and literature drawn from secondary research.

An extensive semi-structured interview schedule was developed collaboratively by TISS, SCA and Villa College. The interview tool enabled us to understand the teacher education ecosystem in the country with specific focus on Teacher Professional Development and its various facets. Concepts of action research, mentoring, use of ICT, distance education and inclusion were explored within the context of Teacher Professional Development (TPD) and Teacher Educators' professional Development. (*Please refer to Annexure 1 for the interview schedule*).

We interviewed a total of 26 stakeholders from diverse backgrounds across the 3 countries. These comprise government functionaries, teacher training institutes, school principals, teachers, non-profit organizations, funding agencies and consultants working in the space of teacher education. (*Please refer to Annexure 2 for the list of stakeholders interviewed in Nepal*).

The literature reviewed (approx 50 documents) for landscape mapping comprised policy documents, budget documents, reports on education plans and programs, ministry website, research papers, impact study reports, blogs, newspaper articles, case studies, reports/documents shared by interview respondents amongst others to understand the country profile and context, data on various programs/initiatives around TPD and specifically during covid-19 pandemic, gaps in teacher education & TPD practices, policies around TPD, data on finances / investment for school education and TPD etc. (*Please refer to Annexure 3 for a list on secondary literature reviewed*).

For Nepal, a total of 11 interviews were carried out virtually by the TISS Team based out of India. These comprised 8 male and 3 female respondents from various universities, government and non-government organizations, invested in Teacher Education and TPD programs. These interviews aimed to construct a holistic perspective about the status and concerns regarding TPD in Nepal.

We wanted to reach out to a diverse set of stakeholders who have engaged in the space of teacher education and TPD specifically to get different perspectives and insights on Teacher Education and Teacher Professional Development, through their work, experiences and reflections. The following criteria was considered to include the potential participants. All interview participants should have (a) the knowledge and experience of how TPD is conducted. (b) must be involved in conducting or implementing PD in school level/policy level and must have at least 5 years or more years of experience working as a teacher/teacher educator/principal/PD policy maker.

The sampling methodology adopted for the research was purposive, convenient and snowball. The initial respondents for the study "Interview respondents 1-4" were reached out for interviews as they had been associated with TISS on former projects. They were requested to help us identify other potential interviewers for the study. We subsequently reached out to the other potential interviewees and closed on the ones that agreed to participate in the study. These were "Interview respondents 5-11." In addition to speaking with the above participants,

we also reached out to few resources over an informal conversation in order to bridge some of the information gaps.

The interviewees were briefed on the MATPD project and the objective of the landscape mapping study either on email or over a phone call followed by sharing of the interview schedule and the consent form. A mutually convenient time was sought to conduct the interview.

The interviews were carried out in English on zoom and spanned 1-1.5 hours. While most of the interviews were done over a single session, few were completed in 2 phases based on identifying further questions after going through the interview. The interviewees were requested to share relevant documents based on the conversation.

During the data collection process, there were some delays in carrying out the interviews since some of the interviewers and respondents and/or families were affected with the covid-19. In addition, access to data has been challenging on various accounts: (a) data was inaccessible for it could not be shared in the public domain, (b) The interviewees did not have information/ details for some of the questions asked, and, (c) lack of available data as evidence, (d) some of the policy documents, online information could not be accessed since it was in the vernacular language. Last but not the least, one of the limitations was not being able to speak with teachers for the study. Their perspectives would have really enriched the study with insights into current TPD practices on the ground.

Post the phase of data collection, the interviews were transcribed for the purpose of data analysis and report writing. This was followed by the process of data querying based on codes generated from the interview schedule as well as voices from the ground. (*Please refer to Annexure 4 for the Code Index*). The data under the various codes were subjected to content analysis. Key highlights from the analysis and the relevant anecdotes were integrated into the report.

SECTION II.

2. Country Profile

2.1 Geographic, demographic, political, and administrative context

Geographically, Nepal is a landlocked country with Bhutan, India, China and Bangladesh as extremely close neighbors. Physically, Nepal is very small in size with a total area of 147,181 sq. km. It measures 880km East to West and 150-250 km North to South regions. Geographically, it is divided into 3 parts, the Himalayas, the hills, and the Terai and shares its northern territory with China and is locked by India on its Southern, Eastern, and Western sides. Terai region, being the flat land, is responsible for growing the majority of the country's crops whereas, the Himalayan region is the home to the highest peak in the world, Mt. Everest. There are no significant water sources for the rivers in Nepal but are fed by the snow melts from the peaks and have an abundant amount of water flowing in the Koshi, the Karnali, the Gandaki, the Kali, and the Narayani rivers throughout the year (Where Is Nepal in the World?, 2022).

Nepal is defined as a federal democratic republic after the replacement of the Interim Constitution of 2007 by the Constitution of Nepal 2015 and has three tiers of government: local, provincial, and federal. After the last democratic election held in November 2017, Nepal consists of 753 local governments, seven provincial governments, and one federal/central government. The 7 provinces are: Province 1, Madhesh province, Bagmati province, Gandaki province, Lumbini province, Karnali province and Sudur Paschim province.



Figure 1: Political Map of Nepal

With an annual growth rate of 5.89%, the gross domestic product of Nepal has reached 2.6 trillion Nepali Rupees in 2018. In FY 2017/18 Nepal allocated an annual budget of 12 billion Nepali Rupees. The GDP per capita stands at USD 1001. Nepal's economy is dominated by the tertiary sector, which contributes 57.61% of the GDP followed by the primary sector (28.21%) and secondary sector (14.18%). (Ministry of Finance, 2021).

According to the preliminary report of the Housing and Population Census 2021, the total population of Nepal is 29,192,480 of which 48.96% are male and 51.04% are female, and has a population density of 198 per sq. km.. As per the census 2011, Nepal has a diverse ethnicity with 126 caste/ethnic groups. Chettri being the largest group covers 16.6% (4,398,053) of the total population which is followed by Brahman (12.2%, 3,226,903), Magar (7.1%, 1,887,733), Tamang (5.8%, 1,539,830), Newar (5%, 1,321,933), Kami (4.8%, 1,258,554), Muslims (4.4%, 1.164,255), Yadav (4%, 1,054,458) and Rami (2.3%, 620,004). Also, with the diversity of the ethnic groups, there are 123 mother tongues as per the census 2011 report. 44.6% of the total population of Nepal speaks Nepali as their mother tongue followed by Maithili (11.7%), and Bhojpuri (5.98%). Tharu (5.77%), Tamang (5.11%), Newar (3.2%), Bajjika (2.99%), Magar (2.98%), Doteli (2.97%) and Urdu (2.61%). In terms of religion, Hinduism is followed by 81.3% of the rest of the population is split among Buddhism (9.0%), Islam (4.4%), Kirat (3.1%), Christianity (1.4%), and others (0.8%) (Central Bureau of Statistics, 2022).

As per the CBS record from 2011, the overall literacy rate (over the population aged 5 years and above) has increased from 54.1% in 2001 to 65.9%, with 75.1% of male literacy as compared to a female literacy rate of 57.4%. The highest literacy rate is reported in the Kathmandu district (86.3 %) and the lowest in Humla (47.8%) (Central Bureau of Statistics, 2022).

After federalism was embraced in Nepal, the role to look after the school education (up to class 12) was the responsibility of the local government. Provinces and the federal governments are given the role to look after higher education (university). Besides, the idea of a provincial university has emerged and is being implemented at the moment with the new constitution. (Aasaman Nepal (Organization) et al., 2014)

2.2 Country-specific risks and impact of COVID-19 pandemic

Nepal's education has been badly affected by different factors, majorly Maoist insurgency, earthquake, and now COVID-19. The INFORM risk index places Nepal in 34th place on the list of riskiest countries based on the parameters of hazards and exposure, vulnerability, and lack of coping capacities. Particularly, the risk has increased in recent years, particularly due to low coping capability, which in turn has been driven by low capacity for governance and healthcare (MoEST, 2021).

In terms of risks of natural disasters, the 2015 earthquake was the worst tragedy in the history of Nepal as it resulted in the massive destruction of lives and properties. While coming to the education sector, as per the reports, around 33,000 classrooms from 7,923 schools from 32 districts were destroyed completely. The aftermath of the earthquake affected female students more than the male students as they were vulnerable to human trafficking, had added

responsibilities as daughters, and faced problems with open toilets to name a few. It also gave rise to temporary learning centers, alternative learning centers, and distant learning programs using audio/visual content on radio/TV to cope with the situation

The risk for Nepal also comes from its transition into federalism. Though significant progress has been made in terms of democratically elected representatives of the people, the key challenge is the need for capacity building for the newly appointed officials. There are weaknesses in the structure of inter-ministerial coordination systems, for policy development and administration. Most of the provinces are in the process of building necessary infrastructures such as offices and local government buildings. The recent pandemic brought some of these weaknesses to light quite starkly (MoEST, 2021).

Apart from a transition to federalism, the disparities in access to education for different groups remain a risk for the population and the country. This includes different gender groups, socioeconomic groups, and linguistic groups. Though the policy has laid the foundation for mother tongue and multilingual instruction, the teaching-learning material still has to be updated, along with teacher education. Given the prevalence of the growing private sector, the gap between the different groups is widening and presents a challenge to the country's education system (MoEST, 2021).

In the context of Nepal, COVID-19 has had serious impacts on pupils' learning, social, emotional, and mental well-being (Dawadi et al., 2020). The number of children impacted by COVID-19 through school closures is around 8.8 million of which 993,900 are in pre-primary level education (3-5 years old), 5,165,186 in basic education (grade 1 to 8, 5-12 years old), and 1,554,792 secondary schools (grade 9 to 12, 13-16 years old) (MoEST, 2020).

The federal government has provided the following guidelines and protocols to local governments to mitigate the effects of COVID 19 on the education of the students:

- 1. COVID-19 Education Cluster Contingency Plan 2020 (approved 7 May 2020)
- 2. Emergency Action Plan for School Education (approved 22 September 2020)
- 3. Alternative Learning Facilitation Guidelines to facilitate learning from "open" and "distance education" until the schools reopen (approved 31 May 2020)
- 4. School Reopening Framework (approved 5 November 2020)
- 5. Closed User Group Service Implementation guidelines

Since many students did not have access to devices or the internet, several local governments launched radio and TV programmes and distributed self-learning packs. UNICEF's monthly household survey (UNICEF, 2020) found that though 81 percent of all children were continuing their studies in some form during school closure, there were differences in the students' engagement based on geographical location and gender, and age of the students. Two provinces (Province 2 and Sudurpaschim) reported 68-71 percent of children engaged while other provinces reported above 81 percent of children studying. The students most affected and not studying at all are predicted to be boys aged 13–17. (UNICEF, 2020).

Although there is widespread mobile phone accessibility with over 83 percent ownership in all but two of the provinces (Karnali and Sudur Paschim), no information is available about the type of mobile phone used. Only 51 percent of all households have access to the internet (25 percent in Province 2 and Sudurpaschim) and some of the data related to the use of technology in schools indicates that fifty percent of students are not engaging with Zoom classes. There are areas in Nepal where teachers are overburdened in some areas (e.g. one school with 2,700 students has just 33 teachers).

Some teachers have reported the adoption of more learner-centred methods during the pandemic which might be because of the development of a community of teachers in the form of learning circles, introduced by schools, and Tole (village square) classes wherein teachers work with small groups of children to provide individualized learning support. Some of the communities, such as Parsagadi Municipality in Province 2, worked towards local solutions such as establishing WiFi zones.

There have also been reports of an increase in violence against women and children during the pandemic. According to the Rapid Needs Assessment survey in May 2020 by Save the Children, the number of incidents of violence against children during lockdown has increased.

Some of the challenges identified during the pandemic as identified by a UNICEF study (2020) are:

- 1. Minimizing learning loss during a long period of school closure.
- 2. Access to opportunities and materials to study beyond the use of Technology due to low accessibility.
- 3. Keeping teachers motivated in the context of changing teaching-learning modalities and a need to develop new skills, along with dealing with family pressures and anxiety about face-to-face contact.
- 4. Coordination mechanisms, timing, and implementation capacity of different levels of governments to provide solutions.

Overall, the COVID pandemic brought some challenges to teacher education and education in general. The interview respondents (MBS, ECC) shared that the newly developed programs during the pandemic were mainly focused on the learners. This meant that the teachers using the new ICT tools had the resources to deliver but very little training on how to integrate it meaningfully to support learning of subject-specific content. Furthermore, professional development opportunities were unevenly distributed across the country, with those in urban areas getting more access to TPD. Though distance learning is used significantly in teacher training, such as radio and television, the content of these training did not substantially shift with the advent of the pandemic to address teachers' needs. As such, teachers who relied on these distance learning programs were at a disadvantage. The schools with students from higher socioeconomic backgrounds had financially supported training to upgrade teachers' technical skills to adapt to online schooling during the pandemic. Furthermore, the learners from these

schools also come from well-off backgrounds and can afford tech devices and the internet. As such the students from low-resourced government schools were at a relative disadvantage. However, more than the issues of devices and network, adequate professional development opportunities was a major concern.

SECTION III.

3. Education System

3.1 History of Education in Nepal

Nepal's emergence as a country with a federal governance structure has led to reform in education policies, systems, and its delivery. The education system in Nepal is one of the youngest in the world and operates within a political democracy, whose foundation was laid in 1991. The people of Nepal have had to navigate through major disruptions in the last decade due to natural disasters, unstable political environment, and most recently, a pandemic. The delivery of education, like most other basic facilities, faced a multitude of challenges hampering the progress of development work being carried out in the country in the last couple of decades. Despite the challenges, efforts by several entities were made to build education infrastructure, systems, and institutions. (*Please refer to Annexure 5 for History of the Education System in Nepal*)

3.2 School Education

For a long period, Nepal's school education system consisted of 5 years of primary, 3 years of lower secondary, 2 years of secondary, and 2 years of higher secondary education. Until 1989, school education consisted of grades 1–10 only, with the higher secondary education (then known as proficiency certificate level or intermediate level in popular terminology) falling under the ambit of university education. However, this has been restructured in recent times, especially with the implementation of the School Sector Reform Plan (SSRP) in 2009. The new school structure comprises at least 1 year of Early Childhood Education and Development (ECED), 8 years of basic education, and 4 years of secondary education. (*Please refer to Annexure 6-School structure in Nepal*).

Assessment Structure involves a number of board examinations conducted at the end of grade 8 and grade 10 determining their access to secondary and higher secondary education. Until 2015, the Secondary Education Examination (SEE) was called the School Leaving Certificate (SLC) examination and students had to pass all the eight subjects to pass the SLC and be eligible for entry to higher secondary education. However, a single subject certification and letter grading system were introduced in 2015 to do away with the passing and failing in the SLC and to reduce inefficiencies in the same. Some of the interview respondents believe that this change reduced the motivation levels and impacted the perception of success for both students and teachers alike. Entry to higher secondary education (grades 11–12) is contingent on obtaining the minimum required Grade Point Average (GPA) in the SEE examinations. Thereafter, in grades 11 and 12, students can opt for either the science, management, humanities, or education streams, which again is determined by the GPA obtained in the SEE. Technical stream is also introduced from grade 9 onwards.

Key figures for the Education System in Nepal (MoEST,2020)

Student Enrollment and Teachers

The share of all student enrolment in community schools remained at 70.0% at lower basic level, 74.1% at upper basic level, 76.2% at secondary level and 64.3 % at higher secondary level. Meanwhile, 5,319,004 students were enrolled at the primary level and 1,702,618 were enrolled at the secondary level. The number of teachers at the basic education level is 2,54,578 and secondary level is 62,156.

Performance of Students

The overall survival rate to Grade 10 was 60.3% with 61.6% for girls. According to the 2015 National Assessment of Student Achievement (NASA) report , the average student learning achievements in Grade 8 were 35.0% in Mathematics, 48.0% in Nepali, and 41.0% in Science subjects.

However, the 2017 NASA reported 500 \downarrow in Mathematics, 500 in Nepali, and 498 \uparrow in Science subjects shows there is a decrease both in Mathematics and Science whereas improvement in Nepali as compared in the previous NASA in these subjects.

Student -Teacher Ratios

In 2019-20, the student-teacher ratio (based on approved teacher positions) in community schools was 24:1 at lower basic level (27:1 in the previous year), 51:1 at the upper basic level (54:1 in the previous year), 30:1 at a basic level (33:1 in the previous year), 40:1 at the secondary level with grade 9-10 (41:1 in the previous year) and 73:1 at the secondary level with grade 11-12. Although the situation has improved, there remains a need to increase the number of teacher positions in the local levels with high STRs, and also there is a shortfall of the subject-wise teachers at upper basic and secondary levels.

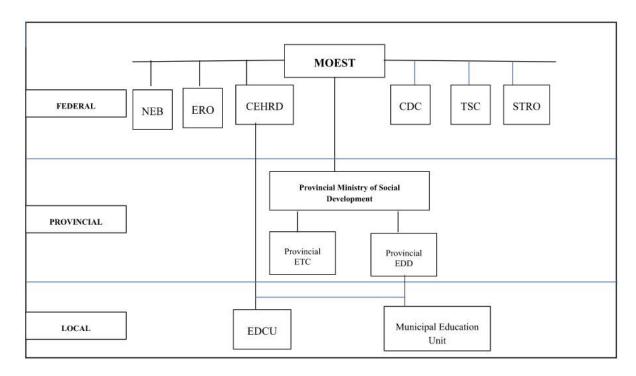
Schools

There are a total of 35,055 schools in Nepal, of which 27,728 are public schools (community schools), 6,206 private schools, and 1,121 religious schools (Muslim religious schools, Gumbas/Vihar, and Hindu Ashram schools) (DoE 2018, Figure 1). (*Please refer to Annexure 7-Types of schools in Nepal*)

3.3 Educational Administration

Under the federal system, the provincial and 753 local governments are responsible for basic education provision. The Ministry of Education, Science and Technology (MoEST) serves as the executing agency and the newly established Center for Education Human Resource Development(CEHRD) is responsible for preparing annual work plans, budgets, and strategic implementation plans. The 2015 Constitution of Nepal introduced a federal structure of governance that devolved a range of governing functions of school education to

local governments. At the provincial level, the Provincial Education Development Directorate oversees the education affairs, while at the municipal level this responsibility lies with the Education Unit established within each municipality. With the establishment of these new structures, the regional, district, and cluster level entities created earlier have either ceased to exist or their roles are redefined. See the table below for further details.



Nepal is undergoing a transition in the delegation of responsibility and authority from the federal to the local level. According to some of the respondents, many local government offices face a shortage of experienced administrators and resources. Moreover, in an interview with a local government representative, we found that duties are often carried out in a top-down approach, and in some cases, there is an absence of basic monitoring and evaluation of education delivery services. In addition to this, there is a lack of coordination between the central and local government entities which has affected teacher deployment, the curriculum, educational standards, and student assessment leading to disruption at the school level. (MoEST, 2021) (*Please refer to Annexure 8-Functions of different levels of the government*)

Education in Nepal is financed by federal, provincial, and local governments along with the support of international donors. For the fiscal year 2020/21, total education funding stands at NPR 171,712 million (\$1,468 million) (Table 2), which represents about 11.7% of the government's budget. (*Please refer to Annexure 9-Financing responsibilities of different stakeholders in the system*)

Table 2: Figures related to budget allocation for education

	NPR million	\$ million
Total national budget	1,474,645	12,604
Total education sector budget	171,712	1,468
Percent share of education in the national budget	11.7%	11.7%
Total SSDP budget	121,250	1,036
Percent share of SSDP of the education budget	71%	71%

4. Teacher Education

Teachers are the pillar of the school ecosystem in preparing students to become lifelong learners and good citizens. Therefore, teacher preparation and their professional development is key to developing efficient and competent teachers in the system. Teacher Education comprises teacher preparation and teachers' professional development.

Initial Teacher Education (ITE): There are 12 public universities in Nepal. The Faculty of Education at 5 of these universities and their constituent campuses/affiliated colleges run various B.Ed. & M.Ed. courses for preparing skilled and competent teachers to enter the teaching profession. For example, Tribhuvan University has 62 affiliated campuses across Nepal that run the various TE programs. There are no privately run universities in Nepal, while the affiliated run colleges can be community or privately run.

In-service Teacher Education: It is currently provided by the training division of The Centre of Education and Human Resource Development (CEHRD), which comes under the Ministry of Education, Science and Technology. (MoEST). Previously, in the unitary system, The National Centre for Educational Development (NCED) and resource centres were the primary channels for providing in-service training. Post federalism, NCED was merged into CEHRD.

A significant number of teachers have been trained viz a viz the TPD Program as per FLASH Report I 2019/20 by CEHRD. 74.1% at the lower basic level, 70.2% at the upper basic level, 73.3% at the basic level, and 73.5% at the secondary level. We are trying to source the latest data on the number of teachers trained under TPD. In addition to the training provided by the government, there are several non-state actors (Teach for Nepal, OLE Nepal, REED Nepal, Karkhana, Rato Bangala Foundation, etc.) that contribute to strengthening the teacher education system in Nepal either in collaboration with the government or independently.

Some of the examples cited by interview respondents for inservice teacher education are listed here:

a) Rato Bangla Foundation [RBF]: They run a 1-year primary teacher training certification program in collaboration with Kathmandu University and Bank Street College of Education. Those who undertake the program after completion of grade 12 get a certificate from Bank Street College of Education and RBF. While those who undertake the course post bachelor's or a master's degree are required to complete a term at Kathmandu University for which they get a degree from the University. (*SD, RBF, Co-founder of a non profit organization*)

b) Teach For Nepal [TFN]: The TFN fellows are placed in various public schools across the country to address the issue of teacher shortage. They undergo rigorous and intensive 6 weeks of residential training before placement. In addition, they receive various kinds of inservice training support through various channels such as classroom observations, teaching circles, mini conferences, etc. (KK, TFN, Chief of staff of a non profit organization)

Some of the respondents spoke of Teacher Associations playing a role in the professional development of teachers through different modalities like webinars, mini-conferences, workshops, etc. especially NELTA (Nepal English Language Teachers' Association).

"Yeah, [...] there are -- there are but the teachers should be interested, if the teachers are interested, they really do go for... from NELTA, every year, the people go to... they get fullbright scholarship, and they go to UK and sometimes to the US for some our exchange program for four to six weeks. They also organize workshops, webinars for teachers." (BK, TLP, Resource person, Tulsipur District, Lumbini Province)

"NELTA provides both things... teacher training and language training. Similarly, there are similar subject associations, Social Studies Teacher Association, SETA that was formed and that is active till now, I think. Similarly, there may be Math Nepali Community also as a group and they are trying and what I found is in first pandemic when first pandemic happened and all school closed and at that time, teacher associations in Nepal, there are many teacher associations, but more of them started online teaching trainings for their teachers so that their members could be equipped with a skill, basic skill of online teaching and similar courses they are starting I mean, teacher associations are also little more stepped in teacher professional development from first pandemic." (KK, TFN, Chief of staff of a non profit organization)

The above mentioned organizations along with others have played a key role in the professional development of teachers, head teachers, across Nepal.

Regulation of teacher training institutes, in-service programs, and teacher education programs run by non-state actors is done by different agencies.

- I. The teacher education institutes are regulated by the concerned University's Rule and Regulation. At the university level, there is a monitoring division that monitors the constituent and affiliated colleges across the country. For instance, The Dean's Office at Tribhuvan University has a monitoring provision that ensures the quality of the teacher education programs through classroom visits and feedback. (GRG, TBUN, Teacher Educator at University)
- **II.** The Ministry of Education, Science and Technology is responsible for monitoring the implementation of the in-service teacher training programs.
- III. Nonprofits are regulated by the Social Welfare Council, established by the Government of Nepal in 1992.

4.1 Types of teachers and teacher Recruitment

The teacher ecosystem in Nepal comprises 4 categories of teachers. (FLASH Report I 2019/20, CEHRD)

- a) Permanent teachers working in approved positions
- b) Temporary teachers working in approved positions
- c) RAHAT teachers (temporary)
- d) Privately funded teachers paid through the local government, communities, NGOs, or school's own sources of income.

The minimum qualification required to teach at the basic and secondary school level is:

I. Basic level

a) Lower basic: completion of grade 10

b) Upper basic: completion of grade 12

II. Secondary level

a) Lower secondary: completion of bachelor's degree program

b) Higher secondary: completion of master's degree program

The Fifteenth Plan (2019/20-23/24) calls for reviewing teachers' minimum qualifications and periodic assessment of their qualifications. This is yet to be put into action. There is a proposed plan to raise the minimum qualification to a Masters Degree. A Bachelor's degree to teach at the basic level and a Master's degree to teach at the secondary level (*PB*, *TBUN*). In addition to the minimum academic qualification, a 10 months' teacher training program is required to be undertaken by those who do not have a degree in education. The 10 months training program is carried out in the form of 3 modules spanning 330 hours, 660 hours, and 330 hours respectively. (Pradhan, 2011). (*Please refer to Annexure 10-Details on the 10 months training program*). We have however not been able to source the module specifics for the same.

"And so, there was this lot of public debate that we are not really getting good teacher candidates, you know, even if they have pre-service training, we are not really getting good teacher candidates. So, then this provision of, you know, this provision that everybody should have a teacher education background for licensing, that has also been relaxed. So, what happens is, you know, students who have done extremely well in university, they can directly enter the teaching profession and then they can complete one year of one year equivalent of a postgraduate diploma in education while they are in the service. So, that provision is also there." (PB, TBUN, Teacher Educator at University and Consultant for Education Sector Plans)

The Teachers Service Commission (TSC) under MoEST called Shikshak Sewa Ayog is responsible for teacher recruitment at the school level. As per the TSC Rules (2000), the possession of a teaching license is mandatory to enter the teaching profession at the school level. The license is permanent and cannot be revoked. It is however not a mandatory requirement at the University level.

The TSC is responsible for issuing teaching licenses, conducting examinations for appointing permanent teachers in government schools, and for overseeing the promotion process.

- a) According to the TSC Rules (2000), there is an eligibility criterion for receiving the teaching license. In addition to meeting the eligibility criteria, one also has to clear the license examination.
 - **I.** Those with a B.Ed. or an M.Ed. degree are issued the teaching license directly.
 - **II.** Those who have completed their grade 10th, 12th, bachelor's or masters in a different subject are required to undertake a 10 months teacher training program to get the teaching license.
- b) Post clearance, one has to undertake the TSC Examination. The examination conducted by TSC has both a theoretical and a practical component to it followed by an interview. The curriculum for the examination was revised and implemented in 2018. (*Please refer to Annexure 11-Details on the TSC Examination*)
- c) Teacher Promotions:

Only permanent teachers in the system are eligible for a promotion. They should have served a period of 5 years in the post of the concerned class. Teachers are promoted either through internal competitive examinations or based on work performance evaluation.

The TSC has been non-operational since the last few years. The last examination was conducted in the fiscal year 2018/2019. As a result, a significantly large pool of students with teaching licenses are unable to teach in schools. As per the recent (Jan 2021) data by CEHRD, there are 12, 061 vacant posts of teachers in schools across the country. There are 9100 vacant posts at the basic level, 1913 at the lower secondary level, and 1047 at the higher secondary level. "The number of vacant posts is likely to reach 14,000 by the time the TSC publishes new advertisements" (Madhav Prasad Dahal, CEHRD, cited in The Himalayan).

"The government was supposed to conduct the teacher license once a year at least, but that did not go as they planned for whatever reasons. For example, this is run by TSC and the commission went for a long time without appointment of a chairman. That went for political dialogues and disagreements, changes in government, ruling party, opposition, so this is all affected by political activities and licenses could not happen on time and teachers were not being recruited. Our teacher recruitment and license exams were not in place as they were expected to conduct. So there are many teacher vacancies but not recruited on time and school suffers from lack of teachers. This is the fact we are suffering till now. Teacher Service Commission is not conducting teacher recruitment as well frequently." (KK, TFN, Chief of staff of a non profit organization)

Gender equality and social inclusion is manifested in the teacher recruitment policy and recruitment processes. According to the FLASH Report 2020/21 by CEHRD, there is a policy provision of reserving 45% of the seats for women and other social-ethnic groups. From among the total reservations, 33% are reserved for women, 27% for Adivasi/Janjati community, 22% for Madhesi, 9% for Dalits, 5% for Persons with disabilities, and 5% for other backward regions.

The number of female teachers and those belonging to other groups in the community schools are:

• Basic Level: 40.3% female, 30.9% Janajati and 5.9% Dalit,

• Secondary Level: 18.87 female, 19.2% Janajati, and 7.4% Dalit

"When I was selected as an English teacher, we are only two in whole this Dang district for secondary level teachers; English teachers, there were only two; Science, there was only one; Maths there were none. But these—these days, there are more and more female teachers included. And as you said, here they are... they are called Daliths and Janjatis like from the deprived group, even many of them are in the teaching sector these days, primary level there are many more ladies' teachers these days and even secondary, Secondary many more are getting. Even my school there are altogether 70 teachers, among them, I think 25 to 30 teachers are females." (BK, TLP, Resource person, Tulsipur District, Lumbini Province)

4.2 Financing Teacher Education

The Education Budget for the fiscal year 2021/22 is 11% (NPR 180.04 billion) of the national budget (NPR 1.647 trillion) which accounts for 4% of the GDP. This falls short of the governments' envisioned target of 15%. While there's been an increase in public spending over the last decade, the governments' spending on education as a share of the total government expenditure shows a declining trend. The statistics seem to indicate the priority that the government attributes to education. (*Please refer to Annexure 12- Budgetary allocations for the education sector over the last decade across the 3 tiers.*) Nepal's transition to a federal system of governance has changed the way education is managed and financed. With fiscal decentralization, the local government gets the highest allocation (64%) followed by the central (33%) and the provincial government (3%). (UNICEF Budget Brief Nepal, 2021).

External financing plays a significant role in Nepal. These are in the form of grants/loans from international organizations such as development banks, NGOs, and foreign government cooperation agencies. External funding has seen a rise from NPR 13.5 billion in 2009/10 to 31.3 billion in 2020/21. (Nepal: Education Sector Analysis, 2021) The school education reform plans: SSRP and SSDP have been jointly financed by the government and external development partners. Based on the SSDP expenditure framework that estimates a total cost of 6461 million dollars, 85% of the cost is to be borne by the government and 6.75% financed by the partners. There has, however, been an increase in loans and a decline in financial grants. (Gyawali et al, 2021). (*Please refer to Annexure 13- Budgetary allocations for SSDP.*)

While there is data available on budgetary allocation for the education sector as a whole, it has been difficult to source decadal data specific to Teachers Professional Development. Moreover, the interview respondents did not have the requisite information pertaining to financials visa-vis TPD. They, however, unanimously acknowledged that funds for TPD are insufficient for most is allocated towards teacher salaries. This corroborates with Peano's work (Bessieres et al. (2019) on public finance analysis for the Education Sector Analysis Report which postulates that the funds received by the local government from the centre are earmarked for teacher salaries, scholarships, and school operations. In addition, the amount allocated for TPD in the above SSDP Expenditure Framework table aligns with the respondents' views.

"Let's say we have some less teachers in the secondary level, let's say in the basic level, so to cope up with those kinds of problems we have... almost half of the budget has been allocated for those teachers. We have sent the teachers to the school, some volunteer teachers, right, and we have collaborated with Teach for Nepal, we (have) spent some money on those fellows and things like these. The most of the amount is for the teachers' salary, so the amount for Teacher Professional Development is quite less. Specifically this year, we have allocated like Nepalase 2 Lakh and you know for organizing 2 or 3 program like teacher professional development, 2 lakh is not enough." (MBK, LG, Education Officer at Local Government)

4.3 Teacher Professional Development (TPD)

Teacher Professional Development is a key focus area for policy makers. This is reflected in the various sector-wide reform plans such as The School Sector Reform Plan (SSRP:2009-16), School Sector Development Plan (SSDP:2016-21), and the upcoming School Education Sector Plan (SESP:2021-2030). The recent National Education Policy (2019) of Nepal recognizes this need and emphasizes that teacher selection and teacher preparation be made more robust and that there be a mandatory and continuous professional development of teachers in the system.

Key highlights viz professional development of teachers has been enlisted in TABLE 1 below.

KEY HIGHLIGHTS: POLICIES AROUND TPD

S.No	Policy Document	Details	
1	School Sector Reform Plan (2009-	I. 30 days TPD Program for all the teachers in the system (across all grades) over a five-year period of time.	
	15)	II. 1-3-month School Management and Leadership Training will be developed and made available through the ETCs for the selected school heads.	
		III.NCED to monitor the implementation of the training programs.	
2	School Sector Development Plan (2016-2021)	I. Teachers will take pre-service and in-service professional development courses based on a teacher competency framework.	
		II. Teachers' subject matter and pedagogical knowledge and skill set will be enhanced through (a) course attendance (b) mentoring by peers and head teachers and classroom practice.	
		III. The training courses will emphasize on subject knowledge, child centred and active learning, inclusive education, formative assessment, and differentiation to meet the needs of every student.	

National Education Policy (2019)

- I. National teacher competency standards to be formulated.

 Teachers to be prepared based on these standards and their capacity to be developed based on the set competencies; which will help teachers gain knowledge and skills in subject teaching, multi-grade teaching, and classroom teaching methodology.
- II. Training Centres to be transformed into teaching academies for continuous professional development.
- III. Intensive Refresher Training to be conducted at both the provincial and local levels through different modalities. (in-person, virtual, blended)
- IV. Local government to conduct a diverse range of schoolbased continuous professional development programs such as customized trainings, workshops, seminars, collaborative research, observation tours, reflections, teacher networks, mentoring, coaching, etc.
- V. Head teachers to be responsible for the continuous professional development of the teachers at the school level, linking CPD with student's learning achievement.
- VI. Arrangements to be made for professional partnership, experience sharing, and class observations among the teachers from the same school or the schools in the neighbouring communities to enable cross learning.
- VII. Research activities to be an integral part of teacher preparation and teachers' professional development. Culture of research and self-study to be promoted for teachers to develop their capacity themselves.
- VIII. The teacher training providers at the federal and provincial levels continue to run capacity building programs based on innovative technology such as websites, online tutorials, discussion forums, simulations and virtual imaging for developing qualified teachers and trainers and enabling them to conduct scientific research and the use of ICT.
- IX. Linking professional development, motivation, performance level, and years of experience to career development.

4	School Education
	Sector Plan (2021-
	2030) (Draft version)

- I. Review and update of the Teacher Competency Framework 2015 and the Teacher Professional Development Framework 2015.
- II. Revised model and courses for teacher preparation.
- III. Increase in number of teacher training centres to conduct TPD.
- IV. Conduct a minimum of 10 days TOT.
- V. Revision of the TPD curriculum.

Inclusion of topics such as teaching during epidemics and emergencies, using ICT in teaching and learning, gender, equity, inclusion, peace education, environmental change, formulating learning plans by identifying students' personal capacities and diversities, etc. in the TPD curriculum.

- VI. Conduct of ICT-based online/offline training.
- VII. Conduct of one-month induction training for newly appointed teachers.
- VIII. Institute teacher professional support networks at the local level.
- IX. Conduct 3 days capacity development training for school-based supervision to school head teacher, mentors, subject matter specialist, and peer teacher.

4.4 The TPD Model

The Centre of Education and Human Resource Development under the Ministry of Education, Science and Technology is responsible for the provision of in-service teacher education for the teachers in the system. The CEHRD Administrative structure has been enlisted in TABLE 2 below.

The training programs are designed centrally based on the (a) Teacher Professional Development Framework (2015) and the (b) Teacher Competency Framework (2015) developed by CEHRD while the training is executed at the provincial level through the Education Training Centres (ETCs). The new sectoral plan SESP intends on revising these frameworks so that they are in line with the current needs & requirements. Currently, there are 7 ETCs, one in each province. In the Unitary system, the in-service teacher training was provided by National Centre for Educational Development (NCED), 1053 resource centres, 46 lead resource centres, and 29 ETCs. Post Federalism, the resource centres were abolished and a large number of ETCs dismantled thereby, reducing the capacity for in-service training and teacher support and thus impacting the number of teachers trained.

CEHRD ADMINISTRATIVE STRUCTURE

DIRECTOR GENERAL			
EDUCATION PLANNING AND DEVELOPMENT DIVISION	EDUCATION TECHNOLOGY AND INFORMAL EDUCATION DIVISION	HUMAN RESOURCE DEVELOPMENT DIVISION	
I. Planning and Monitoring Section	I. Curriculum and Materials Section	I. Education Management Training Section	
II. Early Childhood Development Section	II. Audio-Visual Section	II. Teacher Training Section	
III. School Education Standard Determining Section	III. Educational Technology Section	III. Research and Quality Reform Section	
IV. Teacher Management and Coordination Section	IV. Informal and Alternative Education Section	IV. Financial Administration Section	
V. Governance Reform Section	V. Inclusive Education Section	V. Internal Administration Section	
		VI. Information, Technology and Library Section	

Source: CEHRD Website (Translated version) https://cehrd.gov.np/

The Teacher Professional Development Framework is based on the rationale that quality and meaningful education is possible only when the teachers are skilled and competent and therefore, their professional development is critical.

The framework postulates the different kinds of professional development programs available to the teachers in the system. These comprise:

- (a) Teacher Training: Certification training, refresher training, local need-based training
- (b) Self-learning
- (c) Experience sharing program at the school level, resource centre, and district level.

It also emphasizes upon

- (a) Training on the use of ICT for classroom teaching-learning.
- (b) Incentivizing teachers who are driven and motivated towards self-improvement.
- (c) A robust follow-up plan to ensure that the training programs result in effective teaching-learning practices in the classroom.

The Teacher Competency Framework postulates the eight core competencies that are essential to becoming an efficient and competent teacher. (*Please refer to Annexure 14- Teacher Competency Framework*)

The trainers at the ETC have the flexibility to modify 25% of the training curriculum based on the needs of the teachers. The former sectoral plan (SSRP: 2009-2016) had the provision of a needs-based assessment to design the training program.

"So, there are teacher educational training centers across the country and there are teacher trainers, I am talking about the in-service context, in those teacher training center educational training center, there are certain trainers whose job is to visit the school, collect the demands of the teacher design a teacher training package and deliver it in their own center. So, that's it has to be ongoing. So, it's a continuous backstopping kind of support based on the needs. Yeah." (GRG, TBUN, Teacher Educator at University)

This practice however did not continue during the SSDP period for reasons cited in secondary literature and by interview respondents (a) needs of the teachers are not looked into (b) majority of the teachers are unable to articulate their needs (c) needs expressed by teachers are more often generic and not specific.

The provincial ETCs implement two types of training for the teachers in the system, through a cascade approach. Given the inadequate numbers of training personnel at the provincial level, there is support sought from roster trainers at each of the ETCs. The roster trainers come from a diverse pool namely: (a) experts from privately-run institutions (b) renowned university faculty and (c) highly experienced teachers currently in service or veterans. The roster trainers are given an honorarium of NPR 2000-2500 for every session that they take.

TRAINER DETAILS			
1	Number of trainers at CEHRD	6	
2	Number of trainers at ETC	7	
3	Number of roster trainers	20-30	

Source: Interview Respondent (RS, CRD)

I. Refresher Training

The Refresher Training is a short-term customized 5 days training program for teachers. Every teacher is required to undertake the training once every 2 years as per National Education Policy 2076. In addition to the training provided by the provincial government, there are refresher trainings provided by national and international organizations at the local level through collaboration with the government. Currently, there are **25 thematic areas in** which training is provided. Some of the themes are (a) child-friendly teaching-learning (b) project-based teaching (c) teaching-learning in diverse contexts (d) creating a learning culture in classrooms. We have not been able to source these themes from CEHRD.

II. Certification Training

The Certification Training Program is a month-long (30 days) training program for the teachers in the system. Every teacher is required to undertake the training once every 5 years. The training is carried out in 2 phases of 15 days each, comprising elements of both theory and practice. There are 25-30 teachers in a group. There is a gap of 1 year between the two phases. Currently, there are **58 thematic areas** in which training is provided. We have not been able to source these themes from CEHRD though the broad themes cover curriculum components and pedagogy.

Phase 1: The 1st 10 days are face-to-face training on content & pedagogy at the ETC covering themes such as learner-centric pedagogy, making classrooms interactive and engaging, etc.

The next 5 days focus on project work that the teachers have to undertake. They are required to complete 4 different kinds of project activities out of which the Lesson Plan creation and Action Research task are compulsory. The teachers are required to submit a report on the project activities to the ETC.

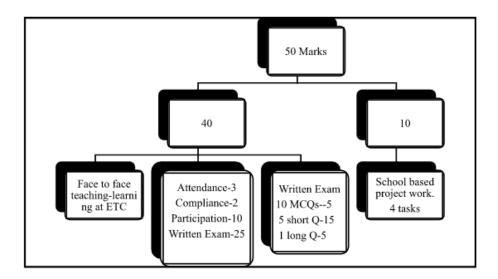
Phase 2: The 2nd phase entails aspects of both curriculum as well as themes that will facilitate the teachers' professional development. For eg. Reflective writing, Action Research amongst others.

There is an assessment that takes place during the course of the training program to gauge the teachers' learnings from the TPD program. Post the training, as per the sectoral plans-SSRP and SSDP, the trainers are required to visit schools for class observation and interaction with the school stakeholders to understand the translation of training programs into classroom practice and instruction. However, most of the interview respondents stated that the practice of monitoring is weak in implementation.

"So, but even in case of Nepali system, Nepal-- Nepal's education provision that is-that our school supervisors and resource persons... by the name both-- both posts are
responsible to go in the classroom, to sit with the teacher and observe the things, then
finally feedback them and follow up their feedbacks again. It was a provision but actual
in my book I showed you... in many schools, the teachers have not seen their school
supervisors; he or she and the same is resource persons; Resource person and school
supervisor, they go up to... hardly, they go up to school, they sit with the principal, they
sit in the office and they just say Hi, Hello and (Indistinct 39:34) this and that, this and
that. Then they come back. Right. So, this is the main -- this the main problem that
trainings are not having effective." (MBS, ECE, Co-founder of a non profit organization)

"Nowadays, the TPD model has been changed, it's -- it's a bit different nowadays. I haven't been to training; I haven't been taught also. So, these days, I don't know, but in those days, during the entire 10 periods -- 10 months' time, the facilitators would have to go and visit those teachers and help them in between, at least twice, at least twice. But nowadays, I hear that they just don't get monitoring-- monitoring part is very less these days. I think education office has to go and just monitor them, but there is no such thing here. Because there are very few officers, the Educational, this Training Centre, they are always busy. The trainings and education sector, there are too many schools and there are few, this... manpower is very less and they are busy doing their own work, there... less but nowadays these days, they are just trying to at least visit one school per week; one to two schools per week." (BK, TLP, Resource person, Tulsipur District, Lumbini Province)

The participants receive a certificate post the completion of the training program which is supposed to be linked with their career development/progression. There were a few respondents who believed that the most valuable incentive is the training itself for they get an opportunity to unlearn & re-learn and explore new classroom practices for improved learning outcomes.



Source: The Teacher Professional Development Framework, 2015

III. Local Need Based training

In addition to the certification training program and the refresher training that takes place at the provincial level, there are demand-driven trainings carried out at the local level. The needs of the teachers are collected and the training program is designed accordingly. These span over a period of 5 or 10 days. Most of these trainings are based on curriculum or teaching methodologies. The teachers are provided with a certificate at the local level as well, however, it does not hold the same value as the certificate received from the ETC training at the provincial level.

"The training that we give, the certification that we give... there is no part of progression in their grade, there is no part of progression in their level, right, the certificate that province gives it matters, so sometimes what to do, sometimes even we feel like when the teachers there is - there is very less, you know, incentive is given to the teachers and they expect more, sometimes they say that, no, there is less budget why to go. So, budget is the must." (MBK, LG, Education Officer at Local Government)

"So we have education training centre in our province level and even teachers from the local level the... Education Training Centre has been training the teachers. So, I mean to say that as an Education Officer, I too have the role of need analysis... we are Education Officers and we go there to school... we find out what the actual problem is with the teachers and we are trying to diagnose what exactly the teachers are in need of, so according to that in our local government, at our local level... what exactly they are feeling, are they in problem with... I mean what are the things that they have been facing in the real classroom and finding it out, we have some need based training ...we train our teachers, we have tried our best to develop the ICT skills in our teachers.... yes and after the need analysis we have been organizing some kind of training, some kind of workshop for our teachers when there are changes in curriculum, when there are changes in some policies, when there are changes in some text books, so we do some dissemination of programs to our teachers... we have very less budget... allocated for Teacher Professional Development, so according to the need we just try to sketch the framework for the teachers... we conduct, sometimes when we feel comfortable in training ourself we - we facilitate otherwise, we request some of the other personalities from different part like sometimes with some NGOs... so we have been collaborating with non-profit making organizations like Teach for Nepal, we have been collaborating with NELTA, we have been collaborating with Changing Stories. And besides this our division working on this education sector, so to support let's say for the teachers' professional development and... we have been observing the class and beyond that we have formed the expert team of the teachers who have already completed their tenure of their teaching, some teacher educator... we request them to go to the school... requested to support the teachers, so that is how we have been doing it." (MBK, LG, Education Officer at Local Government)

The onset of the pandemic led to the formulation of SOP for learning through distance mode in the year 2020. The SOP could not be sourced from CEHRD for it has not yet been officially approved. Given that the teachers could not meet in person for the training, a FLIP MODEL for TPD was adapted. This is for 12-15 days and the model comprises three essential components.

- Engagement: A self-study phase where the teachers engage with the reading material that has been shared by the trainers.
- Collaboration: This is a phase where synchronous teaching-learning takes place through various platforms such as zoom, Microsoft teams, google classroom, etc.
- Application: Teachers are required to carry out mini research on various topics where they engage in reflective writing and submit the report.

Teacher Professional Development has been a priority for the State for over a decade; with a mention in policies and the implementation of the various sectoral reform plans. Having said that, the evaluation of these plans, impact studies, and interviews conducted suggest that the TPD programs have not been effective in translating skills, knowledge, and competencies learned *into effective teaching-learning practices in the classrooms and improved student scores*.

"I actually reviewed the kind of teaching training events and the number of teachers trained and also its impact in the students.... learning achievement with reference to the results at the end of Grade 10, a few years back and interestingly, I didn't find any significant increase in the percentage of the students who completed secondary education after having a number of teachers trained increased in the space, so - so it's very difficult to say that whether there is an impact or not." (GRG, TBUN, Teacher Educator at University)

A recent impact evaluation of secondary school teacher training under the SSDP reform in Nepal indicated that the training program does not have a positive correlation with student scores. (Schaffner et al, 2021). Teacher training alone does not result in better teaching-learning classroom practices or improved student-learning outcomes. This must be followed by a supportive and encouraging school environment, a culture of learning and motivation, and ongoing support through coaching/mentoring.

Some of the key challenges highlighted by interview respondents as well as indicated in the literature relate to teacher motivation, supportive school environment, access to resources, monitoring, and adequate budget for teacher training. (Please refer to Annexure 1- Challenges to effective translation of knowledge, skills, and competencies learnt into effective teaching-learning classroom practices)

"The real challenge is the will power of teacher I say, because the transformation wewe see, we feel that the transformation of teacher training is exactly not seen inside the classroom, whenever we go back to the school, still, we feel like there must be some problem, whether in teacher professional development or let's say in some training part or the will power of the teachers." (MBK, LG, Education Officer at Local Government)

4.4.1 Action Research

Action Research is a relatively new concept and has been focussed upon in the TPD programs as part of the certification training at the ETC for the last few years. At the end of the 10 days face to face training, the next 5 days are spent orienting teachers towards the various project activities that they need to undertake to complete phase I of the training. Action Research is one of the mandatory projects that the teachers need to work on and is also a graded component (2.5 /10). The workshop on action research entails teachers being oriented to the concept of action research and the various steps included in the process of carrying it out. These are (a) identification of the problem (b) action plan/strategizing (c) implementation (d) observation and (e) reflection. They are guided on identifying the problem using the WH approach: (a) what is

the issue (b) where is the issue located (which grade) and (c) who is facing the issue (majority/minority of the students are facing the problem). We, however, were unable to source the list of themes that the teachers have worked upon during their TPD training. The action research task is done by the teachers while being supervised by a teacher educator (over phone/social media) or by senior teachers in their schools.

Once they are done completing these steps, they are required to write up a report based on a framework that has been shared with them during the training and submit the same to the ETC.

However, despite being such an integral part of the process (RKP, TBUN, Teacher Educator at University), action research is conducted by teachers only during training and rapidly falls out of practice once in the classrooms. Majority of the respondents agreed that very few teachers continue to employ the pillars and processes of action research once they are in the classrooms and one respondent pointed out that the action research reports are often plagiarized and put together as a deliverable rather than a tool for success in the classroom (MBS, ECC, Co-founder of a non profit organization). Though it is mandated and necessary practice for improving teaching-learning in classrooms (MBS, ECC, Co-founder of a non profit organization) and (RKP, TBUN, Teacher Educator at University), only some teachers conduct action research. According to one respondent, given that there is no monitoring, the teachers do not actively participate in conducting action research and there is no motivation (PB, TBUN, Teacher Educator at University and Consultant for Education Sector Plans). According to another respondent, the Nepal government launched an action research opportunity for teachers but the initiative was not a success since most of the teachers usually make reports based on interventions that have already been done instead of doing an action themselves in the classroom. However, respondents also cited examples of teachers who engaged in action research.

"...there are some schools which are very excellent. Teachers are professional and they have a very enthusiastic spirit and they individually carry out action research and they share in the social media..." (RS, CRD, Technical officer at Central Teacher Training Institute)

Action research is an integral part of the appraisal of teachers. However, post the training, very few teachers complete this requirement. Although during the teacher training, the supervisor/ trainers can visit the teachers and provide support, once the trainings are done the teachers do not take up the action research regularly (MBS, ECC, Co-founder of a non profit organization)

"when they (teachers) return to their schools, then they would not carry out that (action research); to tell the truth, because you are doing this research work... what the teachers would do is for the marks' sake, for their... okay because they are getting evaluated, they would just write some pages for action research, and then they would submit it, and again, in the later in the classroom, then again, they wouldn't follow that." (BK, TLP, Resource person, Tulsipur District, Lumbini Province)

Negi (2019) in his book on reports of successful action research conducted by teachers, hints at report writing being the major challenge for teachers, considering it burdensome due to other commitments and tasks. Teachers tend to treat action research as a formality and write it post hoc based on actions already done in the field.

A recent initiative has been taken called "The British Council Action Research Mentoring Scheme" (2017-18). This initiative focused on adapting the method of Action research to an "Exploratory action research" mode (inspired by Smith 2019[RSK1]). This involves engaging in the process of exploration of the present circumstances in their classroom and postponing the phase of formulating the research questions and planning actions. A teacher is encouraged to develop a more in-depth understanding of her situation to be able to formulate a more specific and relevant problem formulation. The support structure for action research by teachers is done through the mentoring process by the teacher educators who are mentored by the super mentor (Mr Smith from University of Warwick) through face-to-face interactions, email exchanges as well as WhatsApp group. An important step is asking questions to students to get their perceptions about learning as well as asking colleagues to observe the class and getting feedback. The collaboration between the mentor and mentee was established during webinars and workshops conducted at each stage of the research. Mentors asked teachers to clarify their questions, probing them to articulate their understanding and inviting them to share more information about the situation and how the situation can be changed. Instead of writing a complete report of the research or indulging in extensive literature review, the teachers engaged in writing their "stories" by responding to ten prompts given by the mentor and focusing on the actions and activities of the teacher as well as the students and the challenges faced by them. The prompts asked the teachers to elaborate the problem faced, their exploratory questions, plan of action and the modification in the plan, and their learning during the course of engagement for six months.

The kind of action research reports available in the context of Nepal are mostly from teachers attempting in their own classrooms catering to the difficulties faced by the students in learning, their motivation, and engagement, or in terms of teachers attempting to develop a skill for teaching. Some of the examples of action research that can be seen in Negi (2019) includes "My students do not appear to be interested in writing, and they have difficulties in writing" or "My students do not take part actively in group work". The problems selected are contextually based on teachers' work conditions and attempt to identify a solution within the same. For example, an action research by Shova Shahi in Negi (2019) focuses on a very relevant topic of managing a large class.

A few teachers have tried publishing their action research in form of blogs (e.g. http://krishnagorkha. blogspot.com/2014/02/an-action-research-teacher-students.html). The structure of the report had the following sections: (a) background (b) Introduction to Action Research (c) Classroom description (d) Problem identification and investigation (e) Strategies (f) Plan implementation (g) Outcome (h) Conclusion. In another blog, Sigdel (2017) describes the NELTA approach to facilitating action research by provisioning space for reflection on teaching, identification of the problems, and development of the plans during the TPD sessions rather than asking teachers to develop them on their own post the training. He also identifies the challenges faced by teachers for systematic implementation in the classroom.

4.4.2 Mentoring

A significant number of basic and secondary teachers have been trained through various TPD initiatives under the various sectoral education plans. Having said that, there has been a poor translation of training skills and competencies into effective classroom practice & instruction and improved student learning outcomes. The need of the hour is, therefore, to provide teachers with a comprehensive and sustainable continuous professional development approach to strengthen teacher education at the systemic and school level. With the federal structure in place, the National Education Policy 2019 mandates the local government to conduct a diverse range of school-based continuous professional development programs such as customized training, seminars, collaborative research, mentoring, teacher networks, and reflection. In addition, it also makes the headteachers responsible for CPD of teachers at the school level, linking CPD with students' learning achievement.

Linda Darling Hammond in her paper on Effective Teacher Professional Development professes the merits of coaching and expert support, reflection and constructive feedback, and well-designed professional learning communities in enhancing the professional development of teachers thereby creating a richer classroom environment for teaching-learning. It empowers teachers to reflect on their practice, accelerate their learning and adopt new practices. She also postulates that well-designed professional learning communities that are active, collaborative and reflective, and implemented with high quality can lead to improvement in classroom practices and gains in student achievement.

"Professional development models associated with gains in student learning frequently provide built-in time for teachers to think about, receive input on, and make changes to their practice. "Coaching or other expert scaffolding can support the gains and higher performance on a valid and effective implementation of new widely used curricula, tools, and approaches by educators."

Geeraerts' paper on peer mentoring echoes Hammond's views. The Peer Mentoring model based on the ideas of socio-constructivism, dialogue and knowledge sharing results in not only strengthening teachers' professional identity and confidence but also translating into teachers' taking ownership of their learning curve, feeling immense joy in the teaching-learning process, and influencing other teachers who have not been part of the peer mentoring model.

Mentoring is a relatively new concept in the teacher education space in Nepal. Though elements such as supervision & classroom observations by trainers, education officials, and headteachers exist, the practice has been weak in implementation.

"However, given the supervisor has so many schools, they are not able to visit and thus there are conversations about the school-based professional development and mentoring system. As per a respondent "mentoring element is not really very strong element of this TPD program...in fact, is one of the weakest systems." (PB, TBUN, Teacher Educator at University and Consultant for Education Sector Plans).

In light of the above, a Teacher Mentoring program was initiated on a pilot basis at the local level by CEHRD in collaboration with SSDP TA (British Council) in December 2021. The pilot was to be completed in April 2022 but due to the pandemic, the timeline has been extended until June 2022.

The vision of this initiative is for Local Governments to adopt the Teaching Mentoring program which will serve as a core integral element of Teachers' Professional Development.

Details of the pilot Teacher Mentoring program have been taken from the draft Teacher Mentoring document by CEHRD. (Please refer to Annexure 16- Theory of Change for the Mentoring Program)

Implementation of the Teacher Mentoring program:



Coverage

The Teacher Mentoring program is being piloted with Math, Science, and English teachers across grades 6th to 8th.

- The mentoring approach will be piloted in 2 provinces (Bagmati and Lumbini)
- 4 municipalities (2 urban and 2 rural) have been selected in each of the 2 provinces
- 20 community schools have been selected (5 from each municipality)
- A total of 60 teachers have been selected across the 20 schools.
- Creation of 4 Communities of Practice (CoP) across the 4 municipalities.

Selection and remuneration of mentors

- Mentors have been selected jointly by the local government officials and the school headteachers.
- The mentors range from a diverse pool of experienced in-service teachers, retired school teachers, teacher trainers, former resource persons, education officers, and university teachers locally.
- The mentors must be highly experienced with sound content knowledge, pedagogy skills, good communication, and personal attributes.
- Remuneration for the mentors will be NPR 1500 if they are from the same school and NPR 2000 if they are from another. Their regular classes will be taken care of.
- They are required to make at least 2 school visits in a month to each of their mentees during teaching hours.
- The mentors will receive a certificate post completion of the mentorship program.

Training of mentors

- Mentors have undergone 3 days of residential training.
- Some of the components of the mentor training program comprise: (a) relationship building between mentor and the mentee (b) qualities of a good mentor (c) effective classroom observations and providing constructive feedback (d) teacher support on competencies (e) creating mentee progress plan (f) assessment: self and mentee.
- A reflection, learning, and refresher training will be organized for mentors during the middle of the pilot phase.

"Even the teachers, they are not very keen about it, even the capacity of the teachers is very low. For example, some of the studies that were conducted some time back, showed that, especially in Maths, Science, and English, the teachers' capacity was not good enough. Even they could not score the required marks when some of the studies tried to do that. If the teacher could not get the required marks, then how can he support the students to get the required marks? So it's not only the Pedagogy, even the

content, so we still have that kind of problem. So in our mentor, all these situations have been taking care of. So we discussed all about these things in-depth in our meetings with the mentors. Mentors will also help the Communities of Practice (COPs) and will also be communicating with the palikas and the province level officials and also the CEHRD will be monitoring all these activities. So this is what is going to happen, that we hope." (KS, BTC, Consultant for Education Sector Plans)

The mentoring process will focus on:

- Helping teachers with content and pedagogy.
- Focussing on enhancing four of the competencies prescribed in the Teacher Competency Framework.
- Facilitate peer learning through communities of practice.
- Incorporate local needs and requirements of teachers.
- Facilitating Communities of Practice (CoP) to enable peer learning through sharing of insights, experiences, and best practices.

"So they need to observe the classroom teachings of all the teachers of those schools. It's not only observation but as I mentioned, the peer teaching, demonstration, whatever is required there. And they need to write a report of their mentoring activities because documentation of this piloting is very important for all of us. So they will have to submit a report once every month. So, report, first they will have a reporting person at the palika, the education officer of the palika, to him or her, they have to submit their report. And that report goes to the provinces, the PETCs, and also the minister of social welfare at the provinces and that also comes to us. So we will be monitoring that way, but there is also a provision for the palika level officials to visit the schools to observe the mentoring activities taking place in their palikas in all five schools." (KS, BTC, Consultant for Education Sector Plans)

Evaluation

The mentoring program is currently still running in its pilot phase as a result of the delay due to the pandemic. Therefore, it is difficult to estimate the quality and effectiveness of the intervention. Having said that, there will be continuous monitoring by different agencies and a mixed-methods approach will be undertaken for understanding the impact of the teacher mentoring program.

"So all those things will be there and as I said that the reporting process is there. At the same time, the monitoring will be both from palika level as well as the provincial level and the central level. So we are also visiting them. It is not only, it's not the British Council only, but people like (name) and the others, they also will be visiting the schools and the palikas and similarly the PETCs and the provincial level social development officials, ministry officials will also." (KS, BTC, Consultant for Education Sector Plans)

Role and Responsibility of various stakeholders engaged in the Mentoring Program

- Local Government: (a) participation in the orientation program (b) support in the selection of schools, mentors, and mentee teachers (c) quarterly monitoring of the program.
- II. Local Government: (a) participation in the orientation program (b) support in the selection of mentee teachers (c) provide school access to mentors (d) support in organizing classroom activities/workshops (e) supervise teaching-learning activities of the teachers (f) conduct review meetings with mentors and mentees
- III. Mentors: (a) conduct meetings with mentees (b) create a mentoring plan along with mentees and implement the same (c) classroom observations (d) encourage mentees to create lesson plans, implement and reflect using various tools (e) review progress of mentees (f) report to LGs twice a month
- **IV.** Mentees: (a) active participation in the teacher mentoring program (b) responsibility & accountability for self-learning (c) set goals and plan activities for implementation
- V. Provincial & PETCs: (a) Participate in initial orientation with SSDP TA (b) support LGs in the selection of schools and mentors (c) support in finalization of M&E tools (d) support LGs in mentor trainings (e) periodically monitor the progress of the program (f) Work with CEHRD and SSDP TA in conducting baseline, mid-line and end evaluation of the pilot project.
- **VI.** CEHRD: (a) support provinces in the selection of LGs (b) along with provinces support LGs in the selection of schools and mentors (c) support SSDP TA in designing training orientation for LGs (d) work with SSDP TA to review the program implementation.

4.4.3. Gender and Social Inclusion

4.4.3.1 Inclusion of children with special needs

The United Nations and the World Health organization estimate around 60,000 to 180,000 children with Disabilities in Nepal from the age of 5 to 14, 30.6% of which do not attend school (UN, 2016).

Till 2018 schools got funds for "resource classes" if they have the minimum number of students for a specific type of disability. These are supposed to be preparatory grounds for younger students and can move to mainstream class at around grade 6. However, students tend to stay in these classes for years, only a few shifting to mainstream classes as they had minimal support in terms of accommodations for disabilities like braille textbooks, audio-video materials, sign language materials, etc. Both new as well as old school buildings lack physical accessibility and do not follow Universal design Principles (Human Rights Watch, 2018)

Although the Department of Education (DOE) of the Ministry of Education defines inclusive education as a "process of developing educational system that ensures the opportunity for receiving education in a nondiscriminatory environment in their own community by respecting the multicultural differences" (DoE, 2011), this is yet to be implemented in practice. DoE has also identified the target groups for inclusive education as: girl child and women, children with disability, dalit children, minority ethnic groups, street children, children affected by conflict, children affected by trafficking and sexual abuse, children severely affected by poverty, children of bonded laborers, children in jail, children infected and affected by HIV/AIDS, and child laborers (DoE, 2011)

The discourse related to the education of the children with special needs (CWSN) has mostly adopted a medical perspective toward identifying the disabled in the policy. (*Please refer to Annexure 17- Historical overview of Inclusive Education*)

However, over the years, there has been a shift in the way education for the disabled has been conceptualized. From the 1950s to 2000 it seems that the discourse was to provide special education to the disabled in separate special schools and with specially trained teachers. In recent years, there have been few policies and acts highlighting the need for the integration of disabled students into mainstream education. Recently, the policy discourse indicates a shift toward the inclusive education of the disabled and broadening the definition of inclusive education to address the diversity in the classroom in terms of language, caste, class, and gender and multiple levels of marginalization that students may encounter due to intersectionality of these factors. While there are several policy provisions in place to support inclusive education in schools, the beliefs and attitudes of the teachers in schools as well as cultural factors stigmatizing disability have been identified as a challenge for effective implementation of the policies (Regmi, 2017).

As special schools and inclusive schools exist along with inclusive schools in the education space, teachers and educators perceive inclusive education as "special education" for disabled students supporting segregation or integration due to conceptual confusion (Regmi, 2017). Regmi (2017) reports from analysing teachers' responses to a questionnaire that teachers face a lack of resources, curriculum materials, and training to handle disability and diversity in the classroom while they continue to adopt traditional methods of teaching. Other factors that exacerbated the challenges were a lack of disability-friendly infrastructure, school development plan, individual education plans, sufficient support staff for children with disabilities, and school-community collaboration deeming the existing provisions by the government as insufficient. Even parents' attitude was not found to be conducive to encouraging CWSN for pursuing education. Similar findings were echoed in the work of Thapliya (2019) between inclusive policy and inclusive practices.

There are other reports, however, that indicate that teachers have a positive attitude toward inclusion (Shrestha, 2017) and have an understanding that inclusive education requires a change in the mindset to appreciate the uniqueness of the child and provide a conducive environment and supportive culture to learn.

A report by Human Rights Watch (2018) of 13 public schools in Nepal indicated that segregation of students is still prevalent in many schools. Schools neither had a specialized curriculum for students like the ones with Down Syndrome and neither were the teachers trained in using braille or audio/video systems to be able to use these resources in the classrooms.

Inclusive education has not yet found its place in Preservice teacher education although the education policy adopts the inclusive education perspective. There are special one-month training sessions for teachers teaching CWSN students in resource classrooms (by CEHRD) but Inclusive education is not a theme in training of all teachers in B.Ed or M.Ed courses. CEHRD conducts one-two days of training for teaching students with specific disabilities for special education teachers. Those who have attended in-service training for inclusive education termed it as not useful as only discipline and classroom management were focused on training conducted by NGO (Human Rights Watch, 2018).

4.4.3.2. Gender and inclusion

With regards to Gender, the prevalence of early marriage, son preference, and the traditional view of girls as someone else's property hinder girls' education (Sapkota et al., 2019).

Further infrastructure issues like the lack of separate toilets for girls, impede girls' education as it results in a lack of menstrual hygiene (CERID, 2012). The probability of missing school becomes more when she belongs to a poor family as the responsibility of domestic work and perception of spending money on their education as "waste" is prevalent in the family (Bista 2004). This indicates the need to look at the intersectionality of the impediments to access to education for all categories. Poor families also struggle with infrastructural barriers when asked to produce documents for enrolling students in school (Neupane, 2017). Additionally, the school schedule and timings are not conducive to agriculture-based families where students help in the agricultural work.

4.4.3.3 Socially marginalized and economically disadvantaged groups

The exclusion of marginalized populations based on ethnicity, caste, and religious identity has been reported in Nepal as well as other South Asian countries. Discrimination based on caste create obstacles to the education of Dalits (DFID, 2006) as well as Janjati and indigenous people (CERID, 2005) creating social, educational, economical, and political barriers. The rich diversity of languages (123 languages) in Nepal creates barriers to the engagement of all children when Nepali is used as the medium of instruction and it is not the mother tongue of some students. There is a shortage of teachers knowing a variety of languages as well as curriculum materials published (Phyak & Ojha, 2019) making the success of teaching using your mother tongue difficult.

4.4.3.4 Insights from interviews

Interview respondents shared that Inclusion within education is through the political movements in the 90s and has been included more seriously in policy only after 2006 (PB, TBUN). Inclusion is to be understood at two levels- at the level of representation of diversity among teachers in the system and at the level of representation of diversity in the schools. The school infrastructure was also discussed as a point of inclusion for both children with special needs as well as for girls (KK, TFN, Chief of staff of a non profit organization).

In terms of the representation of the diversity of teachers, Teacher Service Commission guidelines emphasize that there is a 45% reservation in the teaching profession for females. The policy mandated at least 1 female teacher in the government school which led to a lot of females entering the system. However, most of the female teachers are concentrated in primary grades (45% in primary as opposed to 20% in secondary) (PB). The headteachers are still primarily male since most females are in primary grades and promotions are based on seniority (KK, TFN, Chief of staff of a non profit organization). Most of the government sector employees are male teachers, while the private sector has females predominantly (SD, RBF, Cofounder of a non profit organization).

Girls' scholarships have been highly prioritized at the school level (KK, TFN). Respondents shared that now, Inclusiveness is not just restricted to gender, but also moved on to caste and disability. However, challenges include making community and family environments inclusive and sensitive as the practices and biases from there get translated to classrooms (KK, TFN, Chief of staff of a non profit organization). One of the respondents (SD, RBF, Co-founder of a non profit organization) felt that the practice of putting the names and numbers of different category students on the wall may be an incorrect way of going about inclusion and does not really contribute to addressing inequities.

Inclusion was also discussed as a topic being focused in in-service teacher education but not dealt in-depth at pre-service teacher education level. Though inclusion is a new component of TPD trainings, topics like child-friendly classrooms, how to manage all students, and how to work with disadvantaged and disabled students are included (BK, TLP). A lot of training programs, especially ones by NGOs, focus on equity aspects such as financial equity, equitable access to education, peace education, gender, and school-related violence (*PB*, *TBUN*, *Teacher Educator at University and Consultant for Education Sector Plans*). However, the key challenge is to understand what is actually going on in the classrooms. Though teachers communicate that they are treating everyone equally, treating equally is different from treating equitably (*PB*, *TBUN*, *Teacher Educator at University and Consultant for Education Sector Plans*).

4.4.4. Distance Mode of Education

Contradictory policy, corruption, political influence, lack of funds, lack of resources, lack of trained teacher's attitude, a lack of connection of technology to assessment and curriculum were major barriers to implementing ICTs tools in the classroom. (Thapaliya, 2020).

Several education policies in Nepal mention Quality universal school education, ICT friendly school, e-learning, and e-library by enhancing the competencies of teachers to teach using ICT tools (GoN, 2007, 2009, 2013, 2016). The recent School Sector Development Plan (2016-2023) also indicates plans to set up the infrastructure required for the use of ICTs and give professional development training for teachers on the use of ICTs in education. Seven smart public secondary schools were established as models of ICT-friendly Smart schools in seven provinces by the Ministry of Education, Science and Technology (MoEST, 2018).

The level of ICT infrastructure is poor in schools as indicated by the FLASH report of 2019-2020 as "...13% of schools have facilities to access the internet... and 55% of households have access to the internet in their households and 51% of students could access media such as radio and TV..." (MoEst, 2020, p. 1).

The government of Nepal enacted the Learning Facilitation Directory 2020 through the Alternative System to coordinate among federal, provincial, and local governments to provide opportunities for learning during the pandemic to all students. It categorized the students into several categories:

- Students who do not have access to technology (online, internet, TV, Radio)
- Students who have access to radio, local FM Students who have access to television
- Students who have access to computer but no (regular/stable) access to internet
- Students who have access to internet and ICTs Students with additional learning needs (MoEST, 2020, p. 3)

A Memorandum of Understanding (MoU) was signed between Centre for Education and Human Resource Development (CEHRD) with the Open Learning Exchange (OLE) Nepal to provide OLE's collection of digital learning content for free and open access to all learners through the CEHRD's education portal on April 23, 2020 (OLE, 2020).

Thapliya (2020) conducted qualitative research based on semi-structured interviews of headmasters and teachers indicating that ICTs is used to conduct mostly administrative tasks for designing tests and progress reports of tests and examinations rather than for teaching students in Nepal. The use of social media is more prevalent than the use of emails and Facebook being popular among teachers and schools is used to communicate with students for homework or examination results though the classes are conducted using ZOOM. Other popular social media apps like Whatsapp, Viber, and Youtube are also used by teachers.

Most teachers and headteachers in the study were unaware of the policy initiatives and action plans created by the government to address learning loss during the pandemic indicating a gap between policy and practice. Interviews also indicated that even when teachers are interested in teaching using ICT, there is a lack of digital resources like computers as well as the challenge of continuous power supply and internet connectivity in schools. The situation is much worse for teachers trying to teach using online teaching during the pandemic as teachers lack devices and high-speed internet at home and attendance of students in online classes is as low as 20%, possibly due to lack of devices/internet. Teachers lack training in basic skills of using computers

like MS office and even those who got themselves trained through their own initiative feel they don't use it in teaching. There is also a lack of an adequate number of trainers for teaching ICT skills. Other constraining factors include time constraints for preparing lessons based on ICT, lack of technical support to maintain/repair devices, and further lack of infrastructure facilities in geographically remote situations. The enabling factors identified were acknowledged of teaching being more effective by teachers using ICT materials, supportive collaboration among teachers and parents to make ICT tools available to students and some schools adopting the "Smile Smart School Policy" to maximize the use of ICT resources in the classrooms.

During the COVID-19 pandemic, many children were at a loss of learning. Several local governments launched various radio and television programs for the education of children who did not have access to the internet to facilitate remote learning. However, these distance mode interventions have been primarily used for teaching-learning and not for training teachers.

"In CEHRD we have one section that is audio-visual section and that audio-visual section is responsible to develop audio-video materials and deliver through virtual teaching in collaboration with Nepal television in Nepal. In collaboration with Nepal television we are delivering these virtual... not for the teachers, not for the training purpose, for the teaching purpose to continue students learning, this virtual mode of learning we are doing, we are doing... nowadays also doing, we are broadcasting through Nepal television, but for the purpose of training we don't have this kind of system. Till now we have not adapted it. only the system is what, as I already said this flip model, this engagement collaboration application, but for the sake of students we use radio, we use television, we use hard copy materials also, those students who do not have access of radio, television, internet, for them we print out materials and we provide them. Teachers, they go to the student's home and they provide as assignment. When... if students have access in internet, if they access in the radio and television, if they access in the FM radio, through FM radio and television also we are delivering the content, not for the training, for the students as learning purpose." (RS, CRD, Technical officer at Central Teacher Training Institute)

As per another respondent (*PB, TBUN, Teacher Educator at University and Consultant for Education Sector Plans*), radio programming was a big component initially, with programs from USAID but these have lost their traction. There were also dedicated TV programs for the teachers. However, the quality and effectiveness of these programs are yet to be determined (*SD, RBF, Co-founder of a non profit organization*).

Another respondent (*PB, TBUN, Teacher Educator at University and Consultant for Education Sector Plans*) shared that the ICT skills of teachers is a major challenge and the financial support for ICT infrastructure in schools is already provided. Respondents felt that apart from the obvious challenges of low teacher training, the teacher mindset also seemed to be a hurdle to an extent. Teachers did not seem to prefer students surfing the internet and being distracted by the plethora of information and content out there. The internet has been looked at with a negative view, and a concern that the content can negatively affect the students is visible.

5. Professional Development of Teacher Educators

Training of teachers is conducted by teacher educators from ETC who are called expert trainers along with Roster trainers who are external experts having substantive experience in the field of education.

There is no information on how trainers for in-service training are selected by NCED. NCED provides a "syllabus" document outlining the training objectives based on which the trainers prepare the resource material for training. An interview study of trainers by Schaffner, Glewwe, and Sharma (2021) indicates that trainers generally adopt interactive methods like group problem solving during the training (74% of teachers reported its use)

Schaffner, Glewwe, and Sharma (2021) in an impact evaluation study of training of teachers found that teacher training of Maths and Science teachers did not result in any positive impact on student scores. One of the main problems identified is "that trainers were given inadequate time and guidance to prepare training materials, were not provided with 'training of trainers' (19/23 trainers did not receive any training) and in some cases lacked relevant teaching materials. Some ETC trainers lacked adequate expertise in maths and science"(ii). They were unable to provide clarifications and solve questions posed by teachers. This situation was more in remote locations where it is difficult to find trainers. They, therefore, suggest improving how trainers are trained, equipped, and motivated so that they can deliver high-quality training as well as need to redesign the training considering the teachers' availability and addressing gaps in their subject knowledge.

They also suggest the need to identify "mentors or coaches" that can do periodic classroom visits and can advise, monitor, and hold teachers accountable for improved teaching as well as provide a connection between in-service training and classroom teaching.

Interview respondents confirmed that the training of trainers and opportunities for professional development are very few, ad hoc, and not adequate. It is not institutionalized and integrated into the policy frameworks. There are groups like NELTA which hold mini-conferences and help English language teacher educators to build on their knowledge. The process of assessment and appraisal for teacher educators is not in place and participating in professional development activities does not hold any value for teacher educators.

Interview respondents also reported that there are no programs to connect teacher educators with the school teachers. Even though the respondents are aware of the need for professional development programs for teacher educators, they do not get such opportunities in the present context and are not reported in any formal document or policy. There is an absence of MOOCs or distance courses for TEs in Nepal. Though, the National Center for Education Development hosted an open virtual library that had OERs and TEs had access to it but at the national level awareness about these resources does not exist.

SECTION IV.

6. PESTEL Framework

The PESTEL Framework is a tool that helps evaluate macro-level external factors that impact an intervention/strategy. The framework comprises 6 components. (a) political (b) economic (c) social (d) technological (e) environmental and (f) legal.

We have used the PESTEL framework to arrive at components that are working well and those that require improvement/need to be focused upon in the context of professional development of teachers and teacher educators in Nepal.

	Parameters	What's working well (PROS)	What needs improvement (CONS)
1	Political/	TPD	Teacher Education and TPD
	Governance	mandate TPD through different modalities such as customized training, workshops, seminars, collaborative research, reflections, teacher networks, mentoring. II. Teacher recruitment based on gender and social inclusive policies. III. Action Research is a significant component of teacher	 I. Federal structure resulting in significant reduction in teacher training centres. II. Unclear roles and responsibilities between the different levels of the government resulting in ineffective delivery on the ground. III. Training program designed centrally and not on a need analysis. IV. TPD training scheduled on regular working days.
		teacher educators and teachers.	 PD for Teacher Educators I. Professional development of teacher educators not included at the policy level. II. Assessment of teacher educators is unclear. III. Less number of government trainers at CEHRD and the ETC. IV. Lack of robust processes for the selection of teacher educators.

2	Economic/	TPD
	Financial	I. Low budgetary allocation for teacher professional development.
		PD for Teacher Educators
		I. No budget allocation for professional development of teacher educators.

	k of teacher motivation to
dite	end TPD training.
skill clas	or application of training s and other learnings into sroom instruction and ctice.
for a	gative teacher mindset adopting technology for ching-learning.
to c	k of teacher motivation conduct action research in srooms.
	ited understanding of action earch amongst teachers.
	ak monitoring system in ctice.
PD for To	eacher Educators
tead	fessional development of cher educators not included he policy level.
	essment of teacher cators is unclear.
	s number of government ners at CEHRD and the ETC.
	k of robust processes for the ection of teacher educators.
PD for To	eacher Educators
train	r capacitation of rosters ners viz knowledge, skills competencies.

4	Technological	TPD	TPD
		 I. Implementation of the Hybrid FLIP Model with the advent of the covid-19 pandemic. II. Multi-level ICT focused training present (basic and digital literacy). 	I. Lack of access to devices.II. High cost of internetIII. Connectivity issues.IV. Low ICT knowledge and skills.
		PD for Teacher Educators	
		Resource available for teacher educators at Sikhai website (government portal)	
		II. Communities exist in social media websites like Facebook.	
5	Environmental		TPD
			Quality of education affected by calamities like earthquake and the covid-19 pandemic. Teacher training affected by the
			pandemic. III. Poor internet connectivity in
			hilly areas.
			PD for Teacher Educators
			I. Challenges in deployment of teacher educators in remote locations, especially hilly areas.

I. The professional development of teacher educators is not a key focus area for the policy makers as it does not find a mention in the national education policy or the education sector plans. Neither is there a budgetary allocation for the same. There does not seem to be a robust system in place for the selection of trainers for implementing the in-service TPD programs. Moreover, the capacitation of the roster trainers has been in question as articulated in both literature as well as in impact evaluation studies of the TPD trainings, as there are very few opportunities available for their own professional development.

II. Unlike the professional development of teacher educators, the policies/plans speak at length about the continuous professional development of teachers through various approaches such as customized trainings, webinars, collaborative research, mentoring, teacher networks, observation tours and reflections. Though the professional development of teachers is mandated in the policy, its translation into effective and quality classroom instruction and practice is weak owing to various factors highlighted in the report. Concepts of Action Research, mentoring are integral to the TPD programs, however, their understanding of these concepts and its constructive use for improving one's practice is limited.

III. The use of distance-teaching learning is predominantly restricted to schooling viz a viz teaching-learning and not for the purpose of training teachers or the teacher educators.

It is only as recent as the covid-19 pandemic, that the TPD trainings were conducted through the hybrid FLIP Model approach adopting asynchronous and synchronous learning, which seemed as a mere transport of content from the physical space to a virtual one. Additionally, there are low levels of ICT skills and knowledge for classroom instruction and practice.

The Landscape Mapping Study identifies the following gaps in supporting teacher educators and teachers professional development

- 1. Lack of opportunities for teacher educators to work with teachers and develop a contextualised knowledge of teachers work and challenges
- 2. Few avenues for supporting the development of communities of educators and spaces to share and build on the knowledge of teaching learning process and of teacher professional development
- 3. Need for supporting the development of research culture among teacher educators and teachers through opportunities to engage in field based research, identifying challenges and finding contextualised solutions
- 4. Need for online/blended curriculum for teacher educators and teachers to improve their practice and incorporate the skills of reflection and collaboration in their practice
- 5. Use of top-down/ centralised approaches for teacher professional development indicate need for the system to explore collaborative modes of professional development including mentoring and coaching
- 6. Need to develop the knowledge about how constructive and student centered pedagogies can be contextualised in each country's contexts to support meaningful learning of students in school.

ABOUT MULTIMODAL APPROACH TO TEACHER PROFESSIONAL DEVELOPMENT (MATPD) PROJECT

This IDRC KIX GPE funded project is supported by the MATPD consortium. The project, A Multimodal Approach to Teacher Professional Development in low resource settings (MATPD) is a collaborative endeavor. A South South collaboration of higher education institutions and a global non-profit entity, the consortium is addressing the quality of teacher educators and teachers professional development through distance teaching and learning through this project. Villa College, Maldives is the lead partner of the consortium. The Tata Institute of Social Sciences (TISS) is the co-lead and knowledge partner for the proposed innovation; while the Swedish Committee of Afghanistan is the third partner, implementing the project in Afghanistan.

The (MATPD) project aims to strengthen the teacher educators' capacity in the system through multiple professional development activities. The theoretical assumptions behind the design of the project is that to improve the teacher professional development opportunities of the teachers, there is urgent need to address the skills, knowledge and attitudes of the teacher educators to adapt collaborative and constructive professional development activities and meaningfully integrate ICT in professional development as well as the for the classroom teaching learning process. These competencies can be developed through opportunities of practice-based professional development and social learning. The practice- based professional development activities for teacher educators involve:

- 1. Courses on constructive teaching-learning using distance education technologies, action research and mentoring which includes practice-based assignments to be conducted with in classroom and teacher education contexts
- 2. Interaction with academic mentors and field mentors to develop action research proposal and reports to experience the mentoring process themselves to enable them to use these processes with teachers in their Action research
- 3. Implementation of the action research proposal with a group of (5-10) teachers to address their professional development and/or supporting classroom teaching learning process using the skills of collaboration, mentoring and reflection
- 4. Engagement in professional learning communities to share and build their knowledge of collaborative modes of professional development and constructive teaching learning process

These will empower the teacher educators to use tools of distance teaching-learning for

- a) constructivist teaching-learning,
- b) use of mentoring principles and tools for providing academic support to the teachers to help improve their teaching practice; and
- c) use action research processes and on ground experiences to address/solve local contextual educational problems of the teachers.

We will study the change in belief, skills and knowledge of the teacher educators with regards to the Teacher Professional Development approaches through research. We hope that it will indirectly impact the teaching-learning practices of the teachers through their interactions.

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8. Appendix

ANNEXURE 1: INTERVIEW TOOL

Semi-structured interview schedule for Key Informant Interviews

Thank you for agreeing to participate in the Landscape Mapping Study, which we are conducting as part of the project, "A Multi-Modal Approach to Teacher Professional Development to Address Evolving Educational Changes in Low Resource Settings." The countries we are looking at are Afghanistan, Maldives & Nepal. The research study will be carried out collaboratively by Swedish Committee for Afghanistan (SCA); Villa College, Maldives and Centre for Excellence in Teacher Education (CETE), TISS Mumbai, India.

The MATPD Project will implement innovative approaches on Teacher Professional Development devised by CETE, TISS. Designed in and for under resources and developing contexts, they will be collaboratively adapted to suit national contexts of participating countries. It will entail the usage of diverse technologies and modalities for TPD that are context appropriate, combined with action research and social learning through Professional Learning Communities.

This interview is being conducted to understand the landscape of Teacher Professional Development in your country. As a teacher educator/policy maker that works on Teacher Education/Teacher Professional Development, we are interested in understanding your experiences and perspectives on this issue. We hope you can enrich our study by sharing your experience of the field, the changes that you are noticing (if any) and how you perceive it as affecting the teacher education sector.

Basic Information

- Interviews conducted online will be recorded for ease of access to data collected.
- The interview will span for an hour.
- All names (organization & personnel) would be kept anonymous according to research protocols.

Basic Details to be captured

Name:
Organisation:
Gender:
Age:
Designation:
Qualifications:
Years of experience:
A. < 5 yrs
B. Between 5-10 years
C. Between 10-15 years

D.

More than 15 years

I. Status of Teacher Education

- 1. How do you think the teacher education space has changed over the last 5-10 years in your country? What is its current status (both pre-service & in-service)?
- 2. What are the key focus areas towards teachers' professional development? What are the areas that you believe need to be strengthened? (Probe: generic & specifically relating to distance education in teacher education, action research among teacher educators, ICT and inclusive education)
- 3. What are the problems/challenges faced by (1) teacher educators & (2) teachers (Probe: generic & specifically relating to: connecting with teachers using ICT, whatsapp, physically, in-service education being able to address challenges faced by teachers in the classroom)
- 4. Does your country have an education policy and teacher education policy?
- 5. Data on the number of government and private teacher training colleges in your country. (Probe: ask for relevant documents/website details)
- 6. Which agency is responsible for teacher education in your country? What is the structure like?
- 7. What is the process for recruiting teachers in your country?
- 8. How is TE financed in your country? Who are the key donors or financing entities involved in TE? How much of the total budget is allocated towards education (school and higher ed) and teacher training? (Probe: ask for relevant documents/website to source this information)
- 9. How are the teacher education institutes regulated? Are there any guidelines/standards for maintaining quality? Is there any monitoring mechanism in place for assessing quality?
- 10. How is teacher licensing managed and monitored?
- 11. Do you think non-state actors are important in the space of teacher's professional development? In your opinion, how has the role of non-state actors enhanced/improved teachers' professional development in your country? Could you share some examples?
- 12. How is sustainability defined in the country policy documents for teacher education interventions? What practices are in place to achieve sustainability? (Probe: How do you ensure that in-service teacher education interventions continue to function in future. What kind of systemic support is needed for the same?)
- 13. Are you aware of any large scale/national level teacher education interventions in your country? If yes, kindly elaborate.

II. Gender , Equity & Inclusion

1. Elaborate the kind of policy initiatives and interventions in place by the state and your organization to address gender, equity and inclusion related issues in the school and teacher education space? (Probe: pre-service & in-service TE programs)

III. Professional development of teacher educators

- 1. How do teacher educators plan for the in-service workshops?
- 2. What are the modes of professional development available to teacher educators? What are the most common modalities used in TPD? (seminars, workshops, conferences, exchange programs, research, action research). Could you share some examples? Probe-How can research and in particular action research help in professional development of teacher educators?
- 3. How are the teacher educators assessed for their performance? What are the parameters on which feedback is provided to them & what is the mode? Could you share the observation tool/rubric with us?

IV. In-service Teacher Education

- 1. How important is in-service teacher education and why? How does it affect (a) classroom instruction & practice (b) student learning outcomes?
- 2. Are the teacher education programs lecture based, experiential or a combination of both? How does it link theory with practice? Could you share some examples?
- 3. What are the themes/topics covered in the in-service teacher education programs (curriculum/pedagogy/others: specifically ask about inclusive education, community building, action research, mentoring) How are the themes arrived at? Is it based on need analysis, any national /international framework, policy guidelines by the government?
- 4. Is mentoring part of the process of teacher professional development? if yes, What kind of mentoring do you provide to the teachers? What does the process look like-is it individual or group mentoring? What is the mode? What issues/ concerns & themes are discussed? Could you share some examples?
- 5. Does the national education policy in your country mandate the number of hours for Teachers Professional Development (TPD)?
- 6. What is the frequency and duration of in-service teacher education programs in an academic year? How many teachers do you train in an academic year? Are these programs centralized or decentralized?
- 7. Who conducts these in-service teacher education programs?
- 8. Is there a certification provided at the end of the training program?
- 9. How is the training program evaluated? Do you have any rubric for the same? Do you take feedback from the teachers and is the feedback incorporated into subsequent training? Could you share the observation tool/rubric with us?
- 10. Do the in-service teacher education programs entail a component of baseline and end line to gauge learnings of the teachers? If YES-what are the elements that you look at? Could you share the observation tool/rubric with us?
- 11. Are there any follow up sessions post the training? How do you address concerns and issues of teachers post the training program? How do you support teachers in integrating the ideas from professional development activities in their classroom teaching? Could you share some examples?

- 12. If follow up involves classroom observations- Do you conduct any classroom observations to study impact of the training program on students' learning outcomes? If YES- what are the parameters that you look at? Could you share the observation tool/rubric with us? if NO, what is the reason for not being able to conduct observations?
- 13. What is the relation between teachers' professional development and students' learning outcomes in your view?

V. Pre-service Teacher Education

- 1. How important is pre-service teacher education and why? How does it affect (a) classroom instruction & practice (b) student learning outcomes
- 2. What are the broad themes covered in the pre-service teacher education program? (curriculum/pedagogy/others: specifically ask about inclusive education, community building, action research, mentoring)
- 3. What are the most important courses that have a big impact on teachers teaching during the pre-service teacher education and why?

VI. Professional Development through Distance Education

- 1. What modes of distance education are suitable for teacher education in the country and why?
- 2. How can distance education be used in improving teacher education/ professional development activities? Are there any existing interventions that utilize distance education for teacher education? Could you share some examples?
- 3. Have you been engaged in using distance education for teacher education in the last two years? Elaborate on the role played and your experience. What worked for promoting teacher learning and what didn't?
- 4. Whether and What platform have you used / come across for PD of teachers?
 - a.Moodle
 - b.Google Classroom
 - c.EDx
 - d.Coursera
 - e.Marf
 - f.Others
 - g.Whether Media is used for PD of teachers? What? How?
 - h.(pls give examples)
 - I. New Media : Social media (Fb, Instagram , Youtube, Tiktok, Twitter, Clubhouse, Whatsapp, Telegram) , Simulations (VR, AR, Bots etc) , Open Educational Resources, Webinars
 - II. Traditional Media: print media- (newspaper, magazines etc), TV, Radio, Probe- (if not explained)- what kinds of programmes are developed, what are the focus areas and are there any mechanisms for getting feedback from the teachers?

- 5. What is the status of ICT infrastructure & utilization in your country? (Probe- in teacher education institutes, among teacher educators, among teachers?)
- 6. Are there any interventions using ICT based activities for professional development of teachers? IF YES- please elaborate on the focus areas, nature of engagement of the teachers and how classroom based teaching is influenced through these interventions? IF NO- elaborate on what kind of interventions would be useful?
- 7. What kind of digital literacy in—service education is provided to the teachers? What are the broad themes covered?
- 8. How can competencies in ICT among teachers and teacher educators be built and strengthened further?
- 9. What kind of challenges do the teachers face while using ICT in classrooms? How have these been addressed?

VII. Support for newly qualified teachers and their modes of career progression

- 1. What kind of support is provided to the newly qualified teachers? (Probe: Is it school based support or any other form of support?)
- 2. Is there any structure/framework in place to help arrive at excellent & outstanding teachers? Could you share the framework/rubric with us?
- 3. What kind of incentives (monetary, non-monetary) are given to the teachers towards their career growth and progression?

VIII. Educational Leadership

- 1. What is the role and function of educational leadership?
- 2. What are the ways in which educational leadership can be developed among the teacher educators and teachers (in the role of mentors)? How does it /how can it contribute towards improving educational outcomes?
- 3. What are the mechanisms, which can be used to develop educational leadership for mentoring teachers?

ANNEXURE 2: STAKEHOLDERS INTERVIEWED

1	Interview respondent 1	М	Director-Open and Distance Education Centre at Teacher Training College
2	Interview respondent 2	М	Chief of Staff, Non-Profit
3	Interview respondent 3	F	Co-founder,Non-Profit
4	Interview respondent 4	М	Teaching Assistant, Department of Maths Education, Teacher Training College
5	Interview respondent 5	М	Co-founder,Non-Profit
6	Interview respondent 6	М	Education Officer, Local Government
7	Interview respondent 7	М	Technical Officer, pex teacher training body
8	Interview respondent 8	М	Professor of Sociology at Teacher Training College, Consult for SSRP/SSDP for ADB
9	Interview respondent 9	F	Former Resource Person
10	Interview respondent 10	М	Consultant to the SSDP TA Facility of ADB & EU being implemented by British Council
11	Interview respondent 11	F	Senior Education Officer, Funding Agency

ANNEXURE 3: SECONDARY RESEARCH

Sr. No	Title	Author	Year of release	Link/Online
ACTIO	ON RESEARCH			
1	An Action Research- Teacher student interaction in Nepali medium english classroom	Krishna Gurung	2014	http://krishnagorkha.blogspot.com/2014/02/an-action-research-teacher-students.html
2	An Action Research on Classroom Teaching in English Medium	Renu Kumari Lama Thapa	2016	An Action Research on Classroom Teaching in English Medium (ajhss.org)
3	Promises of Action Research Paradigm for Teachers' Professional Development	NELTA	2017	https://neltaeltforum.wordpress.com/2017/07/02/ promises-of-action-research-paradigm-for-teachers- professional-development/
4	Exploring for action, acting for change: stories of exploratory action research in Nepal	Janak Singh Negi	2019	https://www.researchgate.net/ publication/342716936_Exploring_for_action_acting_ for_change_stories_of_exploratory_action_research_ in_Nepal
5	Action research for professional development: Involves observation, data collection	The Himalayan	2022	https://thehimalayantimes.com/opinion/action- research-for-professional-development-involves- observation-data-collection
6	Handbook of Exploratory Action Research	British Council		https://www.teachingenglish.org.uk/sites/teacheng/files/pub_30510_BC%20Explore%20Actions%20Handbook%20ONLINE%20AW.pdf
DATA	ON SCHOOLS, TEACHE	RS etc.		
1	Flash Report 2019-20	CEHRD	2019-20	https://cehrd.gov.np/infocenter/17
DISTA	ANCE EDUCATION			
1	Open and distance learning-cultural practices in Nepal	Shesha Kanta Pangeni	2016	https://files.eric.ed.gov/fulltext/EJ1138171.pdf
2	Online classes may widen digital divide	Nepali Times	2020	https://www.nepalitimes.com/latest/online-classes- may-widen-digital-divide/
3	Alternative teaching methods explored in Nepal in response of Covid-19	UNESCO	2021	https://en.unesco.org/news/alternative-teaching-methods-explored-nepal-response-covid-19

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4	Child and Family Tracker	UNICEF	2021	https://www.unicef.org/nepal/reports/covid-19-child-and-family-tracker-findings
5	Learning in the time of Covid-19: Insights from Nepal	World Bank Karthika Radhakrishnan, Noam Angrist, Peter Bergman, Claire Cullen, Moitshepi Matsheng, Anusha	2021	https://openknowledge.worldbank.org/bitstream/handle/10986/35384/Learning-in-the-Time-of-COVID-19-Insights-from-Nepal.pdf?sequence=1&isAllowed=y
6	Nepal steps up remote learning during covid-19	World Bank Karthika Radhakrishnan, Cristian Aedo, Mohan Prasad Aryal, Maya Sherpa, Uttam Sharma	2021	https://blogs.worldbank.org/endpovertyinsouthasia/ nepal-steps-remote-learning-during-covid-19
7	New Challenges to Education in Post- Covid19 Nepal	University of Oxford (Education South Asia) Bibhu Thapaliya and Uma Pradhan	2021	https://educationsouthasia.web.ox.ac.uk/article/thinkpiece13
8	Covid-19: Adaptation and Innovation in Education programs in Nepal	Save the Children, Nepal	2021	https://nepal.savethechildren.net/sites/nepal.savethechildren.net/files/library/Nepal%20 Learning%20Document_%20COVID-19%20 adaptation%20and%20innovation%20in%20 education%20programming%20_%20FINAL%20 Sept%202020.pdf
9	Teaching in a new reality	UNICEF	2021	https://www.unicef.org/nepal/stories/teaching-new-reality
10	Preparations for and practices of online education during the Covid-19 pandemic: A study of Bangladesh and Nepal	Sagun Shrestha, Saifa Haque, Saraswati Dawadi & Ram Ashish Giri	2021	https://link.springer.com/content/pdf/10.1007/s10639-021-10659-0.pdf
11	Digital 2021: Nepal	Simon Kelp	2021	https://datareportal.com/reports/digital-2021-nepal

12	Nepal's challenges in delivering education amidst Covid-19 pandemic	Nabila Farid, Boyd Hayes and Riya Sirkhell	2021	https://www.asiapacific.ca/publication/nepals-challenges-delivering-education-amidst-covid-19#:~:text=The%20COVID%2D19%20pandemic%20 has,the%20history%20of%20formal%20 education.&text=These%20pre%2Dexisting%20 concerns%20have,response%20to%20the%20 global%20pandemic.
FDUC	CATION IN NEPAL	<u>I</u>		
	Anormitie			
1	National Education system in Nepal	Uma Pradhan	2018	https://www.researchgate.net/ publication/328252675_National_education_system_ in_Nepal_between_the_'local'_and_the_'global'
2	Developing effective learning in Nepal: Insights into school leadership, teaching methods and curriculum	British Council	2020	https://www.britishcouncil.org.np/sites/default/files/developing_effective_learning_in_nepal_0.pdf
3	The status of school education in Nepal	Pramod Bhatta & Archana Mehendale	2020-21	-
FEDE	RALISM	I	l	
1	Federalization and education in Nepal: contemporary reflections in working through change	Daily A Parker, SL Sherpa S and Regmi U	2019	https://www.tandfonline.com/doi/abs/10.1080/ 03004279.2019.1599408?journalCode=rett20
FINA	NCING			
1	Education Budget 2021-22	UNICEF	2021	https://www.unicef.org/nepal/media/14421/file/ Budget%20Brief%20-%202021-22%20-%20Education. pdf
2	Education Budget Brief	UNICEF		https://www.unicef.org/nepal/media/13271/file/ Education%20-%20Budget%20Brief.pdf
IMPA	ACT OF COVID-19		ı	
1	Nepal Case Study: UNICEF	UNICEF	2021	https://www.unicef.org/rosa/documents/nepal-case- study

2	Challenges and Opportunities to Implementing ICTs in education to Manage Learning Crisis due to COVID-19 in Nepal	M Thapliya	2020	http://jogltep.com/wp-content/uploads/2021/06/3- Mukti-Thapaliya.pdf
ΙΜΡΔ	ACT STUDY-TRAINING-S	SDP	1	
	TODI INAMINO S	1		
1	Evaluation of secondary school teacher training under SSDP in Nepal	International Initiative for Impact Evaluation Julie Schaffner, Uttam Sharma, Paul Glewwe	2021	Shared by Mr. Uttam Sharma
INCL	USION			
1	Social Inclusion and Exclusion: A Review1	Nabin Rawal	2008	https://d1wqtxts1xzle7.cloudfront. net/34336396/589-libre.pdf?1406877942=&response-content-disposition=inline%3B+filename%3DSoci al_Inclusion_and_Exclusion_A_Review.pdf&Expires =1645771331&Signature=L9tv~GTPIIwld0ZZY5gC1 0G8p6~2mVg9IKzQtKWRc1Pb5CLMvnpK-L0Lpnwd ygWaBx0epO~WwfnMqYBrfkMZp8rBl5i2wCs3rnx4 8vHYXibXCjTXL3LtPIPQqjvji6kxCRhe20IYiRm8z87r3 3VODXk-70UQBoBNAkpdRGgdnm43DV30fwHIHDu D7QI6IQVeuPRMLkE6M4h85kcl~MY3kxFIS0kxSW0 DH-hMq7-Blnmn9ShXpv1CPA0Zfi8LrnKAam-Itt~xbL2 oLVPYVx6MRobZJNOINQVkNm7i~9un-Ol5CADY-mZF yQetl74dyDhuX8kJ0uepyvng5NgYiiYJRg&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
2	Disability and barriers to education: evidence from Nepal	Kamal Lamichhane	2013	https://sci-hub.se/10.1080/15017419.2012.703969
3	Reforming Teacher Education for Inclusion in Developing Countries in the Asia-Pacific Region	Umesh Sharmaa, Chris Forlinb, Joanne Deppelera, and Yang Guang- xue	2013	https://www.researchgate.net/profile/ Umesh-Sharma-22/publication/236120043_ Reforming_Teacher_Education_for_Inclusion_in_ Developing_Countries_in_the_Asia-Pacific_Region/ links/0deec51628f5e294c4000000/Reforming- Teacher-Education-for-Inclusion-in-Developing- Countries-in-the-Asia-Pacific-Region.pdf
4	Inclusive education in Nepal: Assumptions and reality	Liz Maudslay	2014	https://sci-hub.se/10.1177/0907568213514778
5	Children from the Dalit community in rural Nepal: a challenge to inclusive education	Damodar Khanal	2014	https://sci-hub.se/10.1080/13603116.2014.964568

6	Teachers' attitude towards inclusive education in Nepal	Shovhakar Aryal	2017	http://103.69.125.248:8080/xmlui/ handle/123456789/39
7	Criticality as Ideological Becoming: Developing English Teachers for Critical Pedagogy in Nepal	Bal Krishna Sharma, Prem Phyak	2017	https://www.tandfonline.com/doi/abs/10.1080/1542 7587.2017.1285204
8	Teaching students with visual impairments in an inclusive educational setting: a case from Nepal	Kamal Lamichhane	2017	https://sci-hub.se/10.1080/13603116.2016.1184323
9	Barriers to Education and School AttainmentEvidence from Secondary Schools in Rural Nepal	Pramila Neupane	2017	https://files.eric.ed.gov/fulltext/EJ1130352.pdf
10	Inclusive Education in Nepal From Theory to Practice	Narayan Regmi	2017	https://edoc.ub.uni-muenchen.de/20510/7/Regmi_ Narayan_P.pdf
11	Navigating exclusionary- inclusion: school experience of Dalit EFL learners in rural Nepal	Kamal Raj Devkota	2018	https://barracudaex.aub.aau.dk/index.php/globe/ article/view/2331/1859
12	Moving Towards Inclusive Education: How Inclusive Education is Understood, Experienced and Enacted in Nepali Higher Secondary Schools.	Mukti Prakash Thapaliya	2018	https://ir.canterbury.ac.nz/bitstream/ handle/10092/15806/Thapaliya%2C%20Mukti_ Final%20PhD%20Thesis.pdf?sequence=1
13	Promoting gender inclusive governance to deliver better education in Nepal	Rebat Kumar Dhaka	2019	https://www.researchgate.net/ publication/335789266_Promoting_Gender_ Inclusive_Governance_to_Deliver_Better_Education_ in_Nepal
13	Teachers' Attitude Towards Inclusive Education in Nepal	Puspa Sharma	2019	https://www.nepjol.info/index.php/ire/article/ view/27933/23865

14	Perspectives of children with disabilities and their guardians on factors affecting inclusion in education in rural Nepal: "I feel sad that I can't go to school",	Lena Morgon Banks, Maria Zuurmond, Adrienne Monteath–Van Dok, Jaquelline Gallinetti & Nidhi Singal	2019	https://www.tandfonline.com/doi/abs/10.1080/1360 0818.2019.1593341
15	Policy Framework for Education Development in Nepal	Pramila Neupane	2020	https://files.eric.ed.gov/fulltext/EJ1239485.pdf
16	Teacher Preparation for Primary English Education in Nepal: Missing Agendas of Diversity and Inclusion	Pramod K. Sah	2021	https://link.springer.com/article/10.1007/s42321-021- 00100-7
17	Perception of Stakeholders on Inclusion of Visually Impaired Children in Education in Nepal	Krishna Prasad Lamsal	2021	http://artechjournals.com/uploads/documents/file_740_159.pdf
18	The Leap towards Inclusive education: experiences from Nepal	Mahashram Sharma		https://www.nise.go.jp/kenshuka/josa/kankobutsu/pub_d/d-262/d-262_all.pdf#page=17
MEN	TORING	-		
1	Teacher Education Communities of Practice: More than a culture of collaboration	Kevin Patton and Melissa Parker	2017	https://www.sciencedirect.com/science/article/abs/pii/S0742051X17309617
2	BlueBook on Mentoring (DRAFT)	National Mission on Mentoring,	2021	
3	Teacher Mentoring -Pilot Program Concept Note	CEHRD + SSDP TA		Shared by Dr. Kishore Shrestha (British Council)
4	Teacher Mentoring -Design	CEHRD + SSDP TA		Shared by Dr. Kishore Shrestha (British Council)

5	Tables of mentoring tools and training sessions	CEHRD + SSDP TA		Shared by Dr. Kishore Shrestha (British Council)
6	Remote Trainers Network Infographic	CEHRD + SSDP TA		Shared by Dr. Kishore Shrestha (British Council)
7	Remote Trainers -Survey & Feedback	CEHRD + SSDP TA		Shared by Ms. Smita Gyawali (ADB)
STUE	ENT LEARNING OUTCO	OMES		
1	National Assessment of student achievement (NASA)	MoEST	2018	https://www.ero.gov.np/post/6_5ea12e65bba9f
POLI	CY DOCUMENTS			
	Teacher Service Commission Rules 2057		2000	https://www.lawcommission.gov.np/en/wp-content/uploads/2018/09/teachers-service-commission-rules-2057-2000.pdf
	Not policy doc. but a newspaper article on TSC			https://kathmandupost.com/national/2021/07/23/teachers-service-commission-out-of-work-with-vacant-leadership-positions
	Not policy doc. but a newspaper article on TSC			https://myrepublica.nagariknetwork.com/news/teachers-service-commission-expedites-preparations-to-recruit-12-000-new-school-teachers/
1	SSRP	MoEST	2009-16	https://drive.google.com/drive/u/0/ folders/119RPRNkeqawMvNuUCDT0zUfbSfMErOdb
2	Joint Evaluation of Nepal's School Sector Reform Plan Programme 2009-16	GFA Consulting group	2016	
3	SSDP	MoEST	2016-21	https://drive.google.com/drive/u/0/ folders/119RPRNkeqawMvNuUCDT0zUfbSfMErOdb
4	Policy Framework for Education Development in Nepal	Pramila Neupane	2019	https://drive.google.com/drive/u/0/ folders/119RPRNkeqawMvNuUCDT0zUfbSfMErOdb

				,
5	National Education Policy 2019	MoEST	2019	https://drive.google.com/drive/u/0/ folders/119RPRNkeqawMvNuUCDT0zUfbSfMErOdb
6	Performance Evaluation Report	ADB	2019	
7	Education Cluster Contingency Plan	MoEST	2020	
8	The Fifteenth Plan:Fiscal Year 2019/20	MoEST	2020	
9	Education Sector Plan (Nepali)	MoEST	2021	
10	Nepal Education Sector Analysis 2021	MoEST	2021	
11	SESP Draft	MoEST	2021-30	Shared by Dr. Pramod Bhatta
PPP				,
1	Public desire for private schooling in Nepal	Pramod Bhatta	2014	https://books.google.co.in/books?hl=en&lr=&id= eJ9wCQAAQBAJ&oi=fnd&pg=PA67&ots=SwHNEut enq&sig=Jlo6SaEn4uQhtsfmuowCo-H3CgY&redir_ esc=y#v=onepage&q&f=false
TPD				,
1	Teacher Education in Nepal	Leela Pradhan	2011	https://www.richtmann.org/journal/index.php/jesr/ article/view/11764/11370
2	Teacher Professional Development (TPD) Program: Boon or Bane?	Raju Shrestha	2012	https://neltachoutari.wordpress.com/2012/09/01/ teacher-professional-development-tpd-program- boon-or-bane/
3	Expectations of teachers from the TPD Program	Tika Ram Pokhrel Santosh Kumar Behera	2016	https://www.researchgate.net/ publication/299447600_Expectations_of_Teachers_ from_Teachers_Professional_Development_Program_ in_Nepal

4	Teacher Training in Nepal: Issues & Challenges	Ganga Ram Gautam	2016	https://www.nepjol.info/index.php/TUJ/article/ view/25545
5	Challenges Associated with Teachers' Professional Development through Research-based Activities		2020	https://www.researchgate.net/ publication/346436939_Challenges_Associated_ with_Teachers'_Professional_Development_through_ Research-based_Activities
6	Teachers Professional Development at Public Campuses: Attitude and Practice	Dinesh Panthee	2019	https://www.researchgate.net/ publication/347869096_Teachers_Professional_ Development_at_Public_Campuses_Attitude_and_ Practice

ANNEXURE 4: CODE INDEX

S.No	THEME	CODE	CODE DESCRIPTION
Theme 1	Federalism		
1		FED-GOV	Federalism-Governance model
2		FED-SCH	Changes taken place/impact of federalism on schooling of students
3		FED-TE	Changes taken place/impact of federalism on delivery of teacher education (pre-service, in-service)
Theme 2	School Education		
1		SCH-HIS	A historical background of the school education system in the country
2		SCH-ACA	Academic structure of school education
3		SCH-POL	Reforms/policy changes in school education
4		SCH-ADMIN	Administration of school education in the country
5		SCH-FIN	Financing of school education in the country (govt, donors-national & international)
Theme 3	Teacher Education		
1		TE-GOV	Governments' vision for teacher education (pre-ser-vice , in-service)
2		TE-KEY	Key focus areas in teacher education (pre-service, in-service)
3		TE-AREA	Areas in teacher education that need strengthening (pre-service, in-service)
4		TE-PRO	Agency responsible for providing teacher education in the country (pre-service, in-service)

5		TE-QUAL	Qualification to become a teacher in the school system
6		TE-REC	Teacher Recruitment
7		TE-LICEN	Teacher Licensing
8		TE-REG	Regulation of Teacher Education Institutes
9		TE-FIN	Financing of teacher education (government, donors-national, international)
Theme 4	Pre-Service Teacher Education		
		PRE-POLICY	Policies, frameworks for pre-service
1		PRE-CURR	Pre-service course curriculum
2		PRE-AR	Action Research component in pre-service teacher education (faculty, pre-service students)
3		PRE-MT	Mentoring of pre-service students
4		PRE-GESI	Gender Equality and Social Inclusion (GESI) Inclusion policy at the university level (faculty recruitment, selection of pre-service students, course curriculum) Interventions/Initiatives by govt/university towards GESI
5		PRE-ICT	Status of ICT infrastructure and utilization, initiatives by the government/non-state actors, integration of ICT in teaching-learning (course curriculum), ICT competency of faculty, challenges in using ICT for teaching students
6		PRE-DIST	Modes of distance education are suitable for teacher education in the country, modalities of distance education at the university level, benefits & challenges of distance mode of education

Theme 5	Teacher Professional Development		
1		TPD-MODEL	Model and structure of the TPD program in the country
2		TPD-POLICY	Policies, frameworks for TPD
3		TPD-TRAIN- ER	Trainer-qualifications & skills, selection, number of trainers
4		TPD-NON- STATE	Trainings by non-state actors
5		TPD-REACH	Number of teachers trained through various TPD programs
6		TPD-CERT	Certification for TPD program
7		TPD-INCT	Incentivization -teacher educators, teachers
8		TPD-CURR	Curriculum for the TPD program
9		TPD-AR	Action Research component for teachers and teacher educators (govt, non-state actors)
10		TPD-MT	Mentoring of teachers, teacher educators
11		TPD-GESI	Gender Equality and Social Inclusion (GESI) Inclusion policy at the school level (teacher recruitment, student enrollment, course curriculum, classroom teaching-learning) Interventions/Initiatives by govt/schools towards GESI
12		TPD-ICT	Status of ICT infrastructure and utilization, initiatives by the government/non-state actors, integration of ICT in teaching-learning (course curriculum), ICT competency of teachers, challenges in using ICT for classroom teaching-learning, ICT training (govt, non-state actors)

13		TPD-DIST	Modes of distance education are suitable for teacher education in the country, modalities of distance education for professional development of teachers and teacher educators, benefits & challenges of distance mode of education
14		TPD-HT	TPD for Head Teachers
15		TPD-MEL	Monitoring and evaluation of the TPD program, teachers, teacher educators
16		TPD-CHALL	Implementation challenges for the TPD Program
Theme 6	Professional development of teacher educators		
1		TE-PD	Modes of professional development available to teacher educators (govt initiatives, non-state actors)
Theme 7	Impact of covid-19		
1		COV-OVL	Impact of the pandemic on the country
2		COV-SCH	Impact of the pandemic on schooling of students
3		COV-TPD	Impact of the pandemic on delivery of teacher education (pre-service, in-service)
Theme 8	Head Teachers		
1		HT-SEL	Selection/Appointment of Head Teachers in the school

ANNEXURE 5: HISTORY OF EDUCATION IN NEPAL

HISTORY OF EDUCATION IN NEPAL

Nepal's first college of higher education was established and affiliated to the University of Calcutta at first, and later to the University of Bombay in India in 1918. The number of such schools and colleges increased nominally in the subsequent years.

However, in the late 1940s, together with the growing Mahatma Gandhi-led movement in India, Rana prime ministers also experimented with the Indian style of basic schools, an experiment which was short-lived. During the terminal years of the Rana regime, efforts were also made at expanding opportunities for schooling as well as establishing Nepal's own university.

Until 1951, Nepal had 310 primary and middle schools, 11 high schools, two colleges, one normal school, and one special technical school. The average literacy rate in the 50s was 5%, with male literacy being 10% and female literacy less than 1%. Only 1 child in 100 attended school (Savada 1991). The schools that existed were not open for the masses but remained elitist for the selected few, belonging to and close to the ruling classes in the country.

After Nepal emerged from the Rana rule, one of the first ambitions of the new, multiparty democratic regime was to institute a national, uniform, and universal system of education in the country. This post-1951 period assumes prominence in the rise of the modern education system as it signalled the pursuance of policies aimed at the systematic development of a uniform and universal system of education.

After 1951, The Ministry of Education was formed and the National Education Planning Commission (NEPC) in 1954.

The establishment and operation of schools initially started as a cooperative enterprise, in which local community members took the lead role. There are very few instances of the state establishing a school.

Efforts of the educated and politically connected members to operate schools and therefore bring in diverse options was viewed as detrimental to the state's vision of uniformity in the education system.

The dissolution of the democratically elected parliament in the early 1960s by King Mahendra and the implementation of the National Education System Plan (NESP) in 1971 led to the state assuming increased control over the schooling system

In 1996, the people's war saw an attack on school buildings as they represented state symbols of subjugation and tactical targets.

ANNEXURE 6: SCHOOL STRUCTURE IN NEPAL

		SCHOOL STRUCTURE IN N	EPAL
Age	Grade	PRE-2009	POST-2009
16	12	Higher Secondary Education	
15	11	(Grade 11-12)	Secondary Education
14	10	Secondary Education	(Grade 9-12)
13	9	(Grade 9-10)	
12	8	Lower Secondary Education	
11	7	·	
10	6	(Grade 6-8)	
9	5		Basic Education
8	4	Primary Education	(Grade 1-8)
7	3	·	
6	2	(Grade 1-5)	
5	1		
4	P1		Early Childhood Education
3	P2	Early Childhood Education and Development/Pre-Primary Education	and Development/Pre- Primary Education (at least 1 year)

ANNEXURE 7: TYPES OF SCHOOLS IN NEPAL

	Type of School	Description	
1	Community Schools	(a) Community-aided: schools that receive at least one approved position of the teacher by level and are fully supported by the government for teachers' salary and other expenses.	
		(b) Community-managed: schools that are fully supported by the government for teachers' salary and other expenses but their management responsibility lies with the community.	
		(c) Community-teacher aided: schools that receive only the Rahat quota but not any approved position by level and supported by the government for teachers' salary and other expenses.	
		(d) Community-unaided: schools which get either partial or no support from the government.	
2	Institutional Schools	There are 3 types of institutional schools: private trust, community trust, and registered into company acts which are supported by founders, parents & trustees.	
3	Religious Schools	The main types of religious schools are Madrassas, Gumbas/Bihars, Ashrams/ Gurukuls. They teach religious practices but have been provided with financial and other aid from the government. The aid is available when they mainstream into the formal education system by following the pedagogical rules and regulations set by the Government. Religious schools that follow national education standards are often provided with grants for teachers' salaries.	

ANNEXURE 8: FUNCTIONS OF THE DIFFERENT LEVELS OF THE GOVERNMENT

Function	Responsible actor
Opening new schools	Local governments
Merging and closing schools	Local governments
Managing schools	Local governments and SMCs
Monitoring quality of education	Local governments
Curriculum	Curriculum Development Centre (central-level agency)
Student exams	Local governments for basic education, provincial governments for Grade 10, National Examination Board (central-level agency) for higher secondary education (Grade 12)
Licensing teachers	Teacher Service Commission (central-level agency)
Appointing teachers	SMCs and EDCUs
Transferring teachers	CEHRD/EDCU

ANNEXURE 9: FINANCING RESPONSIBILITIES OF DIFFERENT STAKEHOLDERS

Stakeholder	Financing Responsibility
Federal	 MoEST budget + allocation of conditional grants earmarked for education to provincial and local governments Allocation of non-earmarked grants to the sub-national levels (equalization, special and complimentary grants) Reallocation of part of tax and non-tax revenues to sub-national governments through a revenue sharing mechanism.
Provincial governments	receive specific conditional grants from CEHRD and can add from their other resources.
Local governments	conditional grants from the federal budget and can make use of non-earmarked funding to also pay for school education.
Local government education units	provide supervisory and technical support to local schools. The management of schools that was previously done by 75 district education offices is now spread over 753 local governments.
Development partners	contribute to the financing of education either for programmes managed through the financial system of the government and recorded in MoEST's budget, or for programmes and projects financially managed outside the budget and recorded in the Technical Assistance book of the Ministry of Finance.
Parents	pay registration, tuition and other fees, including for boarding, to private and public schools, colleges and universities. The amount of fees is fixed by school management committees and varies by grade. Although public schools are funded by the government, parents still contribute some costs such as uniforms, school supplies, transport to and from school and private extra-tuition.

ANNEXURE 10: 10 MONTHS TRAINING PROGRAM

10 months training p	10 months training program				
Module I-Face to Face	1 month-132 hours	1.5 months-198 hours			
	Subject content Subject teaching	I. Experiment centred 2.Related school teaching 3.Use of knowledge, skills, learnings during training			
Module II-School	5 months-660 hours				
	 Based on distance learning Knowledge based Emphasis on related subjects Use of self-learning material at 5. Use of modern technology like (based on availability) Workshop Correspondence 				
Module III-Face to Face	1 month-132 hours	1.5 months-198 hours			
	Inclusion of professional development subject matter Professional knowledge and skill oriented	Experiment centred Related school teaching Use of knowledge, skills, learnings during training More emphasis on doing			

Source: Pradhan (2011)

ANNEXURE 11: TSC EXAMINATION DETAILS

TSC EXAMINATION				
S.no	Components	Total Marks	Passing Marks	
А	Written Examination	10	35	
В	Applied Examination	25	10	
С	Interview	25	-	

Source: TSC Rules (2000)

	TSC EXAMINATION (written components)				
S.no	Components	Details			
А	Subject Knowledge	Teachers' knowledge of their respective subjects based on pre-service training. *This is a combination of MCQs and descriptive questions			
В	Pedagogical Content Knowledge	The teacher has to demonstrate how she/he will apply the subject knowledge in class. E.g. How to prepare a lesson to teach a specific element in relation with his/her subject area. *This pertains to creation of a lesson plan.			
С	General Pedagogical Knowledge	I This is common to all subject teachers. II. General knowledge of teachers' roles, obligations, and education regulations. *This is a combination of MCQs and descriptive questions			

Source: Bessieres et al. (2019). School Sector Development Plan Midterm Review: Kathmandu, Nepal: SOFRE-CO-FBC.

ANNEXURE 12: BUDGETARY ALLOCATIONS FOR THE EDUCATION SECTOR (2011/12-2019/20)

	EDUCATION BUDGET: FY 2012-FY 2020						
Year	Total Budget (NPR Billion)	Education Budget	Federal	Provincial	Local	Education budget as percentage of total budget	Education budget as percentage of GDP
2019/20	1532.97	163.76	65.28	4.25	94.22	10.68%	4.22%
2018/19	1315.16	134.19	46.22	2.86	85.12	10.2%	3.87%
2017/18	1278.9	126.78	65.14	61.64	0	9.91%	4.18%
2016/17	1048.92	116.36	0	0	0	11.09%	4.35%
2015/16	819.47	98.64	0	0	0	12.04%	4.38%
2014/15	618.10	86.03	0	0	0	13.92%	4.04%
2013/14	517.24	80.96	0	0	0	15.65%	4.12%
2012/13	404.82	63.43	0	0	0	15.67%	3.74%
2011/12	384.90	63.91	0	0	0	16.60%	4.18%

Source: UNICEF Budget Brief, Nepal 2021

ANNEXURE 13: BUDGETARY ALLOCATIONS FOR SSDP

SSDP-Expenditure Framework: FY 2017-FY 2021				
S.no	Component	Amount	Amount	Share of total
		(NPR million)	(\$ million)	(%)
1	ECED/pre-primary	25,800	246	3.8
2	Basic education	371,289	3536	54.7
3	Secondary education	172,314	1641	25.4
4	Technical education	9,071	86	1.3
5	NFE	8,011	76	1.2
6	Teacher management and TPD	13,219	126	1.9
7	Disaster Risk reduction	31,364	299	4.6
8	Governance and management	5,216	50	0.8
9	Monitoring and evaluation	3,508	33	0.5
10	Capacity development	7,249	69	1.1
11	Organization and development	31,321	298	4.6
Total	accionas et al. (2010). School Sector Davido	678,362	6,461	100

Source: Bessieres et al. (2019). School Sector Development Plan Midterm Review: Kathmandu, Nepal: SOFRE-CO-FBC

ANNEXURE 14: TEACHER COMPETENCY FRAMEWORK

	TEACHER COMPETENCY FRAMEWORK				
S.No	Core Competency	Details			
1	Content Knowledge	I. In-depth knowledge of the subject matter he/she teaches and be updated on the content. II. Knowledge of the formulation of Interdisciplinary curriculum			
2	Pedagogical Knowledge	I. In-depth knowledge of the teaching-learning techniques and processes. II. Lesson plan creation. III. Use of appropriate teaching-learning materials and processes for an effective and engaged classroom. IV. Regular assessment of students to assess learning outcomes.			
3	Knowledge about children/ learners	I. Understanding needs (social, emotional, psychological, physical) of the students. II. Identifying and respecting student diversity. III. Recognizing that children learn at their own pace. IV. Constructing new knowledge based on students' previous knowledge and learning levels.			
4	Learning Environment and Classroom Management	I. Creating a safe and child-friendly learning environment for the students so that there is: (a) effective teaching-learning (b) engaged participation in the classroom (b) opportunities for creativity & research			
5	Communication and Collaboration	 I. Collaboration amongst different school stakeholdersteachers, parents, and students to facilitate effective teaching-learning. II. Communication and collaboration with peers for professional development 			
6	Continuous Learning & Professional Development	I. Reflection on one's knowledge levels and skill sets and recognizing the need for professional development. II. Look out for relevant professional development activities and commitment towards self-improvement. III. Conducting research on subject-related themes.			
7	Professional Conduct	I. Maintaining professional code of conduct and displaying appropriate behaviour in accordance with the legal acts, and laws such as child rights, human rights, etc.			
8	ICT	I. Using ICT for teaching-learning in the classroom. II. Using ICT to evaluate student learning. III. Developing digital learning material based on learners' needs. IV. Self-learning through available online platforms.			

Source: The Teacher Competency Framework, 2015 (CEHRD)

ANNEXURE 15: CHALLENGES TO EFFECTIVE TRANSLATION OF TRAINING LEARNINGS INTO EFFECTIVE TEACHING LEARNING CLASSROOM PRACTICES

Training

I. A top-down supply-driven TPD program does not adequately address the needs of the teachers and the classroom challenges faced by them. This leads to reduced ownership and engaged participation by the teachers. Some of the respondents spoke about how teachers were unable to articulate their needs and therefore, the training package could not address their concerns.

II. Learning techniques to move away from traditional methods like charts and flashcards to innovative strategies like experiential learning, problem-solving and critical thinking, and role-modeling. (Pokhrel et al., 2016)

"Sometimes even in we... let's say suspect somewhere in teacher training part as well, though there is need basis, but actually, is it the need of each and every teachers, or it is the need of only very few teachers, so still, we are in dilemma whether we have been conducting actually to those teachers who are facing the problem, or like whenever we see that problem with 20 students out of 50 teachers, we conduct training, we- we assume that we generalize that the teachers are in need of this, but sometimes some teachers may not feel comfortable in yeah- yeah, we have already done this, we know each and everything about this, why to be serious regarding this training." (MBK, LG, Education Officer at Local Government)

"In my opinion, I may have a different kind of experience, other may have a different kind of experience. At first, in case of Nepal, there is no difference between the teacher having training and having not training; teacher teaching with -- with more students and teacher teaching with few students. Teacher in the very fancy school will has – has with more resources and teacher without resources, there is no difference. The average assessment level and student performance seen similar; this is one thing. And from the... 50 years ago, maybe 20, 40, 45 years ago, Nepal Government is rigorously providing training in different models, packages, like BPP and the school sector reform, education for all; within all-- all campaigns, government provided training to all to – to many teachers, to most of teachers, like that way. But if we go with a package, in the BPP, in the beginning then-- then Education for all, then SSR; school sector, then SSDP; if we see the package and content this is gradual, just adding sometime adding sometime, ICT sometime, distance just added the new component coming into world. But the basic thing is same in all packages and teacher who received all four-- all four kinds of training, they have not implemented in the class." (MBS, ECC, Co-founder of a non profit organization)

Trainers

The Joint Review of the SSRP Program by GFA Consulting in 2016 mentions that the TPF program is effective only in the 1st stage of the cascade model approach. The roster trainers at the ETCs are not capacitated enough viz a viz subject matter expertise and competencies to deliver quality training to the teachers as well as provide feedback to the teachers that is constructive and specific rather than judgemental and generic. (Pokhrel et al., 2016)

II. The evaluation study by Schaffner et al. highlights that the trainers lacked subject proficiency in Maths and Science as many were unable to clarify questions posed by the teachers or even solve the problem they had asked the teachers to solve. Having said that, the trainers mentioned that they were given inadequate time and guidance to prepare training resources and that many were not even provided with TOT.

III. There is a need for the roster trainers to keep themselves upskilled and updated for there isn't any specific professional development training for them by the government.

"There is no qualification to become a teacher educator in Nepal. Anybody with an M.Ed degree can become a teacher educator. Right. So, that's one of the issues. So, having an M.Ed degree does not mean that the person qualifies to become a teacher educator. So I would suggest there has to be some sort of rigorous process to take that position as a teacher educator in the university. So, is the case in school level in-service teacher training. Anybody with a B.Ed degree can become a trainer for the in-service teacher training program. So, both the contexts the trainers' qualification and their skills, their competence, that's one of the big issues." (GRG, TBUN, Teacher Educator at University)

"I mean, these are also the challenges, and some other challenges are like we requested some expert, but even the expert do not execute the training part as we desire, sometimes we may let's say lack like we may not have clearly explain what exactly we are planning to do or what sometimes you have even faith like that some expert has also not really executed the training practically, some most of the training we- we have faced are theoretical, you know, they have been giving lots and lots of theoretical concept but not the practical. We have been facing like the trainers are giving lots and lots of theoretical concept, but not the exact practical kind of techniques that the teachers can use inside the classroom. So sometimes we feel like there must be the- the gap must be bridged, you know, so yes, these are a few to mention." (MBK, LG, Education Officer at Local Government)

Teachers

I. Low attendance of teachers in the training program for they are scheduled on regular school days.

II. Lack of motivation amongst the teachers to learn and derive value from the training program. The incentive to attend is to (a) give teaching a miss (b) receive points/scores that will aid in potential promotion.

"So mainly the culture and facing a problem in the culture. So learning culture, reading culture, slowly deteriorating, I'm experiencing this one. And most of the teachers they love to join in the politics, they prefer politics than teaching. Then when they engage in the political affairs, concerns, then they ignore the reading, writing and researching activities. So not only in teaching profession, but also in other profession also, so reading and researching culture is deteriorating. So how can we encourage this kind of reading culture, researching culture, sharing culture, collaborative culture, this is reflective culture, this is what we are talking and last time from CEHRD we developed one customized teacher training curriculum, that was about developing learning culture. Developing learning culture, one curriculum we have developed and then we have oriented to the PTCtrainers also." (RS, CRD, Technical officer at Central Teacher Training Institute)

"There is no professionalism, I guess, there is no commitment in teachers, we just take ...youngster teachers, especially young teachers, they are happy in taking the training, they come and they just try to follow it also. But the teachers who have taught for a long period of time, I don't know whymaybe it's difficult for them to just be upgraded with the latest knowledge to use this technology, I think it's a tough challenge for them. So mostly the teachers just feel difficult to go back to the school and apply it" (BK, TLP, Resource person, Tulsipur District, Lumbini Province)

"The teachers would again, choose the topics and then they had to conduct a small mini research. And they were allocated some marks And they were allocated some marks even for the 10 months training. They would only do the action research for the training purpose. And again, when they would return to their school, then they would not carry it out. I have to tell the truth because you are carrying out research work. What the teachers would do is only for marks sake, because they are getting evaluated and would just write some pages for Action Research and submit it. So only during the training period would it be done. But actually the action research part was very good. If all teachers carried it out it would be very useful." (BK, TLP, Resource person, Tulsipur District, Lumbini Province)

III. Teacher absenteeism and low levels of teacher accountability.

IV. "We find evidence of serious weaknesses in some teachers' prerequisite subject knowledge, which may have impeded them from grasping the training content that focused on advanced maths and science concepts.

Fourth, few teachers seem to have completed the post-ETC self-study project work or adopted new classroom teaching methods. Our evidence suggests two possible explanations: (1) lack of accountability for the time-consuming development of lesson plans and teaching aids; and (2) lack of budget for required teaching materials." (Schaffner et al., 2021)

Monitoring

There is a lack of proper monitoring and follow-up post training to ensure effectiveness. The practice of school visits, classroom observations, and interaction with stakeholders by trainers/ resource persons/education officers is weak in implementation as they are overloaded with administrative tasks such as student examinations, recruitment of temporary teachers, and infrastructural development. And hence, unable to provide the requisite feedback/mentoring for enhancement of classroom teaching-learning processes. (Gautam, 2016, Poyck et al. 2016)

"We do not have frequent observation after TPD, so still, there is a problem that we are really less in number, we officers are only... we are two officers in here, but we have 83 schools and only 83... 154 schools are here, including some private schools, right, so we cannot go to each and every let's say school, so there is a challenge in observation as well, we cannot approach to each and every school and second thing is that sometimes even in we... "(MBK,LG, Education Officer at Local Government)

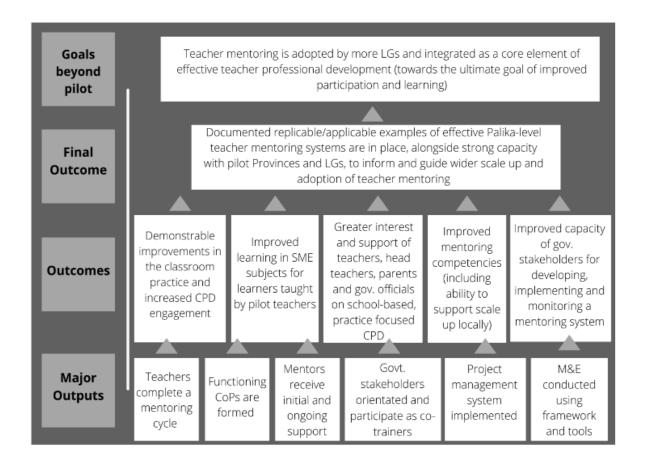
Other reasons

Other factors that lead to difficulty in transferring knowledge and skills into the classroom are: (a) the class size (b) duration of the teaching sessions (c)quality of the learning environment (d) lack of preparation time (e) teacher salary and incentives amongst others. (Gautam, 2016); (Bessieres et al, 2019)

"In the in-service teacher training program, the gap between the two is the training context and the teaching context. Though the Ministry of Education is trying its best to include the real classroom context as much as possible in the training program; still and in my observation when I talk to them, they think that the training context is more ideal rather than the working context. It's more of the resources. They are working in an under-resourced context and that part is not adequately covered in the training context. When you are talking about teacher training..teacher education, we need a lot of hands-on experience for the trainees to practice the teaching skills. And because of the..you know inadequacies..we have not been able to do such things. In the training, the trainers expect that the teachers have adequate resources in order to implement the training." (GRG, TBUN, Teacher Educator at University)

"And, also there are some other problems, like in the government schools, the students, they... mostly absent from time to time...And, besides that, the large number of students, okay 60, 70, 80 students...the teacher finds it difficult to implement whatever is learnt in the training centre. In the training centre there...there may be an ideal class, ok maybe 30-35 students, everything will taught in that way...and then again, they go to their regular classes it's more than 60-70 students...And, sometimes it's challenging in that way. And also, every school, every government is not capable enough to supply all the things needed by the teacher for making teaching materials or buying some resources. So that's also again, a challenge. And, again, if there is monitoring, at least the teachers maybe like monitoring tool without prior information. Sometimes what happens is and coming to monitor in your school and all the teachers are ready with their lesson plans and everything. So without just informing, if people from the Education Office come and they check it, they just monitor, they evaluate, they just give some guidance, then I think it will be better. "(BK, TLP, Resource person, Tulsipur District, Lumbini Province)

ANNEXURE 16: THEORY OF CHANGE FOR THE MENTORING PROGRAM



ANNEXURE 17: HISTORICAL OVERVIEW OF INCLUSIVE EDUCATION

Policy and year	Main Recommendation Regarding Inclusive Education		
Nepal National Educational Planning Commission, 1956 (NNEPC)	suggested government to ensure universal and free primary education, supply of teachers, recognised inequalities due to caste, gender and language but no special provision recommended		
All Round National Education Committee (ARNEC) 1966	special education for crippled, blind, deaf and dumb; reform of delinquent children- training and certification of special teachers		
Education Act, 1971	Special education school infrastructure services should be at par with general schools		
National Educational System Plan (NESP), 1971- 76	created special need education council as an apex body for running special education programme, first steps to provide special education to physically disabled in densely populated areas like kathmandu		
Royal Commission on Higher Education 1981	financial incentives suggested for the education of students coming from remote and disadvantaged community		
Protection and Welfare of Disabled Persons' Act, 1982	NO fees for disabled student education, accessibility to buildings, transportation, employment, education, and other state services		
National Education Commission (NEC) 1992	identified caste and gender disparities in education and suggested special provisions for women, physically and mentally disabled people, and economically, socially and geographically disadvantaged communities.		
Special Education Policy, 1996	grants to conduct special schools, creating environment to raise public awareness for socialization of various types of disabled		
Education rules, 2002 (GoN, 2002)	special education may be provided to blind, deaf, mentally retarded or physically handicapped		
National Policy and Plan of Action on Disability, 2006	Emphasis on inclusive education, access to free and quality education for the disabled		
Consolidate Equity Strategy, 2014	committed to strengthen equity across all levels and subsectors within the school education sector in Nepal- equity in access, in participation, retention and inclusion, learning barriers and learning outcomes and catering to specific needs		
Constitution of Nepal, 2015	protects the human rights on the grounds of religion, race, caste, sex, place of birth and disability. The constitution also ensured the right of education for all without any discrimination		

Disability Rights Act and	children should be able to study, without discrimination, in their own		
an Inclusive Education	communities, but also allows educating for children with disabilities		
Policy for Persons with	separately. (section 23.2) provides for special training for teachers wh		
Disabilities 2017	educate children with disabilities to promote their access to quality		
	education, but does not mention training for teachers in inclusive		
	education.		
Inclusive education	to create disability-friendly educational infrastructure and facilities,		
Master plan-2030	improve teacher training, and develop a flexible curriculum		

Centre of Excellence in Teacher Education

Tata Institute of Social Sciences, VN Purav Marg, Deonar, Chembur, Mumbai, Maharashtra 400088 chair.cete@tiss.edu, 022 2552 5003/4/5









