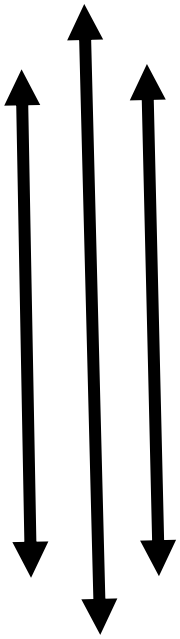
Report
Need Assessment Study for Designing Teacher Education Diploma Curriculum

Madhesh University



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It gives me immense pleasure to present the successful completion of the Need Assessment Study Report for the design of the Teacher Education Diploma Curriculum at Madhesh University. This important initiative reflects our shared commitment to the spirit of "Teacher First, Teach First" and our collective dedication to strengthening teacher education as a foundation for Nepal's social and national development through quality human capital development.

According to the United Nations Human Development Index Report 2021, the literacy rate in Madhesh Province is 63.5 percent, the lowest among Nepal's provinces. The male literacy rate is 72.5 percent, whereas the female literacy rate is only 54.7 percent. These figures clearly highlight the urgent need for educational reform, inclusive learning opportunities, and professionally trained teachers to support meaningful educational transformation in the province.

In this context, the collaboration between Madhesh University and TECSES, as outlined in a Memorandum of Understanding, has been both timely and meaningful. This partnership has greatly supported our vision of strengthening teaching pedagogy, enriching classroom practices, and enhancing the overall quality of education. It is truly encouraging to see this shared dream gradually turning into reality. I would like to express my sincere appreciation to TECSES for its continuous collaboration, technical assistance, and unwavering support throughout this process.

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Finally, I would like to express my sincere gratitude to my faculty members, especially Dr. Basudew Lal Karn and staff of Madhesh University, along with all stakeholders who actively participated in the consultation meetings and contributed to this important study through their valuable perspectives and experiences.

I am confident that this collaborative effort will further strengthen the role and contribution of Madhesh University in the field of teacher education and support the long-term educational development of Madhesh Province and Nepal.

Prof. Dr. Deepak Bahadur Shakya
Vice Chancellor
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Executive Summary

This report presents the findings of a need assessment study conducted through a collaboration between the Technical Support Cooperation to the School Education Sector (TECSES) and Madhesh University. The TECSES supported by the Government of Finland and the European Union, began working with Madhesh University in spring 2025 to strengthen teacher education. One of the key outcomes of this collaboration is the development of a one-year Teacher Education Diploma Curriculum. The study was conducted in February 2026 to ensure that the proposed program is grounded in real needs, practical requirements, and field-based evidence.

The study was necessary because the teacher education system in Nepal continues to face several critical challenges. Although national policies and frameworks exist, there is often a gap between policy provisions and actual classroom practices. Many teachers meet formal academic requirements but lack essential practical teaching skills (pedagogical content knowledge and practice), such as classroom management, student-centred pedagogy, and effective assessment techniques. Teacher preparation education programs at universities and in-service teacher training programs tend to be overly theoretical, offering limited opportunities for real classroom experience. These challenges are particularly pronounced in provinces like Madhesh, where disparities in access to quality education, trained teachers, and competent resources persist. This study was therefore undertaken to better understand these issues and inform the design of a more relevant and effective teacher education curriculum.

The study adopted a qualitative and participatory research design to conduct Need Assessment Study for Designing Teacher Education Diploma Curriculum of Madhesh University mainly assessing existing teacher competencies, gaps and support the development of the diploma curriculum at Madhesh University. Conducted jointly by TECSES and Madhesh University, the subjective data collections employed multiple methods, such as focus group discussions, classroom observations, key informant interviews, expert group consultation workshop, and a desk review of relevant policies and frameworks. Study sites were purposively selected from both rural and urban areas across five districts (Saptari, Dhanusha, Mahottari, Bara and Parsa) of Madhesh Province to ensure diverse representation. Data were collected using semi-structured tools and guidelines by using standardized procedures through proper orientation of data collection and trained team members mobilization, ensuring consistency and ethical compliance. The data were analysed thematically across stakeholder groups to generate comprehensive insights, while the desk review provided additional understanding through analysis of national and international teacher education policy, framework and practices.

Based on the field data analysis followed by literature review, the following conclusions and recommendations have been made by the study team.

1. **Subject Content Knowledge**

Teachers have basic confidence in their subjects, but their knowledge is often theoretical and lacks practical application. This gap might partly exist because teacher education programs focus more on theory than on linking content to real classroom situations.

2. **Pedagogical Knowledge and Practice**

Teaching remains teacher-centred and lecture-based due to limited training in practical teaching methods even in the universities. Teachers often struggle to apply effective strategies, mainly because pre-service and in-service training are not sufficiently practice-oriented. It is also partly matter of attitude of teacher.

3. **Learning Environment and Classroom Management**

Although basic discipline is maintained, overcrowded classrooms, poor infrastructure, and lack of teaching materials limit interactive learning. A similarity across most classrooms is that teachers are able to maintain discipline and order despite these constraints. However, a key difference lies in resource availability, as some schools have better facilities and space, allowing more effective classroom management and student engagement than others.

4. **Knowledge of Learner Diversity**

Teachers have limited ability to address diverse student needs due to insufficient training in inclusive and multilingual teaching. As a result, language barriers and different learning abilities are not effectively managed.

5. **Use of 21st-Century Skills in Teaching and Learning**

Critical Thinking, Creativity, Communication, Collaboration skills are not well developed because teaching is mostly one-way and focused on memorization. There is little emphasis on problem-solving or real-life application in classroom practices.

6. **Use of ICT in Teaching and Learning**

Information and Communication Technology (ICT) integration is minimal due to limited resources, access, and teacher training. Many community schools especially in rural municipalities lack basic facilities such as computers, projectors, reliable electricity, making it difficult to use digital tools in classrooms. Even in urban areas like Birgunj and Janakpur, schools have computer labs, but these are often underused due to lack of trained teachers or maintenance issues. Additionally, irregular internet connectivity and low digital literacy among teachers further restrict the meaningful use of ICT in teaching and learning.

7. Techniques of Learning Assessment

Assessment is predominantly exam-oriented, with little use of formative or continuous assessment methods to support learning, because teachers have limited knowledge of formative and competency-based assessment followed by the new curriculum, for example, integrated curriculum of Grade 1 to 3. Tools like projects, portfolios, and continuous assessment are rarely used.

8. Teacher Motivation

Teacher motivation is affected by both internal and external factors. Many teachers are motivated by their sense of responsibility and the respect of the teaching profession in society. However, grievances about different types of salary package within the level, job insecurity for temporary teachers and private school teachers, and limited opportunities for professional growth reduce their motivation. As a result, even though teachers are personally committed to their work, weak support systems and inadequate incentives affect their effectiveness. This shows the need for better policies and support to maintain teacher motivation.

The above analysis concludes that teachers demonstrate foundational subject knowledge and personal commitment is good even though their effectiveness is constrained by several systemic challenges. Teaching remains largely theoretical, lecture-centered and followed by exam-oriented assessment system, with limited application of learner activating pedagogy and formative assessment. Overcrowded classrooms, inadequate infrastructure, and scarce teaching materials further hinder to manage interactive learning. Teachers struggle to address learner diversity due to insufficient training in inclusive and multilingual classroom teaching approaches. ICT integration remains minimal, particularly in rural schools with lacking of basic digital resources. Addressing these gaps requires systemic pedagogical reforms in pre-service and in-service teacher education with provision of resource allocation, and professional incentive structures.

This underlines urgent need to reform teacher education by bridging the gap between theory and classroom practice. Significant disparities exist when compared to international standards and Nepal's own Teacher Competency Framework, particularly in ICT integration, inclusive education, and learner activating teaching. Change from theoretical overloaded classroom practice to active teaching and learning practice requires a coherent alignment of curriculum, teacher education policy and classroom teaching and learning facilities. Addressing these interconnected challenges holistically is essential for improving teaching quality and achieving meaningful, long-term educational outcomes in Madhesh Province and across Nepal.

The above concluding **findings provide a strong basis to recommend** Madhesh University design a Teacher Education Curriculum incorporating the following key elements:

1. **Subject Content Knowledge**

It is not sufficient for teachers to possess theoretical subject knowledge alone; without the ability to connect content to classroom realities, such knowledge remains ineffective. Therefore, the curriculum must integrate subject knowledge with pedagogy and real-life applications so that teachers can translate concepts into meaningful learning experiences. Madhesh University can also play vital role in continuous teacher professional development through institutional linkage between the university, provincial teacher education centre and schools in Madhesh province.

2. **Pedagogical Knowledge and Practice**

The persistence of teacher-centred methods clearly indicates that existing training approaches are inadequate. Simply introducing new teaching strategies in theory is not enough; teachers must experience and practice student-centred, activity-based methods during their training. Increased emphasis on practicum, mentoring, and reflective practice is essential because pedagogical skills develop through guided experience, not lectures. Pre-service and in-service teacher education shifts toward experiential learning and learner activating classroom practices are required to achieve major pedagogical changes in teaching.

3. **Learning Environment and Classroom Management**

While teachers often manage to maintain discipline, this should not be mistaken for an effective learning environment. Overcrowded classrooms and lack of resources directly limit the use of interactive and student-centred methods. Therefore, improving infrastructure and reducing class size is not just a logistical issue but a pedagogical necessity. At the same time, teachers must be trained to use available materials creatively, as effective classroom management today requires facilitation of learning, not just control of students.

4. **Knowledge of Learner Diversity**

The current one-size-fits-all approach to teaching overlooks the realities of diverse classrooms, especially in regions like Madhesh. Ignoring linguistic, cultural, and socio-economic differences leads to unequal learning outcomes. Therefore, the curriculum promotes inclusive pedagogy and gender-transformative teaching practices to address varied learning needs.

5. **Promote 21st-Century Teaching and Learning Skills**

The limited focus on critical thinking, creativity, communication, and collaboration reflects an outdated approach to education. In a rapidly changing world, rote learning is no longer sufficient for students' success. Therefore, teaching methods must actively incorporate problem-based and interactive learning approaches that develop these competencies. If these

skills are not intentionally embedded in teacher education, students will remain unprepared for real-world challenges and opportunities.

6. **Use of ICT Learning and Teaching**

Merely providing ICT infrastructure will not automatically improve teaching and learning outcomes. The real issue lies in the lack of teachers' capacity to integrate technology effectively into pedagogy. Therefore, alongside strengthening infrastructure, the curriculum must focus on developing practical digital teaching skills. Without this dual approach, ICT investments will continue to remain underutilized and fail to bring meaningful change in classrooms.

7. **Use of Different Techniques of Learning Assessment**

The dominance of exam-oriented assessment practices undermines the goal of holistic learning. When assessment focuses only on final results, it fails to support the learning process. Therefore, a shift toward formative and competency-based assessment is essential, using diverse tools such as portfolios, projects self-assessment, and continuous evaluation. Unless assessment practices change, efforts to promote student-centred learning will remain incomplete and inconsistent.

8. **Teacher Motivation in Teaching Profession**

Teacher motivation cannot be sustained by intrinsic commitment alone; therefore, the Teacher Education Diploma Curriculum at Madhesh University must be deliberately designed to address both motivational and structural challenges. It should move beyond theory and include practical, school-based experiences that build confidence and job satisfaction. At the same time, the curriculum must explicitly address career pathways, professional rights, and job realities to reduce uncertainty and insecurity, especially for temporary teachers. Without integrating pedagogical skill development with real classroom application, teachers will continue to struggle, weakening their motivation.

Finally, the study recommends **Designing a Teacher Education Curriculum** for Madhesh University that emphasizes transdisciplinary and multidisciplinary model with incorporating compulsory subject specialized knowledge. This approach aims to equip future teachers in Nepal with the competencies needed for effective classroom practice. The proposed progression mirrors children's cognitive development-from concrete, holistic understanding in the early years to abstract, specialized thinking in the later stages of learning.

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Chapter One

INTRODUCTION

This chapter provides an overview of the context, background and purpose of the need assessment study conducted to inform the design of a teacher education diploma curriculum at Madhesh University.

Madhesh University

Madhesh University (MU) is a newly established public university located in Madhesh Province, Nepal. It was founded in 2022 under the Madhesh University Act and is also a founding member of a national network for education for sustainable development. The university aims to promote environmentally responsible, culturally sensitive, and life-skill-oriented education.

MU is committed to delivering quality education by fostering creativity, innovation, and critical thinking among students. It adopts a student-centred approach and integrates technology and industry collaboration to prepare graduates for real-world challenges. The university also aspires to develop as a centre of research and innovation, addressing social issues and promoting cultural exchange through national and international partnerships.

The university follows a multidisciplinary and skill-oriented approach in its academic programs, offering courses in fields such as law, entrepreneurship, and management. It emphasizes learner-centred pedagogy, research, innovation, and community engagement, with a strong focus on employability and sustainable development.

As a provincial academic institution, MU is dedicated to addressing local educational needs and promoting inclusive education. It seeks to contribute to social and economic development by aligning its programs with societal and labour market demands. The university also plans to expand its teacher education programs to prepare educators with a broad understanding of diverse teaching approaches.

Background of the Need Assessment Study

Teacher education plays a vital role in improving the quality of school education. However, it continues to face several systemic and pedagogical challenges. Despite ongoing reforms, many teachers struggle to implement student-centred, inclusive, and competency-based teaching methods. Instead, traditional lecture-based approaches remain common, and opportunities for practical training and continuous professional development are limited. These challenges are particularly evident in Madhesh Province due to resource constraints and variations in teacher preparation.

The establishment of Madhesh University presents a significant opportunity to strengthen teacher education in the province. As a new institution, it has the potential to design innovative and context-specific programs that address local needs. In this context, a collaboration was initiated between the Technical Support Cooperation to the School Education Sector (TECSES) and Madhesh University in spring 2025 to develop a teacher education diploma curriculum. This partnership aims to enhance teacher education by integrating TECSES expertise and resources into curriculum development and implementation, with a strong emphasis on student-centred pedagogy and the development of diverse teaching competencies.

To support this initiative, a need assessment study was conducted to inform the design of a one-year Teacher Education Diploma Curriculum, providing practice-oriented teacher education, with particular emphasis on integrating theory and practice. The study employed classroom observations and

consultations with teachers, students, trainers, and other stakeholders to collect data. This participatory approach generated evidence-based insights into teachers' existing skills, practices, and challenges.

The combined effort of institutional collaboration and need assessment has helped identify key gaps in teacher education and supports the development of a practical, relevant, and context-responsive diploma program. The insights gained will also guide the future development of a comprehensive bachelor-level teacher education program at Madhesh University, contributing to the overall improvement of educational quality in Madhesh Province.

Purpose of the Study

The primary purpose of this study is to examine the current status of teacher education in Madhesh Province and identify key gaps and training needs. It analyses teachers' competencies, existing training programs, and classroom practices to highlight areas requiring improvement. The study also contributes to education development in Nepal by providing clear, evidence-based insights for designing effective teacher education programs.

Additionally, the study gathers firsthand information from key stakeholders, including teachers, students, teacher trainers, and school leaders. Their experiences and perspectives help to better understand the practical challenges of teaching and learning, ensuring that the findings are grounded in real classroom contexts. This makes the study particularly valuable for designing programs that respond to the actual needs of schools and educators.

Another important objective of the study is to support the development of a one-year Teacher Education Diploma Curriculum at Madhesh University. By identifying local priorities and needs, the study ensures that the program is relevant, practical, and context-specific. It also assists the university in designing innovative and skill-based teacher education programs from the outset.

Overall, the study plays a crucial role in guiding the development of a responsive, evidence-based, and sustainable teacher education program. It also provides a foundation for future teacher training initiatives and policy development, contributing to the long-term improvement of teacher education in Nepal.

Chapter Two

LITERATURE REVIEW

This chapter presents a review of the literature on teacher education programs and teacher competency frameworks in both national and international contexts. It also outlines teacher selection criteria and overall academic qualification status of teachers in Nepal as well as teacher preparation and curriculum design framework, and the findings from the literature review.

Teacher Education Programs in International Context

Around the world, there are many teacher education programs that last about one year or slightly longer, and most of them require applicants to have completed a bachelor's degree before admission. These programs are designed to prepare future teachers with both theoretical knowledge and practical teaching skills. Despite differences across countries, they share several common features. Almost all programs include studies in learning theories, curriculum and assessment, along with a strong emphasis on teaching practicum. The following examples from Singapore, India, Australia and Finland illustrate different approaches to teacher education that are relevant for comparison (Budhathoki and Thapaliya, 2025).

In **Singapore**, the PGDE (Postgraduate Diploma in Education) is a teacher education program that lasts about 16 months and is designed for graduates who already hold a bachelor's degree. Applicants are expected to have strong subject knowledge and good academic performance, and selection is mainly based on interviews. The program prepares teachers for either primary or secondary levels.

The program includes two main tracks: primary and secondary teaching. While both share common core subjects such as learning theories, assessment, inclusive education, classroom management, and curriculum studies, the focus differs by track. Primary training emphasizes multidisciplinary teaching, literacy, and numeracy, while the secondary track focuses more on subject-specific teaching methods (didactics).

Teaching and learning in the program combine theory with practice through activities such as teaching simulations and peer feedback. These approaches help student teachers actively engage in analysing teaching practices and improving their instructional skills even during the theoretical phase.

Teaching practice (School Experience) is a central component of the PGDE. It involves lesson observation, teaching, and working with mentor teachers. A key feature is the lesson study method, where student teachers collaboratively plan, observe, and improve lessons. The practicum also includes reflective portfolios and small research tasks, helping students connect theory with real classroom practice and develop their professional identity.

In **India,** the Bachelor of Education (B.Ed.) program is the main route to becoming a teacher. It was extended from one year to two years in 2014 by the National Council for Teacher Education, although a one-year option will be reintroduced from 2026–2027 for candidates with a four-year bachelor's degree. Admission generally requires a bachelor's or master's degree and is based on entrance exams, academic performance, and sometimes interviews.

The program is organized into three major components: theory courses, field engagement, and school internship. The overall structure maintains a balance of roughly 60% theoretical learning and 40%

practical training. This combination ensures that student teachers gain both academic knowledge and classroom experience.

The theoretical component includes foundations of education such as history and sociology, along with child studies focusing on educational psychology and motivation. It also includes Enhancing Professional Capacities (EPC), which develops skills like ICT use, communication, assessment, classroom management, and curriculum understanding.

The practical component includes field engagement activities such as school visits and analysis of teaching materials. The school internship is the most important part, lasting at least 20 weeks. During this period, student teachers observe classes, plan lessons, and teach under the supervision of mentor teachers, helping them develop real teaching skills.

In **Australia,** teacher education traditionally included a one-year Graduate Diploma in Education, though many universities now offer Master of Teaching programs. Entry into these programs requires a bachelor's degree, and secondary teachers must have studied one or two teaching subjects. Admission is generally based on academic records and sometimes includes interviews or suitability assessments.

The program has both primary and secondary tracks, but they share common theoretical components. These include learning theories, educational psychology, assessment methods, classroom management, curriculum studies, ICT in education, and professional ethics. This core prepares student teachers with essential teaching knowledge.

In the primary track, emphasis is placed on teaching multiple subjects using an integrated and interdisciplinary approach, including literacy and numeracy. In the secondary track, the focus is on subject specialization, subject-specific teaching methods, and understanding adolescent learners and their needs.

Teaching practice is a central part of the program and usually lasts 45–60 days. Student teachers begin by observing their mentors and gradually move toward independent teaching. They are supervised by both school mentors and university staff, participate in school activities, and receive feedback. Reflection through portfolios and lesson planning is also an important requirement.

In **Finland,** teacher education is highly structured and research-based, with all teachers required to complete a Master's degree. Primary teachers (class teachers) typically specialize in Educational Sciences, while subject teachers major in specific subjects such as mathematics or history and complete additional pedagogical studies.

The pedagogical studies for subject teachers are usually about one year and include important theoretical areas such as learning theories, teaching methods, subject didactics, and educational psychology. The program also includes research methods, reflecting the strong emphasis on research-based teacher education.

Practical training is a major part of the program and is carried out in university-affiliated teacher training schools. These schools are specifically designed for training purposes, and their teachers are experienced mentors who guide student teachers throughout the practicum.

During the practicum, student teachers observe classes, teach lessons, and participate in workshops. A unique feature of the Finnish system is that mentor teachers demonstrate effective teaching in real classrooms, allowing student teachers to see how theory is applied in practice. This ensures strong integration of theory and practical teaching skills.

Teacher Education Programs in Nepal

Teacher education programs in Nepal have evolved as a central component of efforts to improve the quality of school education and strengthen teachers' professional competencies. This section reviews Education Major program at grades 11-12, Bachelor of Education programs at Tribhuvan University, Kathmandu University as well as Nepal Open University, and Teacher Professional Development Framework in Nepal.

The **Education Major Program** at **Grades 11–12** is designed to introduce students to the basic concepts and foundations of education. It aims to create an early pathway for students who are interested in becoming teachers or pursuing higher studies in education. Along with core education subjects, students also study compulsory subjects like English, Nepali, and Social Studies, ensuring a balance between general and specialized education.

The curriculum includes important core subjects such as educational psychology, pedagogy, curriculum studies, and classroom management. These courses are intended to develop basic pedagogical understanding and awareness among students. It helps them gain foundational knowledge before entering formal teacher education programs at the university level (Curriculum Development Centre, 2020).

However, the curriculum has several limitations in its design and implementation. It mainly focuses on theoretical knowledge rather than practical teaching skills, making it difficult for students to connect concepts with real classroom situations. There is also a lack of practical components like classroom observation, micro-teaching, and teaching practice, which are essential for developing teaching competence.

In addition, issues such as overlap with university-level teacher education programs, lack of trained teachers and resources in schools, and exam-oriented assessment systems reduce its effectiveness. The curriculum is also not regularly updated to include modern topics like inclusive education, digital learning, and competency-based approaches. As a result, although it has potential, its impact is limited due to weak practical focus and insufficient alignment with current educational needs.

The curriculum incorporates some practical and skill-based components such as project work, assignments, and limited teaching practice or classroom observation. These elements remain relatively minimal compared to higher-level teacher education programs.

The **Bachelor of Education (B.Ed.) Program** at **Tribhuvan University** is a four-year undergraduate program aimed at preparing professionally trained teachers for secondary-level education. It follows an annual examination system and combines academic knowledge with practical teaching skills. The curriculum emphasizes subject specialization, pedagogical competence, and the application of teaching methods in real classroom settings.

The curriculum is organized into several components, including communication skills, professional core courses, specialization subjects, and teaching practice. Communication skills include General Nepali and General English, while professional core courses cover areas such as educational psychology, philosophical and sociological foundations, curriculum and evaluation, and ICT in education. Students choose a major subject like English, Mathematics, or Science, along with a minor subject to broaden their knowledge.

Teaching practice is a key part of the program, providing students with real classroom experience and helping them connect theory with practice. Overall, the B.Ed. curriculum is designed to be comprehensive and professional, aiming to produce qualified teachers who can handle diverse

classroom situations and contribute effectively to the education system. (TU, Faculty of Education, 2015)

However, the program faces several challenges. It often emphasizes theoretical knowledge more than practical skills, and teaching practice is sometimes short and weakly supervised. The curriculum also lacks focus on modern areas like digital pedagogy, inclusive education, and competency-based learning. Additionally, issues such as outdated curriculum, limited resources, overcrowded classes, and weak alignment with school needs reduce its effectiveness, highlighting the need for improvement.

The **Bachelor of Education Program** at **Kathmandu University** is a modern, semester-based program designed to prepare innovative and responsible teachers. It usually consists of eight semesters completed over four to five years. Unlike traditional models, it follows an interdisciplinary and flexible approach, often offered as integrated or dual-degree programs such as BA–B.Ed., allowing students to study subject content alongside education.

The curriculum emphasizes a balanced integration of theory, practice, and research-based learning. It aims to develop reflective teachers who can connect academic knowledge with pedagogical skills. This structure encourages students to apply what they learn in real-life teaching contexts and promotes a deeper understanding of both subject matter and teaching methods. (KU, School of Education, 2019)

Practical learning is a key strength of the program, with strong focus on fieldwork, practicum, and school-based teaching practice. Students gain hands-on classroom experience and are encouraged to engage in research projects, reflective assignments, and community-based activities. This approach helps make teaching practices relevant to both local and global educational needs.

However, the program faces several challenges in implementation. There is often a gap between theoretical learning and real classroom conditions, especially in schools that follow traditional teaching methods. Issues such as limited mentorship during practicum, uneven quality across affiliated colleges, and insufficient focus on areas like digital pedagogy, inclusive education, and competency-based learning reduce its effectiveness. Therefore, stronger institutional support and continuous curriculum improvement are needed.

The **Bachelor of Education Program** at **Nepal Open University** is a flexible, distance-learning and semester-based program designed mainly for students who cannot attend regular classes, including working professionals. It can be completed within a short period of two semesters and follows a blended learning approach that combines online instruction, self-study, and limited face-to-face or virtual interactions through platforms like Moodle. This structure promotes autonomous and self-paced learning.

The curriculum emphasizes the integration of theory and practice, with a strong focus on teaching practice and work-based learning. Students engage in school-based teaching under the supervision of mentors and university tutors, allowing them to connect academic concepts with real classroom experiences. Assessment is continuous and varied, including assignments, projects, research work, and practical evaluations rather than relying only on final exams. (Nepal Open University, 2020)

A major strength of the program is its accessibility and inclusiveness, as it expands opportunities for teacher education through open and distance learning. It also incorporates modern themes such as ICT in education, inclusive education, learner-centred pedagogy, and reflective practice. This approach aligns with global trends and aims to prepare teachers who can adapt to diverse and evolving educational contexts.

However, the program faces several challenges. Limited face-to-face interaction and weak supervision during practicum reduce opportunities for developing practical teaching skills. Many students also face issues like poor internet access and low digital literacy. Additionally, there is still a strong focus on theoretical content, and coordination with local school needs is sometimes weak. Therefore, improvements in mentorship, digital support, and practical integration are needed to enhance its effectiveness.

The **Teacher Professional Development (TPD)** is designed to provide continuous and systematic learning opportunities for in-service teachers, focusing on long-term professional growth rather than one-time training. It follows a modular structure, with each module typically lasting 5–10 days and implemented in phases, allowing teachers to build competencies gradually while continuing their regular teaching duties. The framework covers core teaching competencies, including subject knowledge, pedagogical skills, classroom management, assessment practices, inclusive education, and the use of ICT, providing a balanced and comprehensive approach to professional development. (Ministry of Education, Science and Technology, 2014)

A key feature of the framework is the integration of theory and practice. Teachers acquire theoretical knowledge during training modules and are expected to apply new strategies in their classrooms between sessions. The framework is delivered through a decentralized system, with central curriculum design and implementation carried out by Provincial Education Training Centres, local governments, and schools. This phased, practice-oriented approach allows teachers to engage in mentoring, reflection, and continuous improvement throughout the training process.

Despite its strong conceptual design, the TPD framework faces several implementation challenges. Training programs are often conducted as short-term workshops with limited follow-up support, and many schools lack the institutional capacity, leadership, and resources needed to sustain collaborative, school-based professional learning communities. Additionally, TPD activities are frequently top-down and standardized, giving limited attention to teachers' contextual needs, subject specializations, and local challenges. Weak monitoring and evaluation systems further reduce the ability to assess the impact of training on classroom practices.

Other limitations include insufficient integration of technology, research-based pedagogical innovations, and reflective practice, which reduces the transformative potential of the framework. Participation in TPD is sometimes driven more by administrative requirements than by teachers' intrinsic motivation. Therefore, while the TPD Curriculum Framework provides a strong foundation for continuous teacher development, its effectiveness depends on improved school-level implementation, mentoring systems, context-sensitive training approaches, and systematic monitoring to ensure professional learning leads to meaningful improvements in teaching and learning outcomes.

Teacher Competency Frameworks in National and Global Contexts

This section outlines the national and global frameworks that helps identify gaps and improvements needed in teacher education programs to meet both local educational needs and international standards.

The **Teacher Competency Framework** by the **Organization for Economic Co-operation and Development (OECD)** outlines the essential competencies required for teachers in the 21st century. It emphasizes that modern teaching extends beyond subject knowledge, requiring a combination of skills, attitudes, and values. The framework links teacher competencies to key 21st-century skills, including communication, critical thinking, collaboration, and digital literacy, highlighting the need for a holistic integration of content knowledge, pedagogical methods, assessment practices, and understanding of

learners. It also introduces emerging areas such as artificial intelligence, research skills, and interdisciplinary learning.

A central focus of the framework is student-centred teaching. Teachers are encouraged to support students not only academically but also socially, emotionally, and personally, fostering well-being alongside learning outcomes. This approach emphasizes creating classrooms that nurture holistic development, helping students connect learning to real-life contexts, thereby increasing relevance and engagement in education. (OECD, 2020)

The OECD framework also stresses the importance of adaptability and continuous professional development. Teachers are expected to integrate new technologies, innovative teaching strategies, and research-based practices into their classrooms. This ensures that education evolves in response to societal changes, technological advancements, and the diverse needs of learners in the modern world.

While the framework provides a comprehensive, forward-looking guide for policymakers, curriculum developers, and teacher education institutions, its effectiveness ultimately depends on practical implementation. Translating these broad ideas into clear, actionable strategies that teachers can apply daily is essential for bridging the gap between theoretical recommendations and actual classroom practice.

The **Teacher Competency Framework** in Nepal developed by the **Centre for Education and Human Resource Development (CEHRD)** provides a comprehensive guide to the essential knowledge, skills, and attitudes required for effective teaching. It emphasizes that teaching is more than delivering content and includes understanding learners, applying pedagogical methods, managing classrooms, and fostering communication skills. The framework highlights the importance of subject knowledge combined with practical teaching strategies tailored to students' needs and promotes student-centered approaches where learners actively engage in the learning process.

A key feature of the framework is its focus on understanding diverse learners. Teachers are encouraged to recognize students' backgrounds, abilities, and differences to create inclusive and meaningful learning experiences. This emphasis on learner awareness ensures that teaching is responsive, equitable, and adapted to individual needs, which strengthens both engagement and academic outcomes. By integrating pedagogical knowledge with student understanding, the framework supports teachers in developing flexible and effective instructional strategies. (CEHRD, 2020)

The framework also stresses the importance of building a positive classroom environment and effective communication. Teachers are guided to create safe, inclusive, and supportive learning spaces while collaborating with parents, colleagues, and the broader school community. This focus on relational and environmental aspects of teaching ensures that students feel supported and that learning occurs in a nurturing context. Continuous professional development (CPD) is another central aspect, highlighting the need for teachers to engage in lifelong learning to update their skills and knowledge.

Ethical behavior and professional responsibility are integral components of the framework, guiding teachers to act fairly, respectfully, and with integrity. Additionally, the framework incorporates ICT competencies, reflecting the increasing role of technology in education. By combining strong subject knowledge, pedagogical skills, learner-centered practices, ethical conduct, and technological proficiency, the CEHRD Teacher Competency Framework provides a holistic roadmap for preparing teachers who can meet contemporary educational challenges and support students' overall development.

Teacher Selection Criteria in Nepal

In Nepal, the teacher selection system is centrally administered by the **Teacher Service Commission (TSC).** The TSC was established in 2002 (2058 BS) under the Seventh Amendment of the Education Act 2028. The Commission aims to recruit qualified and competent teachers for community schools through a structured, merit-based, and transparent process. It oversees teacher recruitment, licensing, appointments, and promotions across three levels: Primary, Lower Secondary, and Secondary, ensuring that selections are fair, objective, and aligned with national education policies. (Teachers Service Commission Nepal, 2020).

Selection criteria vary slightly across levels. However, TSC has set teacher selection basic principles to ensure qualified teacher recruitment:

- Merit-Based Selection: Teachers are selected based on qualifications, competence, and performance rather than subjective considerations.
- Open Competition: Since fiscal year 2061/062, teachers have been selected through open competitive examinations.
- Fairness and Transparency: The Commission emphasizes independent, impartial, and reliable procedures.
- Competency-Oriented Approach: Selection focuses on the candidate's ability to teach effectively and contribute to quality education.

In addition, TSC also sets eligibility criteria which includes i) general requirements – Nepali citizen with 18 to 40 years old, having good mental health and high social moral value; and ii) mandatory teaching licence certificate either one primary teacher, lower secondary teacher or secondary teacher. Minimum qualification requirement has also been set for attending teacher licencing examination as follows:

- For primary teacher – Grade 12 passed certificate with studied of education subject (400 marks) at secondary level or 10 months teacher education / training courses.
- For lower secondary teacher – Certificate of bachelor's degree (either B.Ed. or with at least 1 year B.Ed. degree
- For Secondary teacher - Certificate of Bachelor Degree or Master Degree (either B.Ed. / M.Ed. or at least 1 year B.Ed. degree

At the primary level, emphasis is on foundational pedagogy and child-centred teaching. Lower secondary selection requires a bachelor's degree, teacher training, and moderate subject expertise, while secondary level demands advanced subject knowledge, higher academic qualifications, and teaching experience. In addition to open competition, the TSC supports internal promotion pathways for in-service teachers based on performance, experience, and professional development. Overall, the TSC ensures that teacher recruitment in Nepal is merit-driven, standardized, and focused on improving educational quality.

Overall Academic Qualification Status of Teachers

In Nepal, the overall academic qualification status of Teachers shows a mixed but gradually improving profile. Most teachers now meet minimum academic and professional requirements, though disparities still exist across levels and regions.

At the national level, teachers are required to meet different academic qualifications depending on the level of teaching. For instance, a Bachelor's degree is required for secondary-level teachers, while +2

(higher secondary) or even lower qualifications have historically been accepted at primary levels, although standards are gradually being raised. This has contributed to variation in qualification levels across school stages.

Empirical data indicates that a significant proportion of teachers possess formal academic degrees. According to a national teacher survey, about 34.2% of teachers hold a Bachelor of Education (B.Ed.), while nearly 36% have a Master of Education (M.Ed.) or higher qualifications, reflecting a strong presence of professionally trained teachers. However, around 14.4% of teachers still have only school-level qualifications (Grade 10 or 12), indicating gaps in minimum academic standards (British Council, 2021).

In terms of professional training, Nepal has made notable progress. Recent data show that over 95% of teachers at primary, lower secondary, and secondary levels are trained, with approximately 95.8% at primary level and 97.4% at secondary level having received formal teacher training. This suggests that while academic degrees vary, most teachers now meet professional training requirements (Trading Economics, 2026).

Despite these improvements, challenges remain. There is a mismatch in qualifications across regions and gender, with fewer women teachers attaining higher levels of education. Additionally, disparities exist between urban and rural areas, and between public and private schools, affecting the equitable distribution of qualified teachers (Republica, 2024).

Teacher Preparation and Curriculum Design Framework

The Teacher Preparation and Curriculum Design Framework focus on improving teacher education by bridging the gap between theory and classroom practice. It emphasizes a competency-based approach where teachers develop not only subject knowledge but also practical teaching skills, classroom management, and assessment abilities.

The framework highlights the need for integrating curriculum, policy, incentives, and classroom practices to ensure effective and sustainable implementation. Overall, it aims to prepare teachers who are capable, adaptable, and responsive to real classroom challenges, particularly in local contexts such as Madhesh Province.

This section presents an overview of the framework, including understanding the problem – systemic root causes of teaching challenges, core structural gaps – key competency deficits in teacher preparation, classroom manifestations and student learning outcomes, and practice-oriented solutions for teacher education and curriculum design (Darling-Hammond, 2017).

- Understanding the Problem

  Understanding the problem focuses on the deep-rooted systemic issues that hinder effective teaching and teacher preparation. It identifies key problems such as weak linkage between teacher education and real classroom demands, lack of incentives for professional growth, overemphasis on theoretical knowledge, poor accountability systems, and limited practical exposure for trainees. These factors collectively create a disconnect between what teachers learn and what they are expected to perform in actual classrooms. This strongly argues that these issues are interconnected and cannot be addressed in isolation; instead, a holistic and systemic reform approach is necessary to bring meaningful improvement in education.

- Core Structural Gaps

Core structural gaps highlight five major competency gaps that form the core structural weaknesses in teacher education: didactic content knowledge, pedagogical content knowledge (PCK), classroom management, use of ICT, and assessment practices. It explains that these competencies are interdependent, meaning a deficiency in one area negatively affects others. For example, weak pedagogical knowledge can lead to poor classroom management, while lack of ICT skills reduces student engagement. This emphasizes that these gaps originate from the systemic issues and must be addressed collectively to improve teaching effectiveness.

- Manifestations and Effects

  Manifestations and effects explain how the identified competency gaps manifest in classroom practices and ultimately affect student outcomes. It shows that classrooms become teacher-centered, learning becomes passive, and students rely heavily on memorization rather than understanding. Other issues include poor learning outcomes, lack of critical thinking skills, ineffective use of technology, and weak assessment practices. These classroom-level problems further lead to serious consequences such as low student engagement, high dropout rates, poor exam performance, and a mismatch between education and real-world skills. This presents these issues as a chain reaction—from root causes to visible student outcomes—highlighting that failure to address underlying problems will result in continued educational decline.

- The Solution

  It proposes a comprehensive, practice-oriented approach to reform teacher education. It provides targeted solutions for each identified competency gap, such as using content simplification techniques, promoting case-based and subject-specific pedagogy, strengthening classroom management through practical training, integrating ICT through hands-on learning, and adopting continuous and competency-based assessment methods. It also emphasizes the importance of real classroom exposure through internships, mentoring, and reflective practices. Importantly, it argues that curriculum reform alone is not sufficient; it must be supported by policy alignment, career incentives, and institutional support. Sustainable transformation in education can only be achieved through the combined integration of curriculum, policy, incentives, and practice.

Findings from the Literature Review

The literature reviewed reveals the following findings:

- The literature shows that internationally, teacher education programs are increasingly competency-based, practice-oriented, and aligned with classroom realities. There is strong emphasis on continuous professional development, reflective practice, and integration of theory with practice. Countries with effective systems prioritize mentorship, teaching practicum, and the use of innovative pedagogies, which contribute to higher teaching quality and student outcomes.

- In Nepal, teacher education programs are guided by national frameworks but remain largely theoretical and examination-oriented. Although reforms have introduced competency-based approaches, implementation gaps persist. Limited practical exposure, insufficient mentoring, and weak linkage between training institutions and schools reduce the effectiveness of these programs.

- The literature highlights that teacher competency frameworks, both globally and nationally, emphasize subject knowledge, pedagogical skills, classroom management, and professional ethics. However, in practice, there is often a gap between defined competencies and actual teacher performance, particularly in applying student-centred and inclusive teaching methods.

- Teacher selection in Nepal is primarily based on academic qualifications and standardized examinations conducted by the Teacher Service Commission. While this ensures a baseline level of knowledge, the literature indicates that it gives limited attention to practical teaching skills, attitudes, and classroom readiness, which are critical for effective teaching.
- The reviewed studies suggest that most teachers meet the required academic qualifications, indicating improvement in formal education levels. However, higher qualifications do not necessarily translate into better teaching practices, as practical skills and pedagogical competencies are often lacking.
- The literature reveals that existing curriculum frameworks aim to develop competent and reflective teachers, but they are often overloaded with theoretical content and lack sufficient emphasis on experiential learning. There is a need for more flexible, context-specific, and practice-oriented curriculum design to better prepare teachers for real classroom challenges.

Chapter Three

METHODOLOGY

This chapter presents the methodology used in the need assessment study for designing the Teacher Education Diploma Curriculum at Madhesh University. It describes the study design, site selection, data collection tools and procedures, and methods of analysis used to ensure a comprehensive and reliable assessment.

Study Design

The study was conducted jointly by TECSES and Madhesh University to explore the existing knowledge, skills and competencies of teachers in Madhesh Province. It adopted a qualitative and participatory study design, enabling an in-depth understanding of teaching competencies issues from multiple perspectives at the ground. The study used different methods to collect information. It included stakeholder consultations to gather ideas and opinions from key people involved in education, classroom observations to understand actual teaching practices, and a desk review of important national and international documents. These methods helped to explain the findings in relation to Nepal's teacher education and development system, as well as the teacher preparation curriculum.

Site Selection and Participants

The Ministry of Education and Culture of Madhesh Province, the TECSES Project, and Madhesh University jointly conducted consultations to finalize the **selection of study sites**. Field sites were purposively chosen to ensure representation from both rural and urban communities followed by selection of information-rich participants. For classroom observations, focus group discussions (FGDs), and key informant interviews (KIIs), the following districts and municipalities were selected:

- Saptari – Balanbihul Rural Municipality
- Dhanusha – Dhanushadham Municipality
- Mahottari – Mahottari Rural Municipality
- Bara – Subarna Rural Municipality and Kalaiya Municipality
- Parsa – Thori Rural Municipality and Birgunj Metropolitan City

Classroom observations were done in both public and private schools. Classes were purposively selected to observe across a variety of subjects and grade levels such as integrated curriculum-based teaching (Grade 2), English subject teaching (Grades 9–10), Nepali subject teaching (Grade 9), Social Studies (Grade 8), Science and Technology subject teaching (Grade 7), and Mathematics teaching (Grade 5).

Focus group discussions with different teachers' groups such as primary teacher, lower secondary teacher, secondary teacher and temporary teacher; with student group (Grade 9 and 10) were conducted to collect different views and perspective on teaching and learning practice happening in the field.

Key Informant Interview (KII) was conducted with different personnel such as vice chancellor, education administrators, university faculty members, school headmaster, PABSON chairperson, Education Development Directorate, teacher trainer, and local education unit chief.

Expert Group Consultation Workshop was also conducted under the leadership of Madhesh University. The participants of this workshop were teachers, teacher trainers, university faculty members, PETC chief and other stakeholders. The workshop was worthwhile because the study team could receive very insightful thoughts and suggestions about the teacher education curriculum design need.

In a nutshell, the study **participants** included school teachers, students, teacher trainers, school leaders, education administrators, and university faculty members, all of whom contributed valuable insights based on their experiences and perspectives.

Data Collection Tools and Procedure

Data collection tools for stakeholder consultations and classroom observations were jointly developed and reviewed by the expert teams from the TECSES Project and Madhesh University. The primary tools included focus group discussion (FGD) guides consisting of 5–7 key questions tailored to different participant groups. Separate instruments were also designed for key informant interviews (KIIs). In addition, structured tools were developed for classroom observations and the expert group consultation workshop. All instruments were prepared in advance to ensure consistency, reliability, and effectiveness in field data collection.

The TECSES and Madhesh University teams finalized the schedule for field-level qualitative **data collection** from 16–21 February 2026. It was agreed that formal letters would be issued to local governments to facilitate access to schools and engagement with relevant stakeholders. The data collection team was divided into three groups, each comprising two members. Prior to the fieldwork, an orientation session was conducted to ensure a shared understanding of the tools and procedures, as well as to emphasize ethical considerations and adherence to data collection protocols.

Focus group discussions typically lasted between 60 and 90 minutes. Classroom observations were conducted in natural school settings and lasted approximately 45 to 50 minutes. Key informant interviews (KIIs) were conducted individually, with each session lasting between 45 and 60 minutes. The expert group consultation workshop lasted three hours and followed a structured session plan, involving 15 key education stakeholders who provided valuable insights into curriculum design needs and priorities.

Analysis Procedure

The data analysis procedure for this study followed a systematic thematic analysis approach. Qualitative data collected from focus group discussions (FGDs), classroom observations, key informant interviews (KIIs) and the expert group consultation workshop were first organized and reviewed. The data were then coded to identify recurring ideas and patterns. These codes were grouped into broader themes related to teachers' competencies, pedagogical practices, classroom experiences and systemic challenges. Findings from different data sources were compared and integrated to ensure consistency and depth of understanding. Finally, the themes were interpreted to highlight key gaps and areas for improvement, providing a comprehensive evidence base to inform the development of the Teacher Education Diploma Curriculum at Madhesh University.

Desk Review

TECSES and Madhesh University jointly developed a set of criteria for review. The review covered teacher education programs and teacher competency frameworks in the national and international contexts. It also overviewed teacher selection criteria in Nepal as well as the overall academic qualification status of teachers, and teacher preparation and curriculum design framework.

Chapter Four

DISCUSSION OF FINDINGS

This chapter presents the analysis of qualitative information collected through multiple sources, including focus group discussions (FGDs), classroom observations, key informant interviews (KIIs) and the expert group consultation workshop. It also outlines overall findings and summary of need assessment study.

Using thematic, the findings from each data source are presented and interpreted to identify common patterns and gaps in teacher education and practice. This chapter also integrates perspectives from different stakeholder groups to provide a comprehensive understanding of the current situation and to inform the design of the Teacher Education Diploma Curriculum at Madhesh University.

Focus Group Discussions: Analysis

Focus Group Discussions (FGDs) were conducted to understand the professional competencies, pedagogical practices, and challenges faced by teachers and students in community schools. The discussions aimed to identify gaps in teachers' content knowledge, pedagogical skills, classroom management, assessment practices, and professional motivation. FGDs were conducted with five key stakeholder groups: permanent primary and lower secondary teachers, temporary teachers, teacher trainers, and students from Grades 9–10 (Ref. Annex I). The data collected were analysed thematically, as presented below:

- Pedagogical Practices in Classroom Teaching

The analysis revealed that traditional, teacher-centred pedagogy continues to dominate classroom instruction. Teachers frequently rely on lecture-based methods, memorization, and drill practices, particularly in language subjects. Mathematics teachers reported using inductive and deductive methods, while question-and-answer sessions and oral reading practices were common across subjects. However, the use of student-centred approaches—such as project-based, collaborative, and experiential learning—remains limited. Teacher trainers described the prevailing approach as similar to a "banking model of education," where knowledge is transmitted with minimal opportunities for active engagement or critical thinking. These findings suggest that although teachers are aware of innovative strategies, their implementation is constrained by structural limitations and insufficient training. The findings also suggest that school culture does not necessarily support the use of student-activating teaching methods.

- Competence Gaps in Content Knowledge

Participants across all teacher groups acknowledged gaps in subject matter knowledge, particularly when addressing newly revised curriculum content. Teachers reported difficulties in explaining complex concepts such as algebra, climate change adaptation, and advanced language structures. Some also expressed uncertainty regarding the scope and depth of curriculum content, especially in subjects like Social Studies. In language teaching, challenges were noted in effectively sequencing grammar instruction. New and temporary teachers reported moderate levels of subject expertise, indicating that while they possess foundational knowledge, deeper conceptual understanding and confidence are still developing. These findings suggest that teacher preparation and professional development programs may not adequately address evolving curriculum demands and subject-specific pedagogical needs.

- Assessment and Evaluation Practices

Assessment practices were found to be predominantly examination-oriented. Teachers primarily rely on written tests, terminal examinations, and final exams to evaluate student performance. Although some incorporate project work and oral assessments, these remain secondary. Many teachers reported limited understanding of modern approaches such as competency-based assessment and the Continuous Assessment System (CAS). Teacher trainers also identified gaps in knowledge of the Letter Grading Evaluation System, highlighting the need to strengthen assessment literacy among teachers.

- Integration of ICT in Teaching

The integration of information and communication technology (ICT) in classroom teaching was found to be minimal. Teachers and students reported a lack of both technological infrastructure and adequate training to effectively use digital tools. Teacher trainers similarly noted limited ICT capacity among teachers and minimal use of digital resources in training programs. As a result, ICT remains largely underutilized despite its potential to enhance teaching and learning processes.

- Classroom Communication and Language Use

Teachers commonly use bilingual or multilingual approaches in the classroom. Instruction is often delivered in Nepali alongside local languages such as Maithili or Bhojpuri to improve student comprehension. Students confirmed that learning becomes easier when explanations are provided in familiar languages. However, language barriers persist in subjects such as English and Science, where unfamiliar terminology hinders understanding. These findings highlight the importance of adopting language-sensitive teaching strategies, particularly in multilingual contexts.

- Student Learning Experiences and Challenges

Students reported that they learn most effectively when teachers provide clear explanations and practical examples, particularly in Mathematics. Subjects such as Nepali, Social Studies, and Health and Physical Education were perceived as relatively easier to understand. In contrast, English and Science were identified as the most challenging subjects due to language barriers, unfamiliar vocabulary, and limited opportunities for practical learning. Students also highlighted structural challenges, including overcrowded classrooms, limited teacher-student interaction, lack of laboratory facilities, shortages of subject-specific teachers, and limited access to libraries and digital resources. These findings indicate that student learning outcomes are influenced not only by teaching practices but also by institutional and infrastructural conditions.

- Teacher Motivation and Professional Environment

Despite the challenges, teachers expressed strong commitment to their profession. Teaching is widely regarded as a socially respected occupation, and many teachers are motivated by the opportunity to contribute to society and support student development. However, several factors negatively affect teacher motivation, including low or irregular salaries (particularly for temporary teachers), limited opportunities for professional development, lack of institutional support, and insufficient recognition of their efforts.

Classroom Observations: Analysis

Classroom observations were conducted in several schools across four districts Parsa, Bara, Dhanusha, and Saptari (Ref. Annex II). The purpose of these observations was to examine classroom practices in relation to pedagogical competencies, teaching strategies, communication skills, classroom

management, reflective practices, and teacher–student relationships. The observations also aimed to identify gaps in content knowledge, pedagogy, and assessment practices, and to suggest improvements for enhancing teaching effectiveness and student engagement. The findings were analysed thematically as follows:

- Subject Content Knowledge

Across the observed classrooms, teachers generally demonstrated strong subject knowledge and confidence in lesson delivery. Teachers in mathematics, science, social studies, and language subjects showed clear conceptual understanding and were able to explain content effectively. For instance, mathematics teachers used diagrams and board work to clarify geometric concepts, while language teachers used storytelling and proverbs to make lessons engaging.

However, strong subject knowledge was not always supported by effective pedagogical strategies. Teachers often relied heavily on explanation rather than facilitating student exploration of concepts. This indicates a gap between subject expertise and pedagogical content knowledge.

In the integrated curriculum class (Grade 2), the teacher showed confidence in language use but lacked a clear understanding of integrated learning objectives, relying mainly on translation rather than conceptual teaching. This highlights the need for deeper training in implementing curriculum frameworks effectively.

- Pedagogical Practices

A dominant pattern across observations was the prevalence of teacher-centred teaching methods. Most lessons followed a similar structure: teacher explanation or lecture, writing notes on the board, asking recall-based questions, and students responding collectively or copying notes.

Although teachers occasionally asked questions, these were often rhetorical or answered quickly, leaving little time for student thinking or discussion. Student-centred approaches—such as group work, pair discussions, inquiry-based learning, and problem-solving activities—were largely absent. Students had limited opportunities to apply knowledge independently or collaboratively.

These findings suggest that teaching practices continue to be influenced by traditional lecture-based methods, which may limit deeper learning and the development of higher-order thinking skills.

- Communication Skills

Teachers generally demonstrated clear verbal communication and effective presentation skills. Many used storytelling, examples, gestures, and board work to explain concepts, and students appeared attentive and respectful.

However, communication was largely one-directional, flowing from teacher to students, with minimal opportunities for dialogue or interaction. Students rarely asked questions, possibly due to limited encouragement or insufficient time for reflection. In some cases, responses were given collectively in chorus, making it difficult to assess individual understanding.

Another notable issue was the lack of gender-sensitive communication in some classrooms. Certain examples and proverbs unintentionally reflected gender bias, emphasizing the importance of sons over daughters. This highlights the need for more gender-responsive teaching practices.

- Classroom Management

Classroom management practices varied across schools but generally ensured orderly and disciplined learning environments. Teachers demonstrated authority and were able to maintain control even in large classes.

Positive aspects included respectful teacher–student relationships, organized seating arrangements in many classrooms, effective use of whiteboards and textbooks, and, in some cases, spacious and well-ventilated classrooms.

However, challenges related to physical infrastructure and resource availability were observed in some schools. Classrooms were sometimes small, furniture was outdated, and teaching materials were limited. Lessons relied heavily on textbooks and board work, with minimal use of additional instructional resources. In larger classes, teachers found it difficult to implement interactive strategies, resulting in predominantly teacher-led instruction.

- Reflective Practices

Reflective practice was one of the weakest areas observed. Teachers rarely revisited previous lessons, summarized key concepts at the end of sessions, or encouraged students to reflect on their learning.

Although some teachers used recall questions, these were mainly focused on memorization rather than promoting critical thinking. Students were seldom encouraged to analyse ideas, express opinions, or connect learning to real-life contexts.

This lack of reflective practice indicates that classroom teaching is primarily focused on content delivery rather than on fostering deeper understanding and learning processes.

- Teacher–Student Relationships

Teachers maintained respectful relationships with students, and classrooms generally exhibited a positive and disciplined atmosphere. Students appeared comfortable and attentive, following instructions carefully.

However, classroom dynamics remained largely teacher-dominated, limiting opportunities for interaction and collaborative learning. Students were often passive recipients of knowledge rather than active participants in the learning process.

Encouraging more interactive and participatory relationships could enhance student motivation, confidence, and engagement in the learning process.

Key Informant Interviews: Analysis

Key Informant Interviews (KIIs) were conducted with education administrators, university academics, school leaders, teacher trainers, and local education officials in Madhesh Province (Ref Annex III). The purpose of these interviews was to gather expert perspectives on the current status of teacher education, the competencies of teachers graduating from diploma programs, and the challenges faced in classroom practice. The interviews particularly focused on identifying competency gaps among teachers, contextual challenges in schools, and recommendations for improving teacher education programs. The following are the thematic analysis of KII data:

- Competency Gaps in Teaching

A recurring theme across all interviews was the presence of significant competency gaps among newly graduated teachers. Informants highlighted that many teachers possess theoretical knowledge but lack the practical skills required to implement effective teaching strategies in real classroom contexts.

The Director of the Education Development Directorate emphasized that the current teacher education system does not adequately prepare teachers for classroom realities. Graduates often struggle with practical classroom management, application of pedagogical methods, and the integration of modern teaching techniques.

Similarly, university faculty member and school leaders noted that teacher education programs emphasize theoretical instruction rather than experiential learning. As a result, new teachers frequently demonstrate uncertainty, and limited confidence when conducting classroom instruction.

- Pedagogical Practice

Several interviewees pointed out that teaching in many schools remains largely teacher-centered. Traditional lecture-based methods dominate classroom instruction, limiting student participation, and active learning.

Teachers often face difficulty in implementing child-centered and activity-based teaching approaches, mainly due to limited pedagogical training and large classroom sizes. In some schools, classrooms may accommodate up to 100 students, making it difficult for teachers to apply interactive teaching strategies.

Another concern highlighted was inadequate lesson planning and time management skills among teachers. Trainers and school leaders observed that many teachers struggle to structure lessons effectively, resulting in monotonous, and less engaging learning environments.

- Technological Competency

Technological competence emerged as one of the most critical gaps in teacher education. Informants consistently reported that many teachers lack adequate ICT skills and experience in integrating digital technologies into teaching.

This challenge is compounded by infrastructural limitations. Many schools lack reliable internet connectivity, digital devices, and basic technological resources. Even when equipment is available, teachers may not use it effectively due to insufficient training or confidence.

In the context of the rapidly evolving digital education landscape, informants stressed the importance of integrating ICT training into teacher education programs, and providing opportunities for teachers to develop digital teaching competencies.

- Motivation and Professional Attitude

Teacher motivation was another significant issue highlighted during the interviews. Some informants suggested that teachers often feel undervalued, and insufficiently recognized within society, which affects their professional commitment.

In addition, many teachers participate in training primarily as a requirement for career progression rather than as an opportunity for professional development. This became clearly evident, for example, in interviews with roster teacher trainers.

Low salaries, limited career growth opportunities, and lack of professional recognition were identified as factors contributing to declining motivation among teachers.

- Gaps in Practical Training and Field Experience

Many informants emphasized that teacher education programs lack sufficient opportunities for practical training, and field-based learning. Newly graduated teachers often enter classrooms without a clear understanding of the practical demands of teaching.

The Vice Chancellor of Madhesh University highlighted the need for structured teaching practicum, and school-based internships as core components of teacher education. Practical training should include classroom observation and mentoring by experienced teachers, and simulated teaching scenarios.

Strengthening the connection between theory and practice was considered essential for improving the quality of teacher preparation.

- Contextual and Socio-Economic Challenges

Schools in Madhesh Province operate in a complex socio-economic environment. Informants indicated that poverty, irregular student attendance and limited parental involvement significantly affect learning outcomes.

Students from disadvantaged backgrounds often face challenges in accessing educational resources, and parents may not be able to provide adequate academic support at home. These conditions place additional responsibilities on teachers, who must address both academic and social challenges within the classroom.

Large class sizes and limited learning materials further complicate teaching practices. Teachers often rely on lecture-based methods as the most practical way to manage time and cover the curriculum.

Expert Group Consultation Workshop: Analysis

A workshop was conducted to explore competence gaps in teachers' content knowledge, pedagogy, and student evaluation techniques, and identify possible improvements in teaching practices and evaluation systems. The workshop included a plenary session and group discussions, where participants shared their experiences and suggestions regarding existing teaching content, techniques, and student evaluation practices (Ref Annex IV). The thematic analysis of the expert group consultation data is as follows.

- Subject Content Knowledge

Across both the plenary and group discussions, experts strongly emphasized that existing content is overly theoretical and disconnected from real-life application. Participants repeatedly noted the absence of life skills, livelihood-oriented knowledge, and character-building elements.

There is a clear demand for integration of life-related and need-based content, alignment with 21st-century skills (critical thinking, creativity, digital literacy and collaboration) and inclusion of social context, ethics and values.

The group discussion further reinforced that content lacks horizontal and vertical coherence, indicating fragmentation across grades and subjects. Additionally, insufficient teacher training limits the effective delivery of even existing content.

- Pedagogical Practices

Both annexes consistently highlight the dominance of lecture-based, teacher-centered instruction with minimal student engagement. Teaching practices lack activity-based and experiential learning, collaborative and interactive methods, and use of ICT and technology integration.

Experts pointed out limited use of demonstration, simulation and project-based learning, group discussion, flipped classrooms, scaffolding, and contextual and inclusive teaching approaches.

Teachers were also found to have low questioning skills, and limited capacity to promote critical thinking, further restricting active learning environments. The lack of trained ICT teachers and inadequate technological integration worsen the situation.

- Student Evaluation System

A major convergence across both datasets is the overemphasis on summative assessment, with formative and continuous evaluation either underutilized or misunderstood.

Key issues include limited use of formative assessment tools, evaluation focused on quantity rather than quality, lack of competency-based and 360-degree assessment approaches, and minimal use of portfolios, rubrics and non-testing tools.

Experts also highlighted that project work is often treated as a formality rather than a learning process, homework and classwork are not meaningfully assessed, and practical evaluation exists only nominally.

Overall Findings of the Study

The overall findings from the study highlight several interconnected issues related to teacher competencies, classroom practices, curriculum implementation and systemic support in Madhesh Province. The findings can be organized into the following major themes.

1. Subject Content Knowledge

Although teachers generally demonstrate confidence in their subject areas, important gaps remain in the depth and relevance of their knowledge. Much of the teaching continues to rely on theoretical understanding, with limited connection to practical classroom application. This mismatch reduces the effectiveness of teaching and limits students' deeper conceptual learning.

2. Pedagogical Content Knowledge and Practice

In terms of pedagogical practices, teaching remains largely teacher-centered and lecture-based. Opportunities for student participation, inquiry-based learning and collaborative activities are limited. Many teachers struggle to translate their subject knowledge into effective teaching strategies, indicating a need for more practice-oriented and experiential teacher education programs. Strengthening pedagogical skills is essential to promote active learning and improve classroom engagement.

3. Learning Environment and Classroom Management

The learning environment in most classrooms reflects basic classroom management, with teachers maintaining order and control. However, overcrowded classrooms, inadequate infrastructure and limited teaching-learning materials restrict the creation of interactive and supportive learning environments. These constraints make it difficult to implement student-centered approaches and reduce the overall quality of teaching and learning.

4. Knowledge about Learners' Diversities

Another key issue is the limited capacity of teachers to address learner diversity. Classrooms include students from varied linguistic, socio-economic and cultural backgrounds, yet inclusive and gender-responsive teaching practices are not widely applied. Language barriers and diverse learning needs often remain unaddressed, which negatively affects student participation and achievement.

5. Use of 21st-century skills

The study also reveals that teaching practices do not sufficiently promote 21st-century skills such as critical thinking, creativity, communication and collaboration. Classroom interaction is mostly one-way, with teachers dominating the communication process. There is little emphasis on problem-solving or real-life application of knowledge, which limits the development of essential 21st-century skills among students.

6. Use of ICT in Teaching and Learning

The use of information and communication technology (ICT) in teaching and learning is minimal. This is mainly due to lack of infrastructure, limited access to digital tools and insufficient teacher training in technology use. As a result, opportunities for interactive, visual and innovative teaching methods remain underutilized.

7. Use of different techniques of student learning assessment

Assessment practices are largely focused on examinations and summative evaluation. There is limited use of formative and continuous assessment methods that support student learning. Tools such as portfolios, rubrics and project-based assessments are rarely used. Assessment is often seen as a means of grading rather than improving teaching and learning processes.

8. Teacher Motivation in Teaching Profession

The teacher motivation in the teaching profession remains mixed, shaped by both intrinsic and extrinsic factors. Many teachers demonstrate strong intrinsic motivation, viewing teaching as a socially respected profession and feeling a sense of responsibility toward students' development. Teacher motivation is also significantly constrained by external challenges. Temporary teachers, in particular, reported low and irregular salaries, job insecurity, and limited opportunities for career advancement. This negatively affect their commitment and performance. The findings suggest that although intrinsic motivation exists, it is undermined by inadequate incentives, weak support systems, and limited recognition, highlighting the need for systemic improvements to sustain teacher motivation and effectiveness.

Summary

The study reveals that teachers in Madhesh Province demonstrate a reasonably strong foundation in subject content knowledge, which supports their ability to maintain instructional confidence in the classroom. Many teachers are familiar with core curricular areas and show willingness to engage with subject matter, even though the depth of application varies. Another strength lies in basic classroom management practices, where most teachers are able to maintain discipline and ensure classroom order. Additionally, there is a growing awareness among teachers regarding the importance of improving pedagogical practices, indicating openness to professional growth. Some teachers also attempt to connect lessons with real-life contexts, which reflects an emerging understanding of student-centred learning. The presence of structured curriculum guidelines further supports teachers in planning lessons. Overall, despite systemic constraints, teachers demonstrate commitment, basic instructional capability, and readiness for improvement.

The study identifies significant weaknesses in pedagogical content knowledge and classroom practice. Teaching is predominantly teacher-centred, relying heavily on lectures with limited student engagement, inquiry, or collaborative learning opportunities. Many teachers struggle to translate their subject knowledge into effective instructional strategies, leading to a gap between curriculum expectations and classroom delivery. Lesson planning and use of teaching aids remain inconsistent, reducing learning effectiveness. Classroom environments often lack creativity and interactive learning spaces. Furthermore, professional development opportunities are insufficiently practice-oriented, limiting teachers' ability to improve applied teaching skills. These weaknesses collectively hinder the development of deeper student understanding and active learning outcomes.

The findings indicate strong opportunities for improving teacher effectiveness through targeted professional development programs, especially those focused on pedagogical content knowledge and active learning strategies. Strengthening Teacher Professional Development (TPD) frameworks can help bridge the gap between theory and classroom practice. There is also scope for integrating ICT and innovative teaching methods to make learning more engaging and student-centred. Supportive supervision, mentoring systems, and peer collaboration can further enhance teaching quality. Additionally, aligning curriculum implementation with practical classroom needs can improve instructional effectiveness. These opportunities, if effectively utilized, can significantly transform teaching practices and improve student learning outcomes in Madhesh Province.

In a nutshell, the study highlights that while teachers in Madhesh Province possess basic subject knowledge and maintain classroom control, teaching practices remain largely traditional and teacher-centered. There is a clear gap between theoretical knowledge and its practical application in classrooms, limiting student engagement and deeper learning. Weak pedagogical skills, limited use of interactive methods, and insufficient practice-oriented training further constrain teaching effectiveness. However, the findings also point to strong potential for improvement through targeted professional development, better support systems, and the integration of student-centered and innovative teaching approaches. Overall, enhancing pedagogical competencies and aligning curriculum with practical classroom needs are essential for improving the quality of education.

Chapter Five

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The findings of the study clearly indicate that, while teachers in Madhesh Province possess basic subject knowledge and classroom management skills, there are significant gaps in the quality and effectiveness of teaching and learning practices. A major concern is the disconnect between theoretical knowledge and its practical application in classrooms, which limits meaningful student learning and engagement.

Teaching practices remain largely traditional and teacher-centered, with limited use of interactive, student-centered approaches that foster critical thinking, creativity and collaboration. At the same time, challenges such as overcrowded classrooms, inadequate infrastructure and insufficient teaching materials further constrain the implementation of effective pedagogical practices.

The study also highlights teachers' limited capacity to address learner diversity and the minimal integration of ICT in teaching. Assessment systems continue to focus on summative evaluation, with little emphasis on formative approaches that support continuous learning. These issues collectively reflect a broader gap between teacher education programs and real classroom needs.

The study concludes that there is an urgent need to reform teacher education by making it more practical, competency-based and responsive to classroom realities. Strengthening pedagogical skills, promoting inclusive and student-centered teaching, integrating ICT and improving assessment practices are essential for enhancing teaching quality. In addition, sustained professional development and stronger institutional support are critical to improving teacher motivation and ensuring effective implementation of educational reforms.

Recommendations

Based on the findings of the need assessment study, a set of comprehensive recommendations is proposed for designing the Teacher Education Diploma Curriculum at Madhesh University. These recommendations highlight the need for a holistic reform approach that strengthens teacher competencies while addressing systemic gaps in infrastructure, pedagogy, and assessment. Emphasis is placed on integrating ICT and 21st-century skills, promoting inclusive and student-centered teaching practices, and aligning curriculum design with classroom realities to improve the overall quality of education.

1. **Subject Content Knowledge**

   The curriculum should ensure a balanced integration of strong subject content knowledge with effective pedagogical practices so that teachers can both understand and deliver subject matter meaningfully. Regular professional development programs are necessary to enhance teachers' subject expertise and keep them updated with evolving knowledge. Teachers also need a clear understanding of curriculum frameworks and competency-based approaches to align their teaching with national standards. Furthermore, teaching content should be linked with real-life applications and life skills to make learning more relevant, practical and engaging for students.

2. **Pedagogical Knowledge and Practice**

Teacher education should shift from theory-heavy approaches to practice-oriented, student-centered pedagogy that actively engages learners through methods such as group work, problem-solving, and project-based learning. Strong emphasis must be placed on teaching practice through practicum, internships, and simulations, supported by structured mentoring, lesson planning guidance, and continuous feedback. Effective programs—often seen internationally—highlight intensive teaching practice as a core component. For the Teacher Diploma Curriculum at Madhesh University, collaboration with local schools is essential, along with active involvement of university staff in observation and feedback. Peer learning should also be encouraged, where student teachers observe and support each other. Importantly, a reflective and supportive environment should be fostered, where mistakes during teaching practice are viewed as valuable learning opportunities for professional growth.

3. **Learning Environment and Classroom Management**

Improving the physical and psychological learning environment is essential for effective teaching and learning. This includes enhancing classroom infrastructure, ensuring proper seating arrangements and maintaining hygiene standards. Overcrowded classrooms should be addressed and adequate teaching-learning materials must be made available. Teacher professional development programs should strengthen classroom management skills, enabling teachers to handle diverse and large groups effectively. The use of teaching aids, visual materials and locally available resources should also be promoted to create more engaging and supportive learning environments.

4. **Knowledge about Learners' Diversities**

Teachers need to be well-prepared to address the diverse needs of learners in terms of gender, culture, language and socio-economic background. The curriculum should promote inclusive and gender-responsive teaching practices that ensure equal learning opportunities for all students. Training on inclusive education must be incorporated into teacher professional development programs to equip teachers with the skills to support learners with different abilities and backgrounds. Encouraging equitable participation and representation in classroom activities will further contribute to creating an inclusive learning environment.

5. **Use of 21st-Century Skills**

The development of 21st-century skills (critical thinking, collaboration, creativity, communication) should be a central focus of teaching and learning processes. Teachers should be encouraged to promote two-way communication and interactive classroom discussions that enhance student engagement. Instructional approaches should emphasize problem-solving, inquiry-based learning and collaboration among students. Integrating real-life and experiential learning activities will help students develop higher-order thinking skills and better prepare them for real-world challenges.

6. **Use of ICT in Teaching and Learning**

The effective integration of ICT in education requires both improved infrastructure and enhanced teacher capacity. Schools should be equipped with necessary ICT facilities, and teachers should receive training on digital pedagogy and the use of educational technologies. The use of digital tools, multimedia resources and online platforms should be encouraged to enrich teaching and learning experiences. Additionally, ICT competencies should be systematically incorporated into teacher education curricula to ensure that future teachers are well-prepared for technology-enhanced classrooms.

7. **Use of Different Techniques of Learning Assessment**

Assessment practices should move beyond traditional examinations to include formative, diagnostic and continuous assessment methods that support student learning. Competency-based assessment approaches should be implemented to evaluate not only knowledge but also skills and attitudes. Teachers should be trained to use diverse assessment tools such as portfolios, rubrics and project-based evaluations. Moreover, reflective practices, constructive feedback and effective questioning techniques should be emphasized to better understand and support student learning progress. Particular attention should be paid to the development of these skills, especially during teaching practice. The Teacher Diploma Curriculum could also include a portfolio-based final assignment, in which students reflect on how successfully they have integrated theory and practice during the course.

8. **Teacher motivation in Teaching Profession:**

Teacher motivation in Madhesh Province cannot be sustained by intrinsic commitment alone; therefore, the Teacher Education Diploma Curriculum at Madhesh University must be deliberately designed to address both motivational and structural challenges. It should move beyond theory and include practical, school-based experiences that build confidence and job satisfaction. At the same time, the curriculum must explicitly address career pathways, professional rights, and job realities to reduce uncertainty and insecurity, especially for temporary teachers. Without integrating pedagogical skill development with real classroom application, teachers will continue to struggle, weakening their motivation. Moreover, embedding mentorship, peer collaboration, and continuous professional development is essential to create a supportive professional culture.

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ANNEXES

Annex I: Focus Group Discussions for Lower Secondary Teachers (1)

Focus Group Discussion: Lower Secondary Permanent Teachers
Thori Rural Municipality, Parsa

SN	Name of teacher	Experience (Yrs)	Gender
1	Sone Lal Shah (English), Secondary School, Bijayabasti	2 years	Male
2	Ambar Bahadur Shrestha (Nepali)	7 years	Male
3	Deba Raj Sharma (Math), Saraswoti Sec. School	12 years	Male
4	Madhav Prasad Timilsena (S. studies), Gyan Batika Sec. School	7 years	Male
5	Dal Bahadur Syngbo, Gyanjyoti Sec. School	19 years	Male

FGD Facilitator: Dr Prem Aryal and Mandira Neupane Date: February 16, 2026

Discussion questions

Q1	To what extent do you experience gaps in knowledge, skills, and abilities to teach effectively at the lower secondary level?
Gaps in knowledge, skills and abilities to teach effectively: • Content knowledge as defined different subject (while school curriculum changed) • Time management skills to teach Algebra for all children having different learning abilities • Teaching techniques of peer learning and share learning • Clarity on scope and limitation of explaining the given content knowledge in the social studies book – concern of teacher autonomy • Nepali subject – sequencing of grammar teaching – downward course upgrade • Efficiently use of school curriculum – teaching some content knowledge those are a bit complex, for instance, climate change adaptation	
Q2	Could you describe the content being taught and explain the underlying concepts, relationships, and ways of thinking?
• Use of ICT – concept, and practical use in teaching	
Q3	What are the teaching techniques (pedagogy) and assessment/evaluation processes you are applying in your classroom?
Teaching techniques (pedagogy) being used • Drill and memorizing exercise mainly in language subject (Nepali and English) teaching • Inductive and deductive techniques in Mathematics subject teaching • Oral and reading practice • Teacher led techniques to manage classroom teaching • Question – answer session between the teacher and student Evaluation / Assessment process	

- Record of student attendance and homework submission as given by teacher
- Assessing listening, reading and speaking comprehension
- Writing test
- Project work
- Terminal test
- Final examination

Q4	How do you use communication skills to manage classroom teaching effectively?

- English and Nepali subject– using bilingual medium of instruction, for instance, Nepali to English or vice versa and local language to Nepali or English.
- Communicate through different examples while teaching
- Assign task – group work and individual homework
- Each one teaches one
- Peer communication for supporting lower performer from better performer student

Q5	Have you experienced any competence gaps, for example, in subject matter expertise, different methods of teaching, and management of student diversity?

Subject matter competence gaps

- Conceptual clarity on some contents to be taught
  competency gaps in teaching methods
- Student motivation to learn better
- Use of different methods of teaching / application diversities of pedagogy
- Use of ICT in teaching

Q6	What are the main sources of motivation that keep you engaged in your teaching role, and what obstacles (if any) weaken your passion for teaching in public schools?

Main source of motivation in teaching profession

- Good salary
- Respect for teacher and teaching profession in society
- Supportive and grooming culture towards teaching profession
- Transparent system of teacher progression: entry to 2nd class and second class to first class

The concluding note:

Teachers identified notable gaps in content knowledge, particularly where curriculum has been revised, and expressed un-clarity of scope and limitation in teaching of some contents included in social studies. Time management for Algebra teaching and sequencing of grammar instruction in Nepali remain persistent challenges. ICT integration — both conceptually and practically — emerged as a cross-cutting competency gap.

Pedagogically, teachers predominantly rely on traditional methods: drill, memorization, and teacher-led instruction, with limited application of diverse or student-centered approaches. Assessment practices remain largely conventional, though project work is incorporated alongside terminal and final examinations. Communication strategies include bilingual instruction and peer learning arrangements. Teachers demonstrate awareness of student diversity but lack adequate tools to address it.

Motivation is sustained by competitive salaries, social respect for the profession, and a transparent career progression system. Key obstacles include insufficient pedagogical diversity, weak ICT capacity, and unclear curricular boundaries.

Q7	Any questions do you have for us? If any participant raises questions / clarification, facilitator/researcher needs to reply respectfully but with consideration of limitation as well. NA

Annex I: Focus Group Discussions for Students of Grade 9 and 10 (2)

Focus Group Discussion: Grade 9 and 10 Students of Sri National Rastriya Secondary School
Subarna Rural Municipality - 4, Bara

Students' name	Grade	Gender
1. Mithilesh Kumar Baitha	9	Male
2. Bindesh Kumar Madal	9	Male
3. Shruti Kumari Yadav	9	Female
4. Aasha Kumari Yadav	9	Female
5. Raj Karna Thakur	10	Male
6. Kunal Kumar Yadav	10	Male
7. Asmita Yadav	10	Female
8. Babita Kumari Rauniyar	10	Female

FGD Facilitator: Dr Prem Aryal and Mandira Neupane Date: February 17, 2026

Discussion questions / contents

Q1	Think about lessons in which you feel you have learned well. What do teachers and students do usually in those lessons?

Students found themselves learning well.

- Mathematics – simplification
- Algebra – trigonometry
- Optional Math

Teacher teaches the subject very well that motivates students to learn those subjects.

Q2	Next, think about lessons in which learning was less effective. How did those lessons differ from the ones in which you learned well?

Student found themselves less effective to learn following English subject. Most of the unfamiliar English words which difficult to understand while reading the paragraph that made them difficult to read and comprehend. English subject teaching class does not help to understand easily the lesson taught while the Math class is easy to understand concept of simplification, algebra and trigonometry.

Q3	Consider which subjects you learn most effectively and which you find more difficult. Why do you think this is?

Students expressed that they learned Nepali, Social Studies, Optional Math, Compulsory Math, and Health and Physical Education most effectively, whereas they found English and Science more difficult to learn. They learned those subjects most effectively because those subjects aligned with their interests, and they also found

them more practical and useful for day-to-day life. However, learning Science and English was found to be more challenging due to communication and language barriers, as well as the overly theoretical nature of science classes rather than practical sessions followed to use the Science labs.	
Q4	What factors do you think support learning when a topic is challenging or complex?
• The difficult words used in lessons as well as using unfamiliar languages during teaching made it challenging to learn new things and subject matter. • Over crowd students' number in classroom also made student challenge to listen teacher during teaching time. • Students could not get attention from teachers (even trying to ask for micro-level learning of a topic) during teaching because of the overcrowded classroom	
Q5	In your opinion, what are the biggest barriers or challenges to learning in your school?
The biggest barriers or challenges to learning are: • Less opportunity to access practical classes to learn practically mainly computer and science subjects • Lack of additional books and learning resource materials, for example, school library and e-library books • Lack of subject specific teachers • Overcrowded classroom	

Ground knowledge provided by the students

Focus group discussions with Grade 9 and 10 students at a public school situated in Madhesh province (Nepal) revealed key insights into learning experiences and challenges relevant to teacher education program design.

Students reported learning most effectively in Mathematics and Optional Mathematics, attributing this to teachers' clarity of instruction and subject relevance to daily life. Likewise, Nepali, Social Studies, and Health and Physical Education were perceived easy to learn and comprehend. In contrast, English and Science posed significant difficulties - English due to unfamiliar vocabulary and comprehension barriers, and Science due to its predominantly theoretical rather than practical orientation.

Several systemic barriers were consistently identified such as overcrowded classrooms, limited teacher-student interaction, preventing students from receiving adequate attention during lessons. Similarly, limited access to practical sessions, particularly in computer and science subjects also hindered experiential learning. Likewise, a shortage of subject-specific teachers further compromised instructional quality, while insufficient library and digital learning resources restricted independent study opportunities.

These findings highlight that effective learning is shaped not only by pedagogy but also by language accessibility, class size, resource availability, and teacher competence. Thus, Teacher Education Diploma Program/Curriculum should prioritize communicative teaching strategies, diversified teaching methods such as theoretical, practical and lab-based learning, and classroom management techniques in resource-constrained environments.

Annex I: Focus Group Discussions for Roaster Teacher Trainers (3)

Focus Group Discussion: Roaster Teacher Trainers Kalaiya Bara, Madhesh Province
Sri Namuna Secondary School, Barewa, (Kalaiya Municipality) Bara

Name of teacher trainer	Subject	Gender
1. Pradip Kumar Gupta	Math and Science	Male
2. Ram Bahadur Pandit	English	Male
3. Narendra Kumar Nidhi	English	Male
4. Pawan Yadav	Math and Science	Male
5. Shantosh Kumar Rajak	Social Studies	Male
6. Manoj Prasad Yadav	Headmaster	Male

FGD Facilitator: Dr Prem Aryal, Dr. Marko van den Berg, Dr. Basu Deu Karna and Mandira Neupane
Date: February 18, 2026
Discussion questions / contents

SN	Guiding questions
1	Could you share your opinions regarding the lack of teaching knowledge and skills? Key notes • Lack of teaching knowledge and skills for using multiple teaching techniques • Unable to use 21st century teaching skills (4Cs) such as creativity, collaboration, critical thinking and communication • Lack of skills managing project work for student self-learning • Managing classroom teaching technique in context of overcrowded classroom • Teacher led teaching technique followed by theoretical overloaded speech rather pedagogical practices • Existing teaching approach, "digesting and vomiting" so called banking approach of teaching
2	What are the barriers or hindering factors to transform acquired teaching skills into classroom teaching? Key notes • Lack of motivation in teaching profession • Low pay salary and low level of respect • Consider teacher training just for requirement of teacher promotion possibility
3	What is the biggest challenge of conducting teacher training in context of Madhesh/Nepal? Key notes • Teaching resource development, properly use, store and re-use them in classroom teaching • Learning attitude and attitude to teach innovatively as acquired skills from the training • Creating creative mind in teaching and learning process • Less motivation in teaching profession mainly in English and Science (low salary)
4	What is your opinion about the concept of balancing teaching competencies such as disciplinary content knowledge and skills of pedagogical practice?

	Key notes • 70% theoretical content knowledge and 30% pedagogical practice in classroom with proper mentoring support for future teacher preparation • 1 year teacher education program: 6 months at university to gain pedagogical content knowledge and 6 months pedagogical practice in classroom
5	What do you experience on competencies gaps while conducting teacher training? Key notes • Knowledge and skills to administer Letter Grading Evaluation System • Traditional in-service teacher training delivery approach, for instance, Master of Training of Trainer (MTOT) – theoretical overloaded that trickledown effect same lecture method of teacher training and ultimately transform the same in classroom teaching. • Thus, MTOT, teacher training, seminar and workshops are considered as a one-time festival rather proper plan for teacher support system • ICT use in training followed by using digital resource materials • Practical skills to develop low-cost materials for teaching in context of resource constraint schools and communities
6	What about the teacher training policy or training curriculum, whether it is helpful or it is hindering factor? Key notes • Problem in application of training knowledge and skills in classroom rather than teacher education curriculum or policies • Disconnection of teacher training policy / curriculum resources and proactive use in teaching

Ground knowledge provided by the group of trainers

The focus group discussion revealed significant gaps in teaching knowledge, skills, and professional motivation among teachers in Madhesh Province. Teachers largely rely on traditional, teacher-centered approaches — commonly described as "banking approach of educating children" characterized by rote memorization and theoretical overload rather than meaningful pedagogical practice. Critical 21st-century competencies such as creativity, collaboration, critical thinking, and communication remain largely unintegrated into classroom instruction, further compounded by overcrowded classrooms and inadequate resource management.

Transforming training knowledge into practice is hindered by low salaries, low professional respect, and a culture of attending training solely for promotional eligibility rather than genuine professional growth. Traditional in-service teacher training delivery approach, for instance, Master of Training of Trainer (MTOT) – theoretical overloaded that trickledown effect same lecture method of teacher training and ultimately transform the same in classroom teaching. Teacher training itself replicates the same lecture-heavy methods in classroom teaching as well. Workshops and seminars are considered as one-time events rather sustained follow-up or mentoring support to the teacher professional development.

Contextual challenges include limited ICT integration, insufficient low-cost material development, poor understanding of the Letter Grading Evaluation System, and weak application of the Letter Grading Evaluation System. Although teacher education policies and curricula are broadly adequate, the critical disconnect lies in translating policy into consistent, innovative classroom practice — reflecting an enduring gap between training design and real-world implementation in resource-constrained school environments.

Annex I: Focus Group Discussions for Permanent Primary Teachers (4)

FGD with Permanent Primary Teachers

A focus group discussion was conducted with six primary teachers, consisting of three males and three females, and was facilitated by interviewers Prakash Regmi and Parvej Alam on February 16, 2026. The participating teachers came from Rajeswori Ma. Vi and Rastriya Basic School in Balan Bihul, with teaching experience ranging from 1 to 17 years, showing a mix of both new and highly experienced educators, representing diverse professional backgrounds in primary education.

The responses collected from the Focus Group Discussions (FGDs) were carefully reviewed and analyzed using thematic analysis. This approach helped identify recurring patterns, shared experiences, key gaps, and priority areas expressed by teachers. Through this process, it became clear that while teachers are committed to their roles, they face several structural and professional challenges that influence their teaching effectiveness and overall professional growth.

1. Key Findings

1.1 Teacher Competence and Professional Development

Teachers generally described their subject knowledge as moderate to good, reflecting their dedication and experience in teaching. However, they also openly shared that several systemic constraints make it difficult to perform at their full potential. Many teachers expressed a genuine desire to improve but felt limited by circumstances beyond their control. The key challenges they identified included:

- Lack of teaching and learning materials
- Teachers are required to teach subjects outside their specialization
- Limited access to refresher and professional development training
- Student absenteeism, particularly among marginalized communities

When asked to rate their challenges related to subject knowledge and teaching skills, most teachers rated them as high (4–5 on a 5-point scale). This reflects a strong and honest recognition of their professional development needs and their willingness to learn and improve.

1.2 Access to Teacher Professional Development (TPD)

One of the most consistently expressed concerns was the lack of structured Teacher Professional Development (TPD). Most teachers shared that they had not received sufficient training in several critical areas that are essential for modern teaching. These included:

- Integrated curriculum
- Child-centered pedagogy
- Mentoring and coaching
- ICT integration

Teachers emphasized that professional development should not be a one-time event but a continuous process. They expressed a strong interest in participating in regular training, mentoring, and coaching opportunities that would help them enhance their teaching skills and confidence.

1.3 Understanding and Implementation of Integrated Curriculum

Teachers demonstrated a basic conceptual understanding of the integrated curriculum. They recognized that it connects different subjects and promotes holistic learning among students. However, translating this understanding into classroom practice has been a major challenge. The key gaps identified included:

- Lack of training and orientation
- Limited practical knowledge of integrating subjects

- Lack of teaching materials and guidance

As a result, while teachers appreciated the value of the integrated curriculum, its actual implementation in classrooms remained minimal. Many teachers expressed that with proper training and practical support, they would be more confident in applying integrated approaches.

1.4 Teaching Methods

Classroom teaching was largely dominated by traditional teaching methods. Teachers reported that they primarily used lecture method and discussion method. These methods were familiar and manageable, especially given the constraints they face. However, more interactive and child-centered approaches such as activity-based learning, group work, and experiential learning were rarely used. Teachers explained that this was not due to lack of interest, but because of practical barriers, including:

- Large class sizes
- Lack of materials
- Lack of training

This situation limits opportunities for students to actively participate in their learning and develop important skills such as critical thinking, problem-solving, and collaboration.

1.5 Teaching Foundational Literacy and Numeracy

Teachers clearly understood the importance of foundational literacy and numeracy and recognized how closely these skills are connected. They reported using several strategies to support student learning, including:

- Classroom discussions
- Demonstrations
- Practical exercises

Despite their efforts, teachers noted that their ability to effectively support foundational learning was constrained by several factors, including:

- Resource constraints
- High student numbers
- Lack of preparation time

These challenges make it difficult to provide individualized attention and use diverse teaching materials, which are essential for strengthening foundational skills.

1.6 Assessment and Evaluation Practices

Assessment practices in schools were largely focused on examinations. Teachers reported commonly using:

- Monthly tests
- Quarterly examinations
- Annual examinations

While these assessments help measure academic performance, they do not fully capture students' overall development. Teachers also shared that the Continuous Assessment System (CAS) was not fully

understood or effectively implemented. In addition, teachers reported limited understanding and capacity to assess:

- Critical thinking
- Holistic development
- Competency-based learning

This highlights the need for additional training and support in modern assessment approaches.

1.7 Inclusive Education and Managing Diverse Learners

- Teachers expressed a positive and compassionate attitude toward inclusive education. They showed a genuine commitment to supporting all students, regardless of their background or abilities. However, they also acknowledged that teaching diverse learners presents significant challenges, including working with:

- Children with disabilities
- Students from disadvantaged family backgrounds
- Students with low parental support

Although teachers are willing to help these students, they reported lacking:

- Training in inclusive pedagogy
- Skills to support diverse learning needs
- Specialized support and resources

This often leaves teachers feeling concerned about whether they are able to adequately meet the needs of all learners.

1.8 Classroom Communication Practices

Classroom communication was identified as a positive aspect of teaching practice. Teachers reported using multiple languages during instruction, including:

- Maithili (local language)
- Nepali

The use of the local language was especially helpful at the primary level, as it supported student understanding and participation. Teachers observed that students were generally active in class and felt comfortable asking questions. However, teachers also noted that more structured reflection and feedback practices were limited, suggesting an opportunity to strengthen communication further.

1.9 Use of ICT in Teaching

The use of Information and Communication Technology (ICT) in teaching was extremely limited. Teachers explained that this was mainly due to structural barriers rather than lack of interest. These barriers included:

- Lack of ICT infrastructure
- Lack of teacher training
- Lack of access to digital tools

Many teachers expressed interest in using ICT if proper facilities and training were provided.

1.10 Teacher Motivation and Job Satisfaction

Despite facing numerous challenges, teachers expressed strong motivation and dedication to their profession. Teaching was not seen merely as a job, but as a meaningful responsibility and social contribution. Key motivating factors included:

- Teaching as a social service
- Opportunity to contribute to society
- Respect associated with teaching profession
- Opportunity to support children's development

Teachers reported general satisfaction with their profession. However, they also emphasized the importance of greater professional support, recognition, and opportunities for growth.

1.11 Key Systemic Challenges

Throughout the discussions, several systemic challenges consistently emerged as major barriers affecting teaching and learning quality. These included:

- Large class sizes
- Lack of teaching and learning materials
- Inadequate infrastructure
- Lack of professional development opportunities
- Limited ICT access
- Curriculum implementation challenges
- Student absenteeism

These challenges highlight the need for coordinated efforts at multiple levels to support teachers and improve the overall quality of education. Overall, the findings reflect a group of teachers who are committed, motivated, and eager to improve, but who require stronger institutional support, better resources, and continuous professional development to fully realize their potential and provide high-quality education to their students.

Prakash and Parwej

Annex I: Focus Group Discussions for Temporary Teachers (5)

FGD with Temporary Teachers

As part of the Teacher Education Diploma Curriculum Need Assessment conducted by Madhesh University, a Focus Group Discussion (FGD) was organized with temporary teachers working in community schools in the Dhanusa Dham area of Dhanusha district. The discussion aimed to explore teachers' practical experiences in classrooms, their understanding of curriculum and pedagogy, and the professional competencies required to teach effectively across different school levels.

The FGD conducted by Parvej Alam and Prakash Regmi; included six teachers (three male and three female) representing different schools and teaching levels, from primary classes (Grades 1–5) to secondary classes (Grades 9–12). The participants had diverse professional backgrounds. Some teachers had long teaching experience of around sixteen years, while others had recently entered formal school teaching. One participant also brought extensive experience from working in the non-governmental sector before joining school teaching. This mix of experienced and newly appointed teachers provided a valuable opportunity to understand both long-term systemic issues and the current realities faced by new teachers.

Major Findings

1.1. Subject Expertise

Most teachers described their subject expertise as good or average rather than excellent. Experienced teachers expressed confidence in their subject knowledge and reported that they sometimes review previous lessons and reflect during class. However, new teachers felt that their expertise was still developing. Teachers shared that their classroom routine generally includes:

- Taking attendance
- Greeting students
- Checking homework briefly
- Reviewing the previous lesson
- Delivering the main lesson
- Summarizing the class

Although teachers felt generally comfortable with subject content, they acknowledged that teaching is a continuous learning process, and additional training would help them improve their skills. Teachers identified several areas where they need further support:

- Practical and project-based teaching
- Curriculum implementation
- Teaching and learning material development
- Classroom innovation and modern teaching techniques
- ICT integration in teaching

Participants emphasized that schools lack teaching materials and technological resources, which limits opportunities for innovative teaching. Teachers also noted that collaboration among government, schools, parents, teachers, and students is necessary to improve educational outcomes.

1.2 Awareness of TPD Training

Most teachers were aware of Teacher Professional Development (TPD) training programs, but only one teacher had participated in such training, and even that training was not certified. Several teachers reported teaching for more than 16 years without receiving any formal professional training opportunities.

1.3 Understanding of Integrated Curriculum

Knowledge about the integrated curriculum was extremely limited among the participants. Most teachers had never received training on integrated curriculum and therefore had not implemented it effectively in classrooms. Teachers indicated that only a small percentage of teachers within their municipality have received such training. The teachers highlighted the need for:

TPD training

- Training on integrated curriculum
- Teaching and learning material development
- Low-cost and no-cost teaching materials
- Early Childhood Development (ECD) training
- Training on teaching without corporal punishment
- Basic training for primary-level teaching

1.4 Literacy and Numeracy

The discussion revealed limited understanding of literacy and numeracy concepts. Some teachers, particularly female teachers, reported that they were unfamiliar with these concepts. However, the mathematics teacher explained how locally available materials can support numeracy learning. Teachers acknowledged that literacy and numeracy should be connected but admitted that they rarely integrate the two in practice.

Teachers shared that numeracy is generally taught using traditional methods, particularly lecture and explanation. They recognized that specialized training and thematic teaching approaches could improve students' understanding.

1.5 Integrated Curriculum Textbooks

Most teachers reported that they had little or no knowledge about integrated curriculum textbooks. As a result, they have difficulty understanding the relationships between different subjects within the integrated curriculum. Teachers admitted that they lack knowledge about teaching techniques and materials for language and numeracy development. The absence of training and teaching resources further limits their ability to apply innovative teaching strategies.

1.6 Assessing Critical Thinking

Teachers reported that practical activities to develop critical thinking are rarely conducted. In most cases, questioning and answering is the primary strategy used to encourage reasoning among students. Some teachers felt that developing critical thinking is difficult due to large class sizes, lack of materials, and limited training.

1.7 Teaching Techniques Used

Most teachers reported relying primarily on the traditional lecture method. A few teachers occasionally use locally available teaching materials, but systematic pedagogical strategies are rarely applied. Teachers acknowledged that many teachers lack knowledge about modern teaching pedagogy, including:

- Group work
- Child psychology
- Interactive teaching methods
- Large student–teacher ratios also make it difficult to apply student-centered teaching techniques.
- Learning Differences Among Students

All teachers agreed that children cannot learn effectively through a single teaching approach. They recognized that students have different learning abilities and require varied teaching methods.

1.8 Evaluation System

The evaluation system is largely traditional and exam oriented. Schools conduct:

- Quarterly examinations
- Mid-year examinations
- Annual examinations

The teachers also reported that Continuous Assessment System (CAS) is rarely used. In many cases, teachers are not involved in preparing examination questions, and the local government does not have a strong role in the examination process. The teachers admitted that they do not have sufficient knowledge about assessing the holistic development of children. They expressed the need for training and guidance in this area.

Further, they identified undisciplined students and students with weak foundational skills as the most challenging to teach. They emphasized the need for stronger basic learning skills among students.

1.9 Communication and Reflection

Teachers reported using both Nepali and local languages when teaching, especially at the primary level. Students tend to understand lessons better when teachers use local language explanations. Reflection at the end of lessons happens occasionally but not regularly. Teachers explained that time constraints and student absenteeism often prevent them from conducting proper lesson reflections.

Teachers shared that only a few students actively ask questions during lessons, and even those questions occur infrequently. Limited classroom interaction and traditional teaching methods contribute to this situation.

Teachers observed that students often struggle to understand instructions given in English, while instructions delivered in local language are generally understood better.

1.10 Inclusion of Children with Disabilities (CWD)

Teachers acknowledged that they lack skills and strategies to support children with disabilities. There is no structured system for seating arrangements or inclusive classroom management.

1.11 Competence Gaps in Teaching

Teachers were asked to rank their competence gaps on a scale from 1 (lowest) to 5 (highest). Most teachers rated their challenges around level 3, indicating a moderate level of difficulty. The key competence gaps include:

- Teaching methodology
- Managing diverse classrooms
- Subject content integration
- Classroom management
- Promotion Practices

The teachers reported that all children at the primary level are generally promoted, regardless of academic performance. They suggested that discussion-based teaching methods are most effective for their students, as these encourage participation and interaction.

1.12 Use of ICT

Teachers reported no use of ICT in classroom teaching due to lack of infrastructure, equipment, and training.

1.13 Teacher Motivation and Challenges

Despite many challenges, teachers expressed a sense of integrity and pride in being educators. Teaching is viewed as a socially respected profession. The teachers reported limited satisfaction with their profession. One major issue raised was irregular salary payments, with some teachers not receiving salaries for up to five months. They identified several key challenges:

- High student–teacher ratio
- Limited professional training opportunities
- Curriculum implementation difficulties
- Lack of teaching materials
- Limited motivation and institutional support
- Low salary and economic insecurity
- Lack of professional respect
- Perceived lack of responsibility among some permanent teachers

1.14 Suggestions for School Improvement

If given leadership roles, teachers suggested the following improvements:

- Ensure regular and timely salary payments
- Address student absenteeism
- Promote equality among teachers and students
- Strengthening administrative regulation and accountability
- Encourage collaboration between students, teachers, parents, School Management Committees (SMC), and Parent Teacher Associations (PTA)

- Ensure proper implementation of education policies
- Reduce discrimination and inequality within schools

Conclusion

The Focus Group Discussion with temporary teachers from community schools in the Dhanusadham area of Dhanusha district provides important insights into the realities of classroom teaching and the professional needs of teachers. The discussion revealed that while teachers demonstrate dedication to their profession and possess basic subject knowledge, significant gaps remain in pedagogical skills, curriculum understanding, and access to professional development opportunities. Many teachers rely heavily on traditional lecture-based teaching methods due to limited training, lack of teaching and learning materials, and insufficient institutional support. Awareness of key educational concepts such as integrated curriculum, literacy and numeracy integration, continuous assessment, and inclusive education was found to be limited. Furthermore, the absence of ICT infrastructure and minimal exposure to modern teaching strategies restricts teachers' ability to adopt innovative and student-centered approaches in the classroom.

The findings also highlight systemic challenges such as large class sizes, irregular salary payments, limited motivation, and weak coordination among educational stakeholders. Despite these difficulties, teachers expressed strong commitment to improving student learning and emphasized the need for targeted training programs, particularly in teaching methodology, curriculum implementation, classroom management, and inclusive education. Overall, the discussion underscores the urgent need for structured professional development, improved resources, and stronger institutional support to enhance teaching quality and support effective curriculum implementation in community schools.

Annex II: Classroom Observation of Grade 8 Social Studies (1)

Classroom Observation Tool

Teacher's Name	Bol Bahadur Shrestha (Primary teacher)			Gender	M
School's Name	Nepal Rastriya Basic School, Nirmal Basti, Thori Rural Municipality, Parsa				
Date	February 16, 2026	Observation Start Time	11:55	Observation End Time	12:45

Grade: 8 Subject: Social Studies Unit: VI Period: III Lesson: Tourism in Nepal

Key areas of observation: Didactic proficiencies, teaching techniques (pedagogy), communication skills, classroom management, reflective practice, and relation to the learners.

Observation Summary

Didactic proficiencies	Subject matter expertise (strengths and competence gaps) Strengths • Very good in subject matter expertise / disciplinary content knowledge • Ability to explain – conceptual clarity with suitable example • Teacher confidence level is very high to deliver the lesson • Clear communication mainly between teacher to students • Didactic proficiency with enough confidence Competence gaps • Mainly one way delivery • Lack of skills to provide enough time to think and response from the students
Teaching Techniques (pedagogy)	Pedagogical knowledge (strengths and competence gaps) Strengths • Demonstrated pleasant teacher behavior • Provide luxurious time to students mainly for listening • Posing questions but response quickly from teacher rather than student Competence gaps • Lack of enough pedagogical content knowledge • Mostly following teacher led teaching approach • Unable to provide time to student for thinking and responding • Group work and sharing collective students thought • Less participatory to respond to teacher's question
Communication Skills	Communication skills (strengths and competence gaps) Strength • One-way clear communication with examples • Teacher led communication in teaching • Students consider teacher has great as a source of knowledge • Use of 3Rs – reading, speaking, writing followed to student listening Competence gaps • Unable to provide opportunities for students to think and communicate • Lack of Collaborative learning approach among students • Less interactive • Unable to use four teaching approaches – creativity, collaboration, critical thinking and communication

Classroom Management	Classroom management (strengths and competence gaps) Strength • Good and spacious classroom with proper ventilation and light • Number of students considerably low (10 out 11 presence) • Use of white board and marker, course book, display of lesson title and conceptual definition with examples written by teacher in the white board. Competence gaps • Use of different sources of learning materials related to the lesson title • Unable to explore students' thoughts and ideas to the title of lesson though interactive student-centered teaching approach.
Reflective Practices	Reflective practice (strengths and competence gaps) Strengths • Led by teacher through few questions followed to expect sharing learned points /comprehension Competence gaps • Unable to promote student led reflective approach • Absence of question – answer session from student to teacher • Absence of student self-reflection followed to teacher's reflection • Absence of two-way discussion among students under teacher's observation • Lack of opportunities for student to think critically about the subject matter
Relations to Learners	Student – teacher relational practice (strengths and competence gaps) Strengths • Maintain peaceful classroom environment, followed teacher instruction and listen as an obedient pupil • Smooth and comfortable classroom teaching with confidence while delivering content knowledge • Pupils behave to the teacher as respectful people, carefully listening to him by the pupils Competence gaps • Lack of maintaining two ways of communication between pupils and teachers with equal relations rather than one way speech by teacher and listen by students.
Overall Observation Reflection	Summary of Observation Strengths: The teacher demonstrated strong subject matter expertise and disciplinary content knowledge, delivering the lesson with notable confidence and conceptual clarity supported by relevant examples. Communication was clear and well-structured, following the 3Rs approach — reading, speaking, and writing — while students listened attentively. The classroom environment was conducive to learning, with adequate space, ventilation, and basic teaching materials including a whiteboard, markers, and course book. Students maintained respectful, orderly behavior, and the teacher sustained a calm, comfortable atmosphere during the 50-minute session. Competence Gaps: Despite these strengths, the teaching was predominantly teacher-led, for instance, one-directional approach, offering limited opportunities for students to think independently, communicate, or collaborate for shared learning approach. Pedagogical content knowledge, particularly in student-centered approaches, is lacking that could be helpful to promote critical thinking, creativity, and collaborative learning. Reflective practice was largely absent — there was no meaningful student self-reflection, peer discussion, or question-and-answer exchange initiated by students. The teacher posed questions but answered them quickly without allowing adequate wait time. Overall, integrating interactive teaching approach, two-way communication, and participatory learning methods would significantly enhance student engagement and deeper understanding of the subject matter.

Annex II: Classroom Observation of Grade 9 Nepali (2)

Classroom Observation Tool (Nepali subject: Grade 9)

Teacher's Name	Mr. Mukesh Sharma (Lower Sec. Teacher – Hired by LG)			Gender	M
School's Name	Sri Rastriya Secondary School, Kawati Jagat, Subarna Rural Municipality - 4				
Date	February 17, 2026	Observation Start Time	11:00 am	Observation End Time	11:45

Grade: 9 Subject: Nepali Lesson 11: Period: 2nd Lesson's name: समय पीडा

Key areas of observation: Didactic proficiencies, teaching techniques (pedagogy), communication skills, classroom management, reflective practice, and relation to the learners.

Observation Summary

Didactic proficiencies	Subject matter expertise (strengths and competence gaps) Strengths • Confidence in subject matter and use of language communication • Speaking and storytelling style – writing story title and key character of the story in the back board • Initially shared key points of the story and followed to read loudly the lesson's texts so that 64 students of the class could listen properly • Often use of "relevant proverbs" while further explaining the key message of the story Competence gaps: • Unable / unaware to use of gender-neutral words or proverbs while explain the key message of the story, for instance, for instance, "बुढेसकालको साहारा छोरो", "बिहे गरेर गएको छोरीको केही आश हुदैन" • Lack of skills providing opportunities for critical thinking about the story message from the students themselves.
Teaching Techniques (pedagogy)	Pedagogical knowledge (strengths and competence gaps) Strengths • Presentation of lesson title, story key message, main character of the story • Story telling approach (in brief) without looking at the texts to draw 64 students (big group) attention equally and making interesting • Use often pose – question and followed to read loudly the story texts written in the textbook • Maintain classroom environment calm despite large number of students (64) in the class Competence gaps • Skills • Skills to promote student active participation during classroom teaching and learning • Mobilize students to read the lesson story; one by one (paragraph to paragraph), and help to draw key messages of each paragraph right after reading
Communication Skills	Communication skills (strengths and competence gaps) Strengths • Ability to communicate message of the story with clear and interesting, for instance giving example of Nepali proverbs • Teacher as a good storyteller and able to draw students' attention despite of large group of students in the class • Resilience of keep on speaking for 45 minutes without taking any break Competence gaps • Skills to maintain two-way communication, interactive way of communication between teacher and student; student and student; group work and sharing etc.

	• Knowledge and skills in use of gender appropriate words in classroom while teaching and summarizing key lessons of the story
Classroom Management	Classroom management (strengths and competence gaps) Strengths • Specious, neat and clean classroom, placing white board appropriately, board marker and use of them as needed • 64 students – seating in 3 rows with 7 desk-beach and walking space between the rows • Good space for the teacher as well for telling story by moving from front to back because of the walking space between the rows • Classroom with good light and ventilation for the fresh air circulation • Pleasant presentation – story telling from the teacher Competence gaps • Skills to manage large number of students making classroom teaching interactive such as group work, pair work and reflective session etc.
Reflective Practices	Reflective practice (strengths and competence gaps) Strengths • Use of posing question to draw student attention for recall learning often • Concluding story message "छोरा छोरीको महत्व बराबरी" Competence gaps • Unbale to manage time for reflective practice at the end of session • Unintentional biasness to highlight importance of son through posing question and different example of Nepali proverb during initial and mid-session of the teaching • Profiling less to daughter than the son
Relations to Learners	Student – teacher relational practice (strengths and competence gaps) Strengths • Teacher able to maintain himself good position through gaining student attention and listening to him very calmly • Pedagogical power towards teacher Competence gaps • Making balance of pedagogical power relation between the teacher and student • Maintain interactive relation between teacher and student, and student to student
Overall Observation & Reflection	Summary of Observation Strengths: The teacher demonstrated strong subject matter confidence, engaging storytelling, and effective classroom communication. By writing the story title and key characters on the board, briefly narrating the story before reading aloud, and incorporating relevant Nepali proverbs, the teacher successfully captured the attention of 64 students. The spacious, well-lit, and ventilated classroom with organized seating supported a calm learning environment. The teacher-maintained authority and student attention throughout the 45-minute session, used recall questions effectively, and concluded with a balanced message affirming equal importance of sons and daughters ("छोरा छोरीको महत्व बराबरी"). Competence gaps: The teacher showed limited awareness of gender-neutral language, using proverbs and examples that unintentionally privileged sons over daughters, contradicting the story's intended message. Teaching remained largely one-directional, with minimal opportunities for student active participation, critical thinking, pair work, or group discussion. Skills to facilitate student-led reading and paragraph-level comprehension were absent. Two-way interaction between teacher-student and student-student was lacking. Time management for reflective practice at the session's end was poor. Overall, the pedagogical power remained heavily teacher-centered, with insufficient strategies to engage a large class interactively or promote gender-responsive, inclusive classroom dialogue.

Name of Observer: Dr. Prem Aryal and Mandira Neupane Signature:
Date: February 17, 2026

Annex II: Classroom Observation of Grade 2 Integrated Curriculum (3)

Classroom Observation Tool (Integrated curriculum-based teaching: Grade 2)

Teacher's Name	Shiv Kumar Sah			Gender	Male
School's Name	Shree Rajeshwari Madhyamic Vidhalaya		Address	Balan Bihul RM, Ward 3	
Date	16 Feb 2026	Observation Start Time	14:10 PM	Observation End Time	15:00 PM

A classroom observation was conducted for Mr. Shiv Kumar Sah, a male teacher at Shree Rajeshwari Madhyamic Vidhalaya, located in Balan Bihul Rural Municipality Ward No. 3 on 16 February 2026, from 14:10 PM to 15:00 PM. The purpose of the observation was to review the teacher's classroom practices of integrated curriculum of grade 2, including lesson delivery, student engagement, classroom management, and overall teaching–learning processes, to identify strengths and areas for professional improvement.

Key areas of observation: Didactic proficiencies, teaching techniques (pedagogy), communication skills, classroom management, reflective practice, and relation to the learners.

Observation Summary

Didactic proficiencies	Strengths: The teacher has shown that he understands the learning needs of children with respect to the subject and displayed confidence while using both English and Nepali as media of instruction. He stressed key words for support of comprehension and gave writing work to write on word meanings and translation to improve vocabularies. The teacher also tried to reach out to the children at different learning levels by creating groups, thus some students were found to be good in reading English language. Competence Gaps: The teacher showed the low level of both knowing and using integrated curriculum. His teaching methodology was almost totally concentrated on translation techniques; he did not attempt at all to help the learners to comprehend concepts or develop skills. The teacher-centered approach was largely adopted with very limited children's activities. The lesson started without salutation or any form of introductory interaction as well as extended time of the teacher facing the whiteboard that undermined student participation and classroom interaction.
Teaching Techniques (pedagogy)	Strengths: The teacher tried to cluster students according to their aptitude levels which may imply the teacher has some intuitive feeling for individual learners. Students were very eager and showed their preparedness to participate in the lesson. The teacher further uses worked exercises as well as translation activities to support learning. Competence Gaps*:* The lesson was mainly lectured, which means that there were few child-centered teaching methods being used in the lesson. The teacher seemed not very clear about the aims and objectives of his lesson and what he wanted to achieve at the end of it all. Grouping practices did not support well those learners who struggle academically, moreover it was marked with high levels of direct translation as opposed to interactive and activity-based teaching. Lack of materials for instruction, low questioning style and unclear instructions made it difficult for students to interact actively in learning process. In addition to this, the stick in the classroom might also send a wrong signal that could make some people feel threatened.

Communication Skills	Strengths: The teacher tried to engage students by posing questions individually and encouraging participation. Translation was employed as a strategy to enable students to get the content of the lesson. Some students showed confidence and competence in communicating Competence Gaps: Communication was more of teacher to student and not the other way round having less dialogue in it. The teacher, sometimes, had a high or harsh tone of voice, which affected the classroom environment. The lesson did not contain introductory greetings and rapport-building interaction. On top of this, the teacher taught almost always with his back to the students limiting eye contact and reducing opportunities for support and engagement.
Classroom Management	Strengths: The 21:1 student–teacher ratio was just fine and made it possible to effectively manage a class. The teacher assigned students into groups that were supportive of differentiated instruction if done well. Competence Gaps: Factors such as poor seating arrangements in the class made it quite difficult to achieve learning objectives. Children were not well arranged in terms of seating and the furniture in the class was too old and the classroom was very small. The carpet appeared dirty and damp, which is likely to cause disease among learners There was inadequate application of classroom management techniques and the teacher concentrated on students who could perform well only hence disregarding others. There were no instructional materials displayed and lessons were delivered through writing on the whiteboard only.
Reflective Practices	Strengths: The teacher regularly assigned homework to reinforce vocabulary learning, indicating some effort to extend learning beyond the classroom. Competence Gaps: There was no evidence of reflection during or after the lesson. The teacher did not review previous learning or summarize key points at the end of the lesson. Clear instructions for the next lesson were not provided, and there were limited monitoring and feedback to support all learners.
Relations to Learners	Strengths: Students appeared comfortable with the teacher and showed interest and enthusiasm in learning. The teacher made some effort to involve individual students during the lesson. Competence Gaps: Overall interaction between the teacher and the whole class was limited. Some students had difficulty understanding the lesson but did not receive adequate support. The teaching approach emphasized memorization rather than understanding, which limited meaningful engagement. The teacher-centered approach further reduced opportunities for active student participation.
Overall Observation Reflection	Strengths: Overall, students showed interest in learning and maintained a positive attitude toward the teacher. The teacher demonstrated confidence in language use and maintained regular homework practices. The manageable student–teacher ratio also provided a favorable condition for effective teaching and learning. Competence Gaps: Despite these strengths, the observation highlighted significant areas for improvement. The teacher demonstrated limited understanding and implementation of the integrated curriculum and relied heavily on teacher-centered methods. Classroom management, physical environment, and use of teaching materials were inadequate. There was limited use of interactive and inclusive teaching strategies, insufficient lesson reflection, and inadequate support for low-performing students. These gaps indicate the need for professional support to strengthen pedagogical practices and improve overall teaching effectiveness.

Conclusion and Recommendations

Overall, the observation indicates that while the children are fond of the teacher, there is a need for significant improvement in pedagogical practices. The teacher demonstrated limited motivation, innovation, and skills necessary to effectively engage children in meaningful teaching and learning activities. There is also a clear gap in understanding and implementing the integrated curriculum, which affects the teacher's ability to connect learning with children's needs. Classroom management and seating arrangements were found to be inadequate, and there was little evidence of reflective practice at the beginning or end of the lesson. These observations suggest a need for further professional development and training, particularly in integrated curriculum implementation and child-centered pedagogical approaches.

Thus, based on the above observations the following recommendations are proposed to support the teacher strengthening his skills, knowledge, and competencies to effectively plan, deliver, and assess teaching and learning activities.

- Provide training on integrated curriculum implementation.
- Strengthen child-centered and activity-based teaching skills.
- Improve classroom management and seating arrangements.
- Ensure use of local language where appropriate to support understanding.
- Improve communication skills and positive interaction with students.
- Use teaching and learning materials to support instruction.
- Encourage inclusive teaching practices that support all learners.
- Promote reflective teaching practices, including lesson introduction and closure.
- Improve classroom hygiene and physical learning environment.
- Provide professional development support in pedagogy and learner engagement.

Name of Observer: Parvej Alam and Prakash Regmi

Signature:

Date: February 16, 2026

Annex II: Classroom Observation of Grade 7 Science (4)

Class observer Abdul

February 17,2026

Grade 7 Science Teaching

School- Dhanush Janta Secondary School, Dhanusha Dham

Lesson topic: Force and motion

- The teacher demonstrated excellent subject knowledge initiating lesson by asking questions to the students.
- The teacher moved around the classroom to engage all students in the lesson. The classroom atmosphere was pleasant.
- The teaching was teacher centered. The teacher explained the content by writing on the board which was not properly used.
- The teacher communicated using gesture with the students and it was one-way traffic.
- No tasks were used during the lesson in which students apply their gained knowledge independently.
- The teacher closed the lesson and assigned homework related to force and motion.

Summary of the observation:

The teacher had an excellent command on the subject matter. However, the instruction was predominantly teacher-centered, limiting student task. The lesson consisted of the teacher exposition and questions asked to the students. Students were offered few opportunities to process and apply the knowledge gained. To improve efficacy, the lesson should be reframed to connect abstract concepts with everyday phenomena, fostering deeper conceptual understanding.

Annex II: Classroom Observation of Grade 5 Mathematics (5)

Class observations: Marko van den Berg & Basu Deu

February 16th 2026

Grade 5 Mathematics teaching/private school/ Parsa

Lesson topic: calculation of the surface areas and volumes of geometric solids

- The teacher demonstrated very strong subject knowledge in mathematics. He taught with great confidence and expressed himself clearly. He was able to summarize the essential points of the topic effectively. The drawings on the board further clarified the content.
- The teacher communicated skillfully with the students. The classroom atmosphere was very calm, and the teacher and his expertise were clearly respected. In addition to verbal feedback, he used small gestures and facial expressions to show when he was satisfied with an answer.
- The teaching was highly teacher-centred. The teacher explained the topic and occasionally asked questions, which the students answered. From time to time, a student was asked to solve a task on the board.
- The teacher repeatedly asked the class whether anything was unclear. However, she then moved on very quickly to the next topic, so students who were unsure of their understanding may not have had time or the confidence to ask questions. These questions gave the impression of being more rhetorical; the teacher seemed eager to move on, and the students had perhaps internalized this and therefore did not ask any questions.
- The lesson did not include any actual independent work by the students.

Summary of the observation

The teacher was competent and had an excellent command of the subject matter. He gave an enthusiastic impression of himself. The teaching was highly teacher-centred. The lesson consisted mainly of the teacher's exposition, interspersed with questions to the students. The answers were often given in chorus, with the whole class responding together. A couple of times during the lesson, an individual student came to the board to present a solved task. The problem with this type of teaching is that it offers very few opportunities to process and apply the knowledge gained. The observed lesson might have worked even better if it had included a consolidating phase in which students could have applied what they had learned. Learning might also have been enhanced if the content had been connected to everyday phenomena. For example, the teacher could have given a task in which students were asked to consider in what kinds of situations the ability to calculate surface areas and volumes might be useful at home or in working life. The school yard could perhaps also be used as a learning environment. Students could have been asked to work in groups to calculate the surface areas of items marked in advance by the teacher or located in the yard, such as doors, windows, or a designated section of the playground.

Annex II: Classroom Observation of Grade 9 English (6)

Class observations: Marko van den Berg & Basu Deu

February 17th 2026

Grade 9 English lesson Bara/Kaliya Public school

Lesson topic: Different types of rules

- The teacher appeared to have excellent command of the subject matter being taught. He gave an overall professional impression and managed the teaching situation well.
- The students followed the lesson attentively, and the classroom atmosphere was calm and orderly.
- The lesson was highly teacher-directed. The teacher explained the content and occasionally asked questions, both to individual students and to the whole group.
- A positive aspect of the questioning was that students were sometimes asked to apply their knowledge, for example by giving examples of places where rules are needed.
- The teacher wrote notes on the board for the students to copy. His handwriting was rather small, although no student indicated that it was difficult to read.
- Many answers were given in chorus, even though the teacher also addressed some (few) question to individual students.
- Based on the lesson, it was difficult to get a clear picture of individual students' level of understanding or to identify whether there were students who were struggling with the content.
- The students did not ask the teacher any questions, so it was also not possible to assess from that whether some of the topics were difficult for any of them to understand.

Summary of the observation

The study of rules remained somewhat disconnected. Students learned that there are different types of rules and repeated them in chorus. However, as mentioned, the teacher did ask the students a couple of times where rules are needed. Even though this was an English lesson, the teacher could perhaps have asked why rules are necessary or what would happen, for example, if there were no rules in school. The lesson might have benefited from being more closely connected to the students' own lives. In an English lesson the primary focus is naturally on language learning, but linking the topic in some way to students' personal experiences could have been helpful from a motivational perspective. Learning is also often deeper when new content is connected to existing knowledge structures. The lesson might have been more dynamic if it had included a task in which the topic could be applied in some way. For example: The school decides to establish a library. Draft three to four rules for library users. Or: Recall situations in your own life where you have encountered a rule. Give examples of rules that a) you consider reasonable and b) you consider unreasonable or even unfair.

Annex II: Classroom Observation of Grade 10 English (7)

Class observations: Marko van den Berg & Basu Deu

February 17th 2026

Grade 10 English lesson

Private school Kalaiya/Bara

Lesson topic: English-language poetry.

- The teacher was engaging and demonstrated excellent subject knowledge, presenting himself as a professional who clearly knew what he was doing.
- The teacher communicated skillfully with the students and came across as enthusiastic about his teaching.
- The teacher moved around different parts of the classroom, which gave the impression that he wanted to engage all students in the lesson. He was encouraging, and the classroom atmosphere was pleasant.
- The teaching was very teacher-centered: the teacher explained the content, wrote on the board, and asked the students questions.
- No tasks were used during the lesson in which students could independently apply the knowledge they had gained.
- The teacher could perhaps have paid more attention to ensuring that all students clearly understood the concepts being used. It was difficult to form an understanding of individual students' level of competence during the lesson because many of the answers were given in chorus, with the whole class responding together.

Summary of the observation

The teacher had an excellent command of the subject content, but the teaching was highly teacher-centred and did not make use of a variety of pedagogical methods. The lesson was rather short, but structuring it with a greater variety of activities might have been beneficial. At some point, there could have been a phase in which students applied what they had learned. For example, interpreting the lyrics of an English-language pop song might have helped students realize that they encounter poetry in their everyday lives. There could also have been a brief discussion about why poetry is studied at all — as part of general education, as a way of understanding the world around us, as something that includes song lyrics, and also because art has intrinsic value. Student-activating methods do not necessarily have to be implemented only inside the classroom. For example, group work could be carried out in the school yard, with students returning to the classroom at an agreed time to present their results. In discussions with the teachers at the school, it emerged that they often feel the lesson time is so short that it does not allow for student-centred methods. The content must be covered efficiently within a limited time. They also felt that activities that activate students can generate a lot of noise, which may be interpreted as a lack of classroom discipline.

Annex III: Key Informant Interview of Professor, Education Faculty TU (1)

Interviewee: Suryakant Sah, Asso. Professor, TU

February 16, 2026

Interviewer: Abdul

Summary of the issues raised by the Interviewee:

- The present teacher education program is discouraging due to student's irregularity.
- Teachers at present have insufficient teaching skills to apply in classroom due to lack of practice during studying.
- Diploma Curriculum should include the use of ICT in classroom-based activity learning.
- Teaching competencies can be increased by connecting theoretical knowledge directly to the real-world application.
- Diploma Curriculum should focus on primary teachers teaching competency.
- Activity based learning model should be used to bridge the gap between teaching experience and field-based learning.

Annex III: Key Informant Interview of Headmaster, Public School Parsa (2)

February 16th 2026

Interview of a Headmaster, Pubic school/Parsa

Summary of the issues raised by the interviewee:

- Teachers have shortcomings in their ICT competence. At the same time, school conditions often show major gaps in this respect. For example, there may be no functioning internet connection or adequate equipment for using digital applications.
- The extremely large class sizes is a major challenge. A single classroom may have up to 100 students at a time.
- Students' low socio-economic background affects the academic success of many learners. Parents are often unable to support these students, and dropping out of school is common.
- Teachers need a broad range of skills in order to respond to future challenges. It is important that those who enter the teaching profession are genuinely motivated and committed to the field.
- Teachers also need self-confidence to be able to make full use of their skills. In addition, they require strong psychological and social competences, as social interaction is a central part of the teaching profession.
- Language skills, particularly in English, are important. ICT competence will also become increasingly significant in the future. There are also shortcomings in teachers' subject matter knowledge, which should be addressed in teacher education.
- Teacher selection processes should be improved. Those selected should be motivated and really interested in entering the profession.
- Teacher education should include more school-based practicum. The system should also enable experienced teachers to share their expertise with student teachers. New teachers often have a great deal of theoretical knowledge, but they frequently lack the practical skills required in school work.
- The authorities' approach to private and public schools should be consistent. At present this is not the case.
- It would also be important for the provinces to cooperate with each other in the development of teacher education.

Annex III: Key Informant Interview of Chairperson HISSAN, Parsa (3)

Interviewer: Marko & Basu Deu

February 16th 2026

Interviewee: HISSAN Chairperson/Parsa

Summary of the issues raised by the interviewee:

- Teachers have partly insufficient skills to adapt their teaching to the level of different grade groups. In principle, their pedagogical knowledge is at a good level, but some of them face challenges when dealing with classroom realities.
- Teacher education should place greater emphasis on practical skills, especially on linking theory with practice.
- Some teachers also lack adequate ICT skills.
- Many of beginning teachers show weak commitment to the profession and tend to leave teaching when other opportunities arise
- Dropping out of studies is unfortunately quite common. The reasons often include the economic difficulties faced by families. Students' socio-economic background frequently affects their school performance. The educational capital of the home also influences children's language skills. Parents with higher levels of education are better able to support the learning of English, whereas less educated parents may not know English themselves. In such cases, learning English depends entirely on the school.
- Teachers need a wide range of skills to cope with future challenges. All the skills listed in the question are important. In particular, ICT competence plays a major role in the teaching profession. Therefore, teacher education should place strong emphasis on pedagogy that makes effective use of technology.
- However, young people must also be taught to think independently. Digital applications such as artificial intelligence are tools that support learning, but thinking itself cannot be outsourced to them.
- Teachers need the ability to connect their teaching with real-world phenomena outside the school. If students do not see this connection, learning may remain fragmented and abstract. However, not all problems can be solved through teacher training alone. A major factor behind teachers' motivation problems and the fact that many leave the profession is low pay.
- It would be important to ensure that teacher education reaches a level at which the degrees are also recognized abroad as equivalent to the respective national teaching qualifications in those countries.

Annex III: Key Informant Interview of Roster Teacher Trainer, Bara (4)

Interview of Roster teacher trainer

Prem, Marko & Basu

February 18th 2026

Bara/Kalaiya Public school

Summary of the issues raised by the interviewee

On teachers:

- Teachers have significant gaps in their ICT skills. This is partly due to the lack of necessary equipment, but also to a lack of motivation.
- There are also serious shortcomings in pedagogical skills and in communication with students. Teaching is highly teacher-centred, and the structure of lessons is usually similar.
- Many teachers are not able to plan lessons effectively. This is one reason why almost all teaching is conducted in a highly teacher-centred, lecture-based manner.
- Twenty-first century skills are unfamiliar to teachers, and they are not very motivated to integrate those into teaching.
- There are major deficiencies in teachers' motivation to learn new things. Teachers attend training mainly because it is a requirement for career advancement. They are generally not very motivated to apply what they have learned in their teaching and tend to continue working as they did before.

On teaching groups and schools:

- Class sizes are far too large, which makes it very challenging to use diverse pedagogical methods.
- Classroom equipment is very limited.
- On the other hand, equipment that has been procured for schools (for example microscopes) often remains unused because teachers do not know how to use it.

On the challenges and development needs of TPD training:

- Trainers do not have sufficient time or resources to prepare the training.
- The system should be developed so that teachers have genuine motivation to improve their competences and to apply what they learn in the classroom.
- Teaching competence should be one of the criteria for career progression.
- Teachers need a great deal of practice-oriented training in different teaching methods. The key challenge is how to engage teachers so that they become genuinely interested in this.

Annex III: Key Informant Interview of VC, Madhesh University (5)

Interview of the VC of the Madhesh University Prof. Dr. Deepak Bahadur Shakya

February 18th 2026

Prem, Marko, Basu

Summary of the issues raised by the interviewee

- According to the VC, the competences of newly graduated teachers are inadequate in many respects. They have only a vague understanding of what teaching involves in practice.
- Teachers also fail to see the connection between their own work and the curriculum.
- The diploma course should be based on a respectful and encouraging attitude towards the participants. Its purpose is to help them develop as teachers, not to highlight their shortcomings.
- The diploma course is only the first step in becoming a teacher. Its core should focus on the development of practical teaching skills.
- The course should include various simulations that create teaching situations similar to real classroom practice.
- If successful, the course could serve as a model for other universities. It is also important to convince central government authorities that this type of course is worth developing.
- Teachers stated that when students enter their classes from basic education, there are often serious gaps in their knowledge and skills. As a result, a considerable amount of time at the beginning of the upper secondary school studies is spent addressing these deficiencies. This affects later studies, as the time lost in the initial phase must somehow be made up afterwards. Some students become frustrated with their lack of competence, which may lead to absenteeism or dropping out.
- The teachers said that they would prefer to use a variety of teaching methods, but because the time allocated for instruction is so limited, teacher-centred lecturing is, in their view, a necessity. It is the only way to progress at a sufficient pace.
- The use of more creative methods is also restricted by the very limited classroom resources.
- According to the teachers, another factor is that student-activating methods may create noise and restlessness, which can negatively affect the teacher's reputation.
- A further challenge is the lack of learning materials. There are not enough of them, and the existing materials (the teacher referred specifically to textbooks) are not always of good quality. Depending on the subject, textbooks may contain numerous errors.
- In addition to pedagogical training, the teachers felt they need further professional development in the content knowledge of their own subject areas. From the perspective of subject teaching credibility, up-to-date content knowledge is essential.
- With regard to new, recently graduated teachers, a key problem was seen to be that they often have a very limited understanding of what teaching involves in practice. This could be addressed by including more school-based practicum periods in teacher education.

Annex III: Key Informant Interview of Director, EDD, Madhesh Pradesh (6)

Key Informant Interview (KII)

Name of Interviewee: Mahendra Mahato (Secretary, Education Development Directorate (EDD) Madhesh Province.

Name of Interviewer: Consultant and team (Mandira, Prakash, Parvej)

Date: 23 February, 2026- 2:00-3:00 PM

The interview session will take 1-1.5 hours in which interview taker/facilitator ask questions one by one as written below and takes notes of key points expressed during the interview that are important for the record.

Guiding Questionnaire:

1.Current State of Teaching Competencies: Based on your experience and observation, what are the most critical gaps in teaching competencies among current diploma program graduates when they enter the classroom? Could you provide specific examples of areas where teachers struggle most?

- Academic and Professional Competency Gap: Many graduates lack practical skills, updated subject knowledge, technological competency, and professional attitudes required for effective classroom delivery. There is a visible disconnect between university curriculum content and real classroom pedagogy.
- Pedagogical Application Gap: Although teachers acquire theoretical knowledge, they struggle to apply child-centered, activity-based, and inclusive teaching approaches in practice.
- Technology and Innovation Gap: Limited familiarity with digital tools, innovative methodologies, and ICT integration affects classroom engagement and learning outcomes.
- Training and Professional Development Gap: Many teachers have not received need-based, refresher, or customized training for extended periods (in some cases up to 15 years). Training opportunities are not demand-driven nor are equitably distributed.
- Life Skills Transfer Gap: Graduates often lack the ability to integrate life skills and practical competencies into classroom teaching, limiting students' real-world readiness.

2.Contextual Challenges in Madhesh Province: In context of cultural and linguistic diversity, socio-economic conditions, and deteriorating quality of student learning, what types of teacher education diploma programs should Madhesh University design?

The diploma program at Madhesh University should be context-responsive, market-oriented, and innovation-driven, including:

- Life Skills and Technology Integration Courses: Emphasizing ICT in education, digital pedagogy, and innovative classroom practices.
- Culturally and Linguistically Responsive Pedagogy: Preparing teachers to effectively teach in multilingual and diverse socio-cultural contexts.
- Livelihood-Linked and Market-Oriented Curriculum: Courses that equip graduates with employable skills and entrepreneurial competencies to enhance income generation opportunities.
- Skill–Technology–Innovation–Market Alignment Model: Ensuring that teacher education integrates practical skills, technological fluency, and economic relevance.

3.Essential Competencies for Future Teachers: Looking ahead at the evolving educational landscape in Nepal, what core competencies (pedagogical, didactic, technological, socio-emotional) should be prioritized in designing diploma teacher education curriculum to ensure graduates are effective and relevant in 21st-century classrooms teaching management?

Pedagogical Competencies:

- Practice-based and experiential learning (learning by doing) approaches.
- Child-centered, play-based pedagogy at foundational levels.
  Technological Competencies:
- Effective ICT integration in lesson planning and delivery.
- Development of digital teaching-learning materials and use of multimedia tools.
    - Assessment Competencies:
- Emphasis on formative, competency-based, and practical assessment rather than purely theoretical examinations.

Inclusive and Socio-Emotional Competencies:

- Strong understanding of inclusive education principles.
- Skills to address diverse learners, including children with disabilities.
- Classroom management strategies that foster socio-emotional well-being.

4.Practical Training and Field Experience: How can the teacher education curriculum better integrate practical teaching experience and field-based learning to bridge the gap between theoretical knowledge and classroom reality? What models or approaches have you seen working effectively?

To strengthen theory–practice alignment, the following measures are recommended:

- Need-Based Professional Development Mapping: Identify teacher competency gaps and provide targeted training.
- Subject-Specific Capacity Enhancement: Customized and refresher training models.
- Structured Teaching Practicum: Extended school-based internships with mentorship and classroom observation.
- Improved Teacher–Student Ratio: Ensure adequate human resources for effective classroom management.
- Technology-Enabled Classrooms: Equip schools with ICT infrastructure to support practical training.
- Child-Friendly and Disability-Friendly Learning Environments: Ensure inclusive infrastructure and supportive school culture.

5.Systemic Support and Implementation: What support mechanisms including resources and policy provisions are necessary to successfully implement an improved teacher education diploma program and ensure its sustainability at Madhesh University?

Successful implementation requires:

- Provincial and Local Monitoring & Mentoring Mechanisms: Regular supervision and academic support systems.
- Dedicated Education Personnel at Local Government Level: Assign responsible staff for continuous monitoring at municipal and ward levels.
- Improved Teacher Motivation Packages: Competitive salary structures, incentives, and professional growth opportunities.
- Policy Alignment: University programs must align with national and provincial education policies.
- Political Commitment: Education should be prioritized in local and provincial development agendas.
- Partnership with Development and Non-Government Organizations: Collaborative support to strengthen implementation and sustainability.

Annex III: Key Informant Interview of LEU Chief, Mahottari (7)

Key Informant Interview (KII)

Name of Interviewee: Juli Thakur (LEU Chief- Mahottari Rural Municipality, Mahottari District)

Name of Interviewer: Prakash, Parvej

Date and Time- 24 February, 2026- 1:00-2:30 PM

The interview session will take 1-1.5 hours in which interview taker/facilitator ask questions one by one as written below and takes notes of key points expressed during the interview that are important for the record.

Guiding Questionnaire:

1.Current State of Teaching Competencies: Based on your experience and observation, what are the most critical gaps in teaching competencies among current diploma program graduates when they enter the classroom? Could you provide specific examples of areas where teachers struggle most?

- Insufficient Pedagogical Competency: Many teachers lack adequate pedagogical knowledge and practical teaching skills required for effective classroom instruction.
- Weak Time Management and Lesson Planning: Gaps in instructional planning and time management negatively affect classroom delivery and overall learning effectiveness.
- Low Confidence in Training Application: Teachers who have received professional development training often struggle to replicate learned strategies in the classroom due to limited confidence and inadequate follow-up support.
- Underutilization of Integrated Curriculum-Trained Teachers: Teachers trained in the integrated curriculum are not strategically mobilized. Instead, multi-grade teaching practices are widely applied without proper preparation, which has adversely impacted student learning achievement.
- Lack of Refresher and Continuous Professional Development: Long gaps between training opportunities prevent teachers from updating their knowledge in line with curriculum revisions, directly affecting the quality of the teaching-learning process.
- Overreliance on Traditional Lecture Methods: The predominant use of teacher-centred lecture methods limits student engagement, critical thinking, and active learning, making classroom instruction less effective.

2.Contextual Challenges in Madhesh Province: In context of cultural and linguistic diversity, socio-economic conditions, and deteriorating quality of student learning, what types of teacher education diploma programs should Madhesh University design?

- Large class sizes significantly hinder effective classroom management and limit teachers' ability to apply appropriate and interactive teaching methodologies.
- Despite cultural and linguistic diversity among students, it has not emerged as a major barrier to the transfer of knowledge and skills in the classroom.
- The primary factors contributing to the deterioration of learning quality include irregular student attendance, poverty that compels children to engage in labour at an early age and limited parental awareness and educational support at home.
- A well-designed Diploma program can be strategically developed to address these challenges by strengthening teachers' classroom management skills, promoting inclusive and context-responsive pedagogy, enhancing community and parental engagement strategies, and equipping teachers to respond effectively to socio-economic barriers affecting student learning.

3.Essential Competencies for Future Teachers: Looking ahead at the evolving educational landscape in Nepal, what core competencies (pedagogical, didactic, technological, socio-emotional) should be prioritized in designing diploma teacher education curriculum to ensure graduates are effective and relevant in 21st-century classrooms teaching management?

- Developed diploma program should strengthen teachers' knowledge, skills, and professional attitudes through the application of effective pedagogical techniques, while integrating innovation and appropriate educational technologies to enhance teaching and learning practices.
- It should prioritize inclusive approaches that address students' diverse economic, social, and emotional needs, ensuring equitable learning opportunities for all.
- The course should promote child-friendly, disability-inclusive, and resource-responsive classroom practices that create safe, supportive, and engaging learning environments.
- Additionally, the curriculum should incorporate components on counselling and guidance to enable teachers to respond to the diverse needs of children, thereby contributing to reduced dropout rates and improved regular attendance in classrooms.

4.Practical Training and Field Experience: How can the teacher education curriculum better integrate practical teaching experience and field-based learning to bridge the gap between theoretical knowledge and classroom reality? What models or approaches have you seen working effectively?

- The pre-primary curriculum model should emphasize practical, play-based activities delivered through an integrated approach to support holistic child development.
- For lower secondary and secondary teachers, the curriculum should be designed with a strong focus on technology integration and innovation, ensuring practical application in classroom settings.
- The curriculum should be aligned with the prevailing social and economic context, enabling the diploma program to contribute to the development of income-generating skills and community empowerment.
- The course assessment system should prioritize practical-based evaluation methods to ensure the demonstration of applied knowledge, pedagogical competence, and practice-based teaching skills.

5.Systemic Support and Implementation: What support mechanisms including resources and policy provisions are necessary to successfully implement an improved teacher education diploma program and ensure its sustainability at Madhesh University?

- Existing policies are adequate and well-structured; however, challenges persist in their effective implementation and practical application.
- For long-term sustainability, societal attitudes towards the teaching profession must be positively transformed, recognizing teachers as key drivers of quality education and social development.
- A sustainable monitoring mechanism should be established at Ward and Local Government (LG) levels to oversee day-to-day classroom practices. This mechanism should conduct regular monitoring, provide onsite feedback, and recommend immediate corrective measures to support continuous improvement.
- A culturally responsive diploma program under Madhesh University can further strengthen sustainability by aligning teacher education with the local context, needs, and aspirations of Madhesh Province.

Annex IV: Expert Group Consultation Workshop for Plenary Session (1)

Plenary session (collection of meta cards) with name

Topic-Practice in existing teaching content and techniques including student evaluation system.

Name of Participants	Provided Notes
Santosh Kr. Karn	• Contents should focus on life skills, character building. • Emphasis should be given on practical activities. • 21st century skills-critical thinking, creativity, digital literacy needed. • Diagnostic and formative assessment, summative is only valued.
Rambabu Baitha	• Lack of concept learning, learning by doing, model drawing. • Activity based and skill-based problem solving should be focused. • Competency-based evaluation required.
Dr. Arbind Shrestha	• More theory based, less simulation and illustration. • Less interaction and group discussion. • Less quality more quantity-based evaluation. • Misconception of evaluation among teachers. • No 360-degree evaluation process.
Nandakishor Prasad	• Activity based and practical knowledge should be included. • Use of ICT. • Homework/ Classwork should be checked.
Rajan Bhandari	• More illustration related to daily life should be added. • Use of technology to make practical. • Practical and project work be focused.
Mohan Pd. Yadav	• More practical rather than theoretical contents be included. • Contents revised according to present demand. • Demonstration method rather than lecture method. • Use ICT for better learning. • Continuous evaluation rather than annual evaluation. • Allow students to create some projects for wider knowledge.
Ranita Gupta	• Present social context is considered while teaching. • Understanding social norms, values, ethics needs to be considered. • Focus on motivation related discipline.
A.K. Mishra	• Demonstrative and active learning method is needed. • Expressive not impressive. • Less critical thinking. • Word problems presented in real situation. • Sustainable learning management principles. • No application of knowledge in practice. • Low questioning ability in teachers.
Padma Poudel	• Lack of life related skill education. • Character formation needs to be focused. • Lack of use of ICT in activity-based learning. • Teacher acquired knowledge needs to be practical.
Prem Shankar Shrestha	• More theoretical less practical. • Less community work/ project work. • Less used of ICT method. • Collaborative learning method should be focused.

	• Lack of field trip, scaffolding, flipped method. • Use multiple means for internal evaluation rather than limited means.
T.B. Poudel	• Needs improvement in practical skills. • Teaching is not related to practice in life. • Practical evaluation is nominal.
Binay Mishra	• More theoretical and less conceptual knowledge. • Context, specific and practical aspect lacking. • Teacher-centered lecture method. • Lack of activity based practical pedagogy. • Narrow scope of assessment for broader learning outcomes.
Tabrej Ahmad	• Contents should be related with livelihood and modern technology. • Inclusive teaching methods, student centered approaches be employed. • Wider use of formative assessment needed.
Upendra Pandit	• Technology based discussion and project methods needs to be included. • Not only summative evaluation but also formative evaluation needs to be focused.
Jiya Lal Gupta	• Interest and ability of student is considered in teaching. • Focus on classroom interaction among students and teacher. • Make learning environment interesting.

Annex IV: Expert Group Consultation Workshop for Group Discussion (2)

Group Discussion

Topic-Competence Gaps in content knowledge, pedagogy and evaluation techniques.

Group 1 Disciplinary content knowledge	Provided Notes
Group members name – T.B. Poudel Nandakishor prasad Jiya Lal Gupta Padma Poudel Tabrej Ahamad	• Not related to life skills. • Lack of training. • Need based content is required. • Life related skills are needed. • Maintain horizontal and vertical gaps.
Group 2 Pedagogy-Teaching and classroom management	Provided Notes
Group members name – Mohan prasad Yadav Rambabu Baitha Rajan Bhandari Binay Mishra Anshul	• Lack of use of ICT. • Lack of activity-based learning. • Lack of skilled based teaching learning process. • Lack of contextual pedagogy. • Lack of well-trained ICT teachers. • Need based teaching is required. • Focus should be given on critical thinking, creativity and digital literacy.
Group 3 Student evaluation techniques	Provided Notes

Group members name – Ranita Gupta Santosh kr. Karna Prem Shankar Shrestha Upendra pandit Sumit Kushwaha	• Formative assessment not properly used. • Home Assignment not educate. • Project work only for assessment. • Use of non-testing tools. • Formation of portfolios. • Flipped learning evaluation. • Rubrics table usage.