

**Revisiting the Pre-service
Teacher Education
Curricula of Faculty of
Education, Tribhuvan
University, Nepal**

A Need Analysis Report

**Office of the Dean
Faculty of Education, Tribhuvan
University, Nepal**

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Tribhuvan University, Nepal**

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Submitted to:
Office of the Dean
Faculty of Education, Tribhuvan University
Kathmandu

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Message from the Dean

The Faculty of Education (FoE), Tribhuvan University, is committed to serving the nation by producing future teachers equipped with the most-needed and contextually relevant knowledge and skills for the teaching profession. To achieve this, there is a need to update the current curriculum in line with the demands of the market and align it with the national and international context of education. Education is a living process that evolves along with the way our society evolves. Considering the sweeping changes in knowledge, skills, and attitudes regarding what and how we teach, FoE aims to equip the teacher educators working within the faculty with the necessary knowledge and skills for innovative, and effective pedagogy. This needs assessment study was conducted with this objective, primarily to identify key areas that need revision, and the curricular priorities that are demanded by the current market.

Our current graduates are the educational leaders of tomorrow, as they will serve in the educational sectors such as educational administration, policymaking, teaching, school leadership and program development for the future generation etc. The Faculty of Education, therefore, in collaboration with several national and international governmental and non-governmental organizations, has been working toward revising the existing curricula at the Bachelor's and Master's levels. This study has identified the gaps in the currently implemented curricula, explored stakeholders' perspectives and experiences, and made several recommendations for revising the curriculum.

As the Dean of the Faculty of Education, I believe in evidence-based policymaking. For this purpose, unlike past practices, the curriculum revision at Bachelor's level has been guided by the research findings. During this research, the research team worked closely with FoE, Tribhuvan University, Ministry of Education, Science and Technology (MOEST) and its line agencies such as Center for Education and Human Resource Development (CEHRD), Curriculum Development Center, Education Review Office (ERO), Teacher Service Commission (TSC), National Examination Board (NEB), University Grants Commission (UGC) and Technical Support Cooperation to the School Education Sector (TECSES), a teacher education project in Nepal supported by Finland and European Union. This multisectoral engagement represents novel practices in Nepal for generating evidence to inform curriculum development process. It has not only strengthened the relationship between FoE, TU, and the Government, but also has developed closer collaboration to improve the quality of education in Nepal. As one of the leading institutions producing teaching human resources in Nepal, FoE feels proud of this work. As the Dean, I would like to congratulate the team for their rigor in carrying out this study. I would also like to express my sincere gratitude to MoEST and TECSES for their support and collaboration. I am confident that the recommendations presented in this report will serve as cornerstones for the government and universities in enhancing the quality of education.

Prof. Bed Raj Acharya, PhD

Dean, Faculty of Education, Tribhuvan University, Nepal.

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We would like to express our sincere gratitude to the Dean's Office, Faculty of Education (FoE), Tribhuvan University, for providing us with the valuable opportunity to carry out this need assessment research. Prof. Dr. Bed Raj Acharya, Dean of FoE deserves special gratitude for his unwavering support, encouragement and initiative for this study. This study focused on the needs for the revision of the Bachelor's Degree in Education (B.Ed.) curricula enacted under the FoE, Tribhuvan University. We are very thankful for the trust the faculty provided to us to undertake this imperative work for improving quality of pre-service teacher education in the FoE. We would also like to extend our appreciation to the Subject Committees of the five selected subjects that included Nepali Language, English and Other Foreign Languages, Mathematics and ICT, Science and Social Studies education for auditing B. Ed. level curricula and providing credible and authentic information essential for identifying strengths and gaps within the existing programs. Their meaningful insights, constructive feedback and recommendations have enriched the research results and contributed significantly to building a strong foundation for revising and improving teacher education curricula at B.Ed. level in FoE, TU. We are also thankful to all Assistant Deans and administrative personnel of the Dean's Office, FoE, TU.

We are also thankful to the Ministry of Education, Science and Technology (MoEST) for unwavering support in this initiative in strengthening teacher education curricula. Furthermore, we would like to express our sincere gratitude to the Technical Support Cooperation to the School Education Sector (TECSES) Project for its financial and logistic support throughout the research process. We would also want to extend our sincere thanks to Mrs. Eija-Ritta Kinnunen, Chief Technical Advisor, for her continuous support and guidance throughout the research. We are equally grateful to Dr. Prem Krishna Aryal, Dr. Tuovi Leppanen, and Dr. Marko van den Berg for their invaluable academic support, without which this work would not have taken its present shape. The team also extends heartfelt thanks to Mr. Padam Tamrakar for his dedicated logistical support, which greatly contributed to the successful completion of this research.

Additionally, we would also like to extend our sincere thanks to all teacher educators from the FoE, students and informants from MOEST, CEHRD, CDC, TSC, NEB, UGC, Embassy of Finland, European Union, JICA, UNESCO, World Bank, and other partner organizations who contributed to this study by providing their time, insights and experiences to give proper direction to this study. Their valuable information and constructive suggestions played an imperative role in identifying the needs and priorities for revising B.Ed. level curricula, implemented under the FoE, TU for more than a decade. We would also like to express our appreciation to all authors and scholars whose research works have been consulted while preparing this report. Their scholarly contributions provided us with a deeper understanding of teacher education and provided methodological guidance for carrying out this mixed-method research.

Research Team
December 2025

Executive Summary

The education policies in Nepal have consistently mentioned that universities should play crucial role in preparing competent teachers for quality education. The policies have also pointed out the need for revisiting and revising Bachelor' and Master's (B.Ed. and M.Ed.) courses run by the universities as per the changing needs and educational conditions (MoEST, 2022). While the government has implemented competency-based curriculum at school education, the teacher education programmes of the universities have yet to revisit their teacher preparation programs to align them with the competencies required for the prospective to deal with the curriculum for school education. Consequently, a huge gap has been realized between the pre-service teacher education and the school education concerning the implementation of curriculum at schools. Therefore, the present mixed method need assessment study draws on the data derived from multiple stakeholders and sources including policy makers, policy actors, teacher educators and students, and unfolds the needs of revision of the curriculum for Bachelor's Degree in Education.

The primary aim of this study was to explore the needs for the revision of the B.Ed. curriculum implemented in Faculty of Education, Tribhuvan University. The objectives within this broader aim were to analyze current approach and structure of school level curriculum, review pre-service teacher education curricula, identify the needs for the revision and suggest some recommendations for the future pre-service teacher education to be implemented in Faculty of Education, Tribhuvan University. To attain these objectives, the following research questions were framed.

- What is the approach of the school level curriculum in Nepal?
- How have the competencies been defined and incorporated in several countries in their teacher education and what can FOE learn from their practices?
- What can be the overall direction of curriculum development in pre-service teacher education program to align with the school education and teachers' professional development programs in Nepal?
- What will be the overall structure of B.Ed. curriculum in FOE?
- How can we revise the current B.Ed. curriculum and what components need to be revised?

This study was guided by the mixed-methods study, that involved collection of data from multiple sources of data collection. It was undertaken at different successive stages. First, Nepal's education policies, school and B.Ed. level curricula and international practices were

explored and reviewed. Based on the review, tools such as curriculum audit form, questionnaire, interview protocol, focus group guidelines were developed for collecting information from the multiple stakeholders. The audit forms were shared with Chairpersons of the Subject Committees (Nepali, English, Mathematics, Science and Social Studies in Education), received feedback. They were checked for validated through interaction with the Standing Committee. The survey tools were discussed with a number experts from the FOE, and validated before sending to the public online. The stakeholders were interviewed, FGDs were conducted with relevant student groups and workshops were organized. One workshop with the chair and members of the subject committees of the aforementioned five subjects and two national level workshops involving the stakeholders like MoEST and its governing entities at Province and Local levels were organized that enabled the research team to identify their key concerns. The research team collected their observations and views for revisiting and revising B.Ed. curricula. The analysis of the data collected from the multiple sources and multiple stakeholders generated several findings that justify the needs of revisiting and revising teacher education curricula. Guided by the findings, this study proposed a framework for revisiting and revising B.Ed. program structure and curricula.

Key Findings

The study reports the following key findings:

- All stakeholders including the faculty members and students stressed that Bachelor level curriculum needs revisiting and revising as per the changing contexts of needs of the current social, cultural and market needs.
- The analysis also reveals that the current curricula have overemphasized on lower-order cognitive skills, ranging from 52% to 72%, particularly knowledge and comprehension levels, and inadequate emphasis on the application and higher-order cognitive development. It indicates a need a revising teacher education curriculum stressing higher order abilities like application, creativity, judgement and evaluation is desirable.
- There is a weak coordination between the line Education Ministry and its line agencies to collectively inform and guide teacher education programs. A stronger and sustainable coordination is required to establish consistent and high-quality pre-service teacher education program for Nepal, so that all universities can work in collaboration, and develop more competitive programs in the future.
- The currently practised curriculum has a weak alignment between course objectives, course contents, instructional techniques for pedagogic delivery and assessment

practices. The curriculum revision needs to establish a harmony among these components.

- Concerns about content overlapping in teacher education courses were raised. The revision needs to remove less useful and overlapping contents to accommodate new and relevant contents in the future curriculum.
- The practical examinations conducted as part of the courses in different subject areas are fundamentally ineffective due to the practical challenges and pitfalls in the implementation of the activities. There is a great need for rethinking the current model of conducting practical exams.
- The assessment modalities are still monolithic and paper-pencil-based tests. The internal assignments that have been recommended are not implemented well. The curriculum needs to be revised addressing the diverse modalities of student assessment. The competency-based tests need to be designed and internal assessment should also focus on the developing competencies of the pre-service teachers.
- The course that can develop functional and professional skills on prospective teachers were deemed necessary in place of the theory-driven, content-loaded ones.
- Most participants thought that the technology integration has been very generic and the ICT has been taught as a separate subject which is fundamentally a fault line in developing teachers' competencies in using technologies effectively.
- The B.Ed. program is to be developed in such a way that the market needs at the national and international level are met, and the graduates are saleable in the changing future markets.
- A fundamental shift from the conventional content-focused curriculum to the competency-based curriculum was necessary.
- A departure from currently practised single-subject specialization to double-subject specialization was highly emphasized.
- There was a widespread emphasis on designing the B.Ed. program on a semester system.

Key Recommendations

The study makes the following key recommendations:

- Move the current annual system implemented in B.Ed. to a semester-based system.
- Develop and implement B.Ed. curriculum with a dual-specialization model, where students will graduate with two major subjects.

- The B.Ed. program should be developed from a competency-based approach that can develop specific competencies required for the prospective teachers in Nepal and in the world. The competencies might incorporate transversal competencies, content-specific competencies, pedagogy competency, social competency, technological competency, life-skill competency and cultural competency.
- Develop a broader national framework for National Standards for Teachers that can guide both pre-service teacher education and in-service teacher education, for addressing the common goal of improvement of quality education in Nepal.
- Strengthen the collaboration between the Ministry agencies and universities to work for the shared future to improve Nepal's quality education.
- Support universities for developing the teacher educators' capacities through continuous professional development programs to enable them to effectively implement the competency-based curriculum to be implemented in semester-based system.
- Invest in major infrastructure needs for the universities and teacher training institutions to implement the curricula.

Chapter I: Introduction

The Government of Nepal prioritizes the promotion of quality education in all levels, ranging from the pre-school level to the university. For instance, the Constitution of Nepal-2015 considers quality education as the fundamental right of all citizens. Commitment for this has been expressed in several policy documents including the Education for All National Plan of Action (2001-2015), School Sector Reform Plan [SSRP] 2009-2016; School Sector Development Plan [SSDP] 2016-2023, School Education Sector Plan [SESP] 2022/23-31/32 have all aimed to produce quality human resources through reforming school and higher education sector in Nepal. Teachers as key actors of the policy implementation process play crucial role in advancing the agenda of quality education (MoEST, 2019). Production of competent prospective teachers and their continuous professional development are the key concerns raised in virtually all reform initiatives in education in Nepal. National Education Policy [NEP], 2019; the Fifteenth Plan, 2019; and Sustainable Development Goal-Nepal National Framework [SDG-NNF] 2019, among others, have defined the aforementioned aspects as the crucial aspects to transform to meet the national goals of education in Nepal.

The formal education across the world today is confronted by a rapid and unprecedented expansion of modern technologies and innovations. Under the influence of such technologies and innovations, teacher education programmes developed and implemented anywhere across the world are expected to address multiple challenges and issues concerning curriculum and contents, pedagogy and technology, learners and contexts, communication and collaboration, and equity and inclusion some of which are also the key skills required for the 21st century. The SSDP 2016-2023 pointed out “insufficiently prepared teachers and the lack of adequate and appropriate materials” (p. 9) as the pertinent factors behind the low quality of the secondary level education in Nepal. This indicated that there is a dire need to make intervention in teacher preparation courses in developing quality content and pedagogical skills of the teachers.

Despite consistent efforts to improve the quality of education by providing several professional development initiatives to in-service teachers, the educational achievement of the students has not been satisfactory enough to meet the market needs and aspirations of the consumer society. At the same time, while several universities have been providing pre-service teacher education programs, the quality and availability of the teaching workforce have not reached the expected level of competence as well, creating a landscape of teachers with inadequate skills in effective teaching. Nepal Education Sector Analysis (2017) reported ‘non-performance’ as the problem in teachers’ professional development, indicating how the pre-

service and in-service teacher education programs be made more efficient than before to equip teachers with the most recent knowledge and skills. Therefore, there is a need to bridge the knowledge and skill gaps through collaborative initiatives for revising teacher education curricula and implementation practices to prepare teachers who can meet the rapidly changing needs of the learners in this globalized world. In the sections below, we present a synopsis of recent policies and plans in place and their priorities in relation to teacher preparation.

The SSRP (2009-2015/16) mandated professional training for teachers, and that training was to be aligned with the Teacher Competency Framework issued in 2015. The framework was referred to for the preparation of teacher professional development package. Similarly, the School Sector Development Plan (2016-2022) and the School Education Sector Plan (2022/23-2031/32) pointed out the need for revisiting and reforming pre-service teacher education programs delivered by the universities. Similarly, the National Education Policy (2019) aims to prepare more creative, productive, competitive, skilful, and technology-skilled human resources granting at least free education at secondary level, and access to all in higher education. The policy provisioned mandatory Teacher Competency Test for teachers involved in teaching at school education, technical and vocational education, and higher education. The test needs to be implemented to assess the current teachers' professional competency working in school education. The same policy also stressed on the development of national standards to guide the selection, fulfilment, development and involvement of the teachers to be appointed for the institutional schools. The following were the provisions made regarding the training of the teachers:

- Intensive teacher refreshment training in every two years
- Customized training, workshop, seminar, excursion, reflection, teacher network, collaborative research, teacher mentoring, coaching
- Teachers should be capacitated through face-to-face, school-based, blended and online/virtual modes.

This policy also made important updates in the instructional methodology that puts inquiry-based learning, effective communication, appropriateness and inclusion as major concerns in educational reform for preparing teachers. Despite these commitments, the inclusion element has yet to get full effect in school-level practice.

Likewise, the National Curriculum Framework- 2019 aimed at equipping future teachers with a forward-looking perspective and should have a broader understanding of the geographical, social, and cultural diversity of Nepal to preserve long rooted values and heritage. This framework stressed on preparation of teachers with knowledge about child psychology,

classroom diversity, inclusive educational practices, collaborative instructional techniques and various methods of assessment so that they can work for the holistic development of children by promoting thinking skills, communication skills, collaborative skills, critical thinking, good citizenship, and global awareness. In this context, the framework idealized competency-based curriculum for the school education to ensure that all children develop knowledge, skills and attitudes in meeting the curricular goals.

In a similar tone, the SESP continued to emphasise the previous priorities of development of competencies of teachers through teacher training. The following aspects were suggested in relation to the development of teachers and enhancement of quality education.

- Update the teacher competencies framework and coordinate with universities for the development and implementation of a teacher preparation and pre-service training programs.
- Develop and implement a comprehensive teacher professional development system, establish a teacher support system, and streamline and system in order to improve the motivation and accountability of teachers.
- Teachers' competence and motivation levels are improved, and teaching and learning takes place from competent and motivated teachers. Overall, it is essential to develop professional attitude, diligence, and accountability in teachers by enhancing attraction to and respect for the education profession as well as improving teacher-related policy and overall teacher management.
- Restructure the teacher preparation, development and support system to supply qualified and competent teachers as per standards and meet requirements for subject specific teachers in science and mathematics.
- Design teacher career development system and conduct teacher training for technical streams.

We have learnt through our peripheral involvement in several conversations and meetings with key partners that the currently operationalized teacher competency framework is under revision, and similar efforts have also been made by several universities in revising their pre-service teacher education curricula, to align with the national efforts in enhancing the quality of education and teacher training. These efforts all reflect the directions set out in the SESP. This plan has clearly identified the need for revisiting and revising Bachelor's and Master's (B.Ed. and M.Ed.) courses run by the universities as per the changing social needs and educational conditions (MoEST, 2022). However, what was missing was the specific evidence of such needs to guide the future of teacher education curricula. Realizing this

concern, the Faculty of Education in Tribhuvan University (TU) in collaboration with Technical Support Cooperation to School Education Sector (TECSES) made an effort to assess the needs for curriculum revision of its Bachelor level. Therefore, the present need assessment study was carried out through comprehensive consultation with key multiple stakeholders (e.g., policy makers from the MOEST, university officials, policy actors, teacher educators, educationists, pre-service program students, school teachers, head teachers, and representatives from development partners) from education sector in Nepal, to understand the realistic needs in relation to teacher education curricula. Although the findings of this study can be generalizable to the contexts of several new universities of Nepal, this study exclusively focused on micro-level curricular policy and planning issues of the Faculty of Education (FOE) of Tribhuvan University.

Research Questions

This study had the following research questions:

- What is the approach of the school level curriculum in Nepal?
- How have the competencies been defined and incorporated in several countries in their teacher education and what can FOE learn from their practices?
- What can be the overall direction of curriculum development in pre-service teacher education program to align with the school education and teachers' professional development programs in Nepal?
- What can be the future B.Ed. program curriculum structure in FOE?

Some of these research questions have been addressed through the review of the policies, curricula and practices reported in the immediate sections of this report while some others have been responded in the results section later.

Competency-based Curriculum

There is a global focus on competency-based approach of curriculum development and implementation and Nepal has already considered this approach in school level curriculum. This concern responds to the first research question mentioned in this study. Competency refers to the knowledge, skills, behaviour, and attitudes of an individual, which encompasses different 'soft skills' such as adaptability and problem-solving (Morel & Griffiths, 2018). Competency-based Curriculum (CBC) focuses on students' mastery of specific competencies required for their professional career, shifting from traditional time-based, content-driven learning

engagement to student-centred learning in which students get mastery over essential skills required for their life (Lin & Zheng, 2021). This involves personalized learning paths, flexible pacing, and proficiency-based grading in which what skills and knowledge the students achieve is more important than what scores they secured (Wu & Tan, 2021). Competencies intended by a curriculum may vary across countries and contexts. Nevertheless, core competencies include self-management, communication, community engagement, creative and critical thinking, knowledge-information processing, and aesthetic-emotional intelligence to develop capable individuals for successful personal and social life (Kim, 2021). Unlike the ‘one-size-fits-all’ approach of traditional curriculum, CBC promotes a deeper understanding and application of knowledge, values, and skills for real-world success by tailoring instruction to individual needs. Table 1 illustrates instructional practices, learning resources, assessment procedures, human resources, and classroom setting necessary for the effective implementation of CBC.

Table 1

Key Characteristics of Competency-based Curriculum

Instructional practices	<ul style="list-style-type: none"> - Flexible and personalize instruction to cater individual learning needs. - Instructional activities are guided by small-group instruction, one-to-one support, online resources, and real-world experiences. - Differentiated instruction is practiced on a routine basis. - Results of formative assessment determine the supports to be provided to learners. - Level of challenge is adjusted to engage learners in active learning.
Learning resources	<ul style="list-style-type: none"> - Technology integration is crucial for effective implementation of the curriculum. - Learning Management Systems (LMS) and various educational technologies facilitate personalized learning, enhance the scalability and accessibility of CBC. - Real-world connections through guest speakers, field trips, and collaborative projects. - Students are empowered to take ownership of their learning.

Assessment procedures	<ul style="list-style-type: none"> - Depends not only on paper and pencil tests. - Focuses on performance-based assessment, project, portfolios, internship, etc., to appraise students' mastery. - Prioritizes authentic assessment in which students apply their knowledge, values, and skills in real-world contexts. - Evaluation process takes place in binary, 'competent' or 'not yet competent', by utilizing criterion-referenced standards. - Integrates both formative and summative evaluation by focusing on ongoing feedback and support.
Human resources	<ul style="list-style-type: none"> - Expected to be expert, coach, facilitator, evaluator, researcher, feedback provider, and manager instead of information imposer. - Highly adaptable, student-centred and proficient in using both formative and summative assessments. - Able to practice differentiated instruction on a routine basis. - Able to create conducive and supportive learning environment working in collaboration with administrators and school leaders.
Classroom setting	<ul style="list-style-type: none"> - Traditional classroom needs to be transformed into a dynamic and flexible learning environment. - Emphasizes personalized learning by allowing students to progress at their own pace. - Promotes student-centred learning, foster a collaborative culture in learning, and prioritize safety, trust, and mutual relationships. - Fosters a culture of risk-taking and learning from mistakes. - Welcoming setup of the classroom for interaction and collaboration through group activities.

Competencies for Teachers

Effective implementation of the CBC and its success is highly demanding. Producing competent human resource for teaching and upskilling the currently working teachers are the important concerns raised in education policies in Nepal. To do so, the Government of Nepal, Ministry of Education, Science and Technology in 2015 formulated Teacher Competency Framework that outlined eight different areas of the teacher competencies. They are:

1. Content knowledge
2. Pedagogical knowledge
3. Knowledge about children/learners

4. Learning environment and classroom management
5. Communication and collaboration
6. Continuous learning and professional development
7. Legal bases and professional Ethics
8. Information and communication technology

These competencies expected to be developed in all teachers are the guiding criteria for development of professional development programs for teachers. Although an updated and detailed breakdown of these competencies might be desirable, these can be taken as the core guidelines for the development and implementation of the pre-service and in-service teacher education programs. The in-service teacher training aims at enabling the teachers to develop knowledge and skills in these areas and the teacher training package has also been developed for in-service teachers. Although in several ways, these competencies have implicitly been implied in pre-service teacher education programs, the analysis of the teacher education curricula prepared for the Bachelor's degree showed that a coherent policy framework to ensure that pre-service teacher education and in-service teacher education align with each other. In many subjects in the pre-service education, the content areas cover conceptual ideas rather than their application in the classroom instruction. Specific focus is to be provided towards educating the prospective teachers to engage in designing and implementing effective pedagogical strategies. The current study that analysed the Bachelor curriculum concluded that some contents such as 'Ethical and professional responsibilities' included in the teacher license examination have not been explicitly taught as a part of the curriculum in the pre-service teacher education. The review of the B.Ed. curriculum also showed that the competency-based curriculum has not yet been developed at universities. While the school curriculum has been developed from the competency-based approach, the teacher preparation curricula remain highly content-based. This and several other studies show that the prospective teachers have limited understanding of the premises and practices of competency-based curriculum (CDC, 2025). Further detail about the currently practiced B.Ed. curriculum is provided below.

Pre-service teacher education: Brief review of Bachelor of Education program at Faculty of Education

The Faculty of Education at Tribhuvan University has implemented the four-year Bachelor of Education (B.Ed.) program with one major and one minor subject specialization starting from 2015. The curriculum has been organized in five cluster areas namely Communication Skills,

Professional Core Areas, Specialization Major Courses, Specialization Minor Courses, and Teaching Practice/Practicum. The course categories and their weightage have been outlined in Table 2.

Table 2

4-Year B.Ed. Course Structure (Annual System)

Group of courses	No. of courses	Full marks	First year	Second year	Third year	Fourth year
Group A	2	200	200			
Group B	4	400	100	100	100	100
Group C	10	1000	200	300	300	200
Group D	5	500	100	200	100	100
Group E	1	100				100
Total	22	2200	600	600	500	500

The students have to complete 22 courses to get through the 4-year B.Ed. program. Both Nepali and English language curricula have been encompassed within the ‘Communication Skill’ cluster to develop functional language knowledge and skills within all prospective teachers pursuing Bachelor’s Degree in Education. Various core courses have also been provisioned in B.Ed. level as professional courses to develop philosophical, psychological, sociological, historical, research, ICT education, inclusive approaches to education, assessment principles and techniques and comparative foundations in education. The pre-service teacher education courses are loaded with theoretical concepts which to a large extent force the teachers adopt conventional teacher-centred methods such as lecture, explanation, and demonstration making the overall instructional process teacher-fronted with limited student-engagement. The applied part of the pre-service course becomes weak if the trend continues to exist. There is a need to establish a strong link between the program and the world of work. The world of work for the prospective graduates is the education sector including primarily educational professionals and teaching workforce. For teaching workforce, the competencies should be in line with the teacher recruitment standards set by Teacher Service Commission (TSC) of Nepal and the entry requirement for the education sector that employs professionals working in the educational as well as educational governance sectors.

As there is a huge expansion of the job market for the education graduates, there is a need to diversify the curriculum and develop emerging social, professional and individual skills required for prospective teachers.

Professional Development Needs of Teachers in Nepal

The current policy provisions highlight that teachers are provided with two types of training: Teacher professional development training (TPD) and Customized training approved by CEHRD and conducted by the provincial training centres. These trainings are conducted based on the training curriculum approved by the CEHRD. A recent national study explored the perspectives and practices of in-service teacher education and recommended several areas needing improvement (Borg & Poudel, 2024).

- Defining specific job requirements for teachers and developing skills for the same
- Training teachers to develop professional skills and attitudes for their motivation
- Teachers needed skills more than knowledge input.
- Recontextualization of the current professional development curriculum.
- Teachers needed support through monitoring, observation, model teaching and feedback to refine their current practices.
- A regular professional development mechanism is to be developed for teachers to upgrade their skills as per the changing educational contexts.

These development needs for teachers are also closely linked with what they have learnt in the pre-service teacher preparation programs. These needs also show that further intervention needed in the pre-service teacher education curricula that develops these skills and attributes on teachers. The above-mentioned research also recommended for development and implementation of a comprehensive teacher professional development system that can establish a teacher support system, and streamline the system to improve their motivation and accountability. In this regard, the concerned stakeholders should develop a joint plan for both preservice and in-service (TPD and Teacher Induction) teacher education programs.

In universities that have offered pre-service teacher education, the bachelor programs have incorporated knowledge and skills that are more generic for general school administration and pedagogy. Specific competencies that all current and prospective teachers need are to be developed through the courses so that teachers can play multiple roles while in the schools beside their roles as subject-content instructors.

Further to this is the concern about the professional development support available for working teachers. In this study, the curricula of several levels of school education for training in-service teachers were analysed. For instance, the certification training curriculum for teachers teaching English at grades 11-12 included the following competencies (CEHRD, 2025), which we state it here as an example case.

- Demonstrate an understanding of the curriculum and textbook and use them in classroom instructions.
- Design and implement a variety of activities for teaching language skills and aspects.
- Demonstrate an understanding of the various types of literary texts, design lessons and implement them in the classroom.
- Demonstrate understanding of the assessment system and develop test items for testing language.
- Search, select, collect, and design useful materials for teaching English and use them.
- Plan lessons and activities for managing the classroom and ensuring learning to equip secondary-level (Grade 11 and 12) English teachers with the content and pedagogical knowledge and skills required to effectively teach the contents given in the curriculum.
- Adopt innovative teaching strategies and activities and implement them in the classroom.
- Explore and adopt strategies for professional development to address classroom challenges and promote learning.
- Develop skills to conduct research and design projects, including lesson studies.

The analysis of the English language curriculum taught at the bachelor level showed that the current curriculum is based on learning objectives and learning outcomes. However, it is not clear what specific contents were taught why to achieve what ‘specific’ competencies. We do still lack evidence of the impact of these training curricula in enhancing the required competencies on the teachers to handle the designated subject curricula.

Teacher selection, development and preparation curricula: A brief review

We reviewed the secondary level teacher license curriculum prepared and implemented by TSC as well as the pre-service teacher education curricula of FOE, TU. The brief review has been presented here for a reference.

Secondary Teacher License Curriculum

This review also analysed the curriculum of teacher license exam and compared it with the pre-service teacher education. Some key areas of the curriculum (both core and specific) focus are as follows.

- Emphasis on pedagogical knowledge and skills
- Holistic development of future teachers
- Integration of educational theories and practices
- Knowledge of diverse learning settings to accommodate students' needs
- Curriculum design and assessment literacy
- Ethical and professional responsibilities
- Deeper understanding of various education policies and programs, acts, rules and regulations, governance and leadership, etc.

Subject-specific curriculum in TSC and pre-service teacher education

Here, we briefly present the core priorities set in TSC curricula and their relation with pre-service teacher education (i.e., B.Ed. program at TU). These are again reference examples of the five core subject areas, i.e., English, Nepali, Science and Technology, Mathematics and Social Studies.

English

The Teacher Service Commission English Curriculum for Secondary Level (2076 BS) has been organized into two sections:

- Core competencies expected from English teachers by emphasizing on the practical application of teaching and testing methodologies, and ICT tools, research, professional ethical standards, etc.
- Contents related to developing and appraising listening, speaking, reading, and writing skills, understanding of language functions grammar, pronunciation, punctuation, and literary texts.

The curriculum also underscores the need for teachers to be skilled practitioners to use curriculum, teacher's guide, textbooks, and other supplementary materials. But Section B of the curriculum expects deeper understanding of theories of language learning and various

instructional approaches with their applications in English language teaching. It also encompasses literature for language development to enable teachers to explore and use literature to enhance language acquisition of students. The curriculum emphasizes the importance of professional development by encouraging teachers to engage in continuous learning, maintaining ethical standards in the teaching profession, and building collaborative networks. The review of the B.Ed. curriculum shows that more systematic integration of these elements of teachers' professional life is desirable.

Nepali

The Nepali language curriculum of the TSC for secondary level aims to measure the prospective teachers' knowledge of phonology (वर्ण, लिपि, अक्षर), morphology (शब्द निर्माण, रूपायन, व्युत्पादन) and syntax (वाक्य संरचना, पदक्रम, कारक) and their application in language use situations. Alongside of these elements, the curriculum also focuses on pedagogical content knowledge, research skills, inclusive teaching methods, language assessment, and language policy issues. Although the pre-service teacher education provides a foundation for these ideas sporadically, more systematic orientation and instruction is needed to enable students to explore and debate on the issues-based topics. More specifically, the pre-service curricula should focus on effective and innovative language teaching strategies as per the sociolinguistic context of Nepal. Furthermore, the inclusion of research and comparative study (अनुसन्धान, तुलनात्मक अध्ययन) suggests that future teachers should be trained to conduct action research and critically analyse curricula and textbooks for fostering a reflective and evidence-based approach to teaching.

Science and Technology

The TSC curriculum expects the science and technology teachers possess following knowledge and skills:

- A profound understanding of contents from core scientific disciplines such as Physics, Geology, Astronomy, Chemistry, and Biology
- Knowledge of fundamental concepts like measurement and atomic structure, thermodynamics, organic chemistry, and genetics from science teachers.
- Skills in curriculum analysis, development and use of teaching materials, evaluation and testing, and various teaching-learning approaches.

This implies that pre-service courses should not only deliver excessive disciplinary knowledge but also equip future teachers with the ability to effectively translate this knowledge

into engaging and effective classroom instruction. The curriculum also emphasizes on developing practical skills in designing experimental activities, following lab safely, etc. The curriculum of the pre-service teacher education fundamentally covers these aspects, however, given the contexts of teaching and learning and lab infrastructure, it is unclear how effectively and adequately the science teachers have developed skills applying the scientific concepts as per the curricular provisions.

Mathematics

The mathematics curriculum largely encompasses theoretical concepts and contents such as set theory, algebra, geometry, pre-calculus, statistics, calculus, and mechanics. These concepts have been taught from theoretical perspectives and the curriculum provides less emphasis on the application part of these, which might lead to higher level understanding of the concepts with low level link to their actual application. Hence, preservice teacher preparation curriculum needs the contents to be tuned to problem-solving tasks. Therefore, teacher preparation course should offer sufficient practice and ample opportunities for conceptual understanding rather than merely superficial coverage. In addition, the curriculum focuses on pedagogical content knowledge, research skills, and contemporary trends in mathematics education. It includes a comparative study of secondary mathematics curriculum, development and use of teaching materials, effective evaluation and assessment strategies. Furthermore, the course introduces topics like history of mathematics, advanced probability, and recent trends in mathematics education, including learning theories, philosophy of mathematics education, and integration of ICT. These concepts do not directly link to school curriculum as the school curriculum aims to focus on practical application of the key concepts and development of students problem-solving ability by using mathematical concepts.

Social Studies

The Social Studies curriculum of TSC inculcates comprehensive content knowledge across different disciplines such as History, Geography, Political Science, Economics, Sociology, Anthropology, Population Education, Philosophy, and Psychology. However, in the pre-service teacher education programs the social studies contents are taught from the disciplinary perspectives that needs further focused curriculum development to align it with the school level social studies courses. The TSC's Social Studies Curriculum places significant emphasis on pedagogical skills and their practical applications, hence there is a need to make

the pre-service curricula more application oriented, and through extensive pedagogical engagement of the prospective teachers. Furthermore, the inclusion of recent and innovative concepts such as ICT skills, geographical information systems (GIS), global positioning systems (GPS), remote sensing, international relations, sustainable development, and evaluation techniques will add the value of preservice teachers' preparation program.

Key competencies expected in TPD curricula (subject-wise)

Here, we limit the review of subjects such as English language, Nepali and Mathematics considering that similar trends exist in TPD curricula of other subjects. We consider presenting the key competencies and expected course coverage in pre-service program.

Subject: English	
Key competencies	Expected Pre-service course coverage
<ul style="list-style-type: none"> - Design and deliver level appropriate language development tasks; - Demonstrate an understanding of textbook adaptation; - Learn several language development activities and build confidence in - Conduct these activities in the classroom; - Develop high-quality test items for students' language assessment; and - Develop skills in setting favourable learning classroom environment. 	<ul style="list-style-type: none"> - Curriculum-based teaching - Digital materials development and use for instruction - Textbook adaptation - Tech-integrated task design and practice - Assessment tools design - Classroom management: inclusion and diversity - Peer support and collaboration - Corrective feedback and reflection
Subject: Nepali	
Key competencies	Expected Pre-service course coverage
<ul style="list-style-type: none"> - पाठ्यक्रम, पाठ्यपुस्तक र शिक्षक निर्देशिकाका संयोजित प्रयोगसहितको शिक्षण - बोध तथा अभिव्यक्तिगत सिप विकासका लागि विधाको उपयोग - कार्यगत पद्धतिबाट व्याकरण शिक्षणका आधारभुत पक्षको पहिचान र प्रयोग 	<ul style="list-style-type: none"> - पाठ्यक्रम, पाठ्यपुस्तक, र शिक्षक निर्देशिकाको एकीकृत प्रयोग - प्रायोगिक व्याकरण - समावेशी कक्षाकोठा व्यवस्थापन - शिक्षणमा डिजिटल स्रोत सामग्रीहरूको एकीकरण र प्रयोग - कार्य अनुसन्धान र परियोजना-आधारित सिकाइ - व्यावहारिक र अनुभवात्मक सिकाइ

<ul style="list-style-type: none"> - भाषिक व्यवहारमा प्रकार्यको प्रयोग - समावेशितामा आधारित कक्षाकोठा व्यवस्थापन - नेपाली भाषा शिक्षणमा सुचना प्रविधिको प्रयोग - प्रयोगात्मक तथा खोज कार्यको उपयोग - भाषागत शिक्षाका पेशागत विषयगत मुलभुत पक्षहरूको उपयोग 	<ul style="list-style-type: none"> - व्यावहारिक र अनुभवात्मक सिकाइ - सिकाइको लागि/सिकाइमा/सिकाइको रूपमा मूल्याङ्कन - सहकार्य सिकाइ
Subject: Mathematics	
Expected competencies	
<ul style="list-style-type: none"> - Advanced mathematical understanding - Real-world application - Interdisciplinary connections - Learner-centred engagement in instructional process - Lesson study - Digital resources and learning to solve mathematical problems - Ethnomathematical connection to help them understand the concepts clearly - Project-based learning tasks design and implementation - Assessment designs (digital and physical), and tools 	

International Practices of Teachers Professional Development

Several countries with successful education systems have adopted multifaceted approaches to teacher preparation and selection. Many nations, including India, Finland, and South Korea, implement a level-wise teacher preparation system, ensuring educators are specifically trained for the age group they will teach. A common strategy to broaden the teaching pool is to offer additional pedagogy training and certification for graduates with non-education qualifications, as seen in Finland and India. The curriculum structure itself is often highly specific; for example, South Korea's secondary teacher curriculum is a mix of liberal arts, a subject major, and dedicated education courses. Furthermore, a rigorous licensing or national teacher eligibility test is a standard requirement in countries like Finland, South Korea, the US, and India, ensuring a baseline of competency. To address the shortcomings in teacher education, it is essential to establish national standards for the teaching profession that will serve as a guiding framework for all university pre-service teacher education programs. This

framework should place a strong emphasis on developing techno-friendly pedagogical skills, preparing future teachers to effectively integrate technology into their instruction.

High-quality teachers are crucial for quality education. A competent teacher possesses strong pedagogical and content knowledge base, effective communication skills, comprehensive and practical understanding of child psychology, and a strong ethical foundation as indicated by Dicolen (2017). Teachers should invest their time and efforts for continuous learning to be adaptive to the rapidly changing educational landscape. Different nations in the world have developed various frameworks for Teacher Professional Development to ensure these qualities to make teachers responsive to evolving needs of learners, society, and nation. Countries such as Finland, Australia, Korea, Mongolia, the United States, and the United Kingdom have invested heavily on teachers' development through pre-service and in-service professional learning opportunities. These global practices share a common belief that teacher development is not a one-shot event but a continuous process for improving educational quality and meeting societal expectations (UNESCO, 2009). Therefore, continuous professional development opportunities should be provided to teachers and also the educators training teachers to make them update to new innovations and evidence-based practices.

Teacher education is highly selective and research-based in Finland, which reflects the nation's commitment to educational excellence. Only top candidates who pass competitive entrance examinations and aptitude tests are admitted to teacher education programs. Prospective teachers must complete a master's degree, including 60 ECTS of pedagogical studies. The teacher education program is taken as a blended version of theory, research, and practice. Teacher Professional Development Programs in Finland focus on a range of competencies such as pedagogical skills, knowledge about curriculum, digital skills, sustainability, and collaborative activities. Continuous professional learning is primarily supported by institutions such as the Finnish National Agency for Education in Finland. Similarly, Australia aligns its Teacher Professional Development Programs with Australian Professional Standards for Teachers, which encompasses competencies such as getting deeper knowledge of students and their learning, mastering content, pedagogical skills, creating supportive learning environments, and engaging in lifelong learning. In addition, the Australian Institute for Teaching and School Leadership coordinates both pre-service and in-service training programs with leadership and specialized training in STEM and inclusive education to develop intended professional skills within teachers.

Asian nations such as Korea and Mongolia have also prioritized teacher development as part of national education reforms. In Korea, specialized universities play a leading role in developing teachers by balancing content mastery with pedagogical skills. In-service

professional development includes qualification training, job-specific learning, and specialized programs in areas such as artificial intelligence and counselling (Ministry of Education, 2022). Meanwhile, Mongolia has made attempts in improving the quality of teachers by introducing scholarships for high-achieving students to motivate and enrol in teacher education programs (UNESCO, 2019). Mongolian teachers are required to complete annual online and modular TPD courses, including both compulsory and elective domains. However, various challenges such as low teacher salaries, limited digital infrastructure, and declining social dignity of the teaching profession, affect recruitment and retention of university graduates in the teaching field. Choi and Walker (2018) have presented a heuristic model for tailoring teacher development to educational reforms, claiming that any form of teacher development plan and provision is to be customized to the features of a reform, the reform context and the system issues in particular spaces where the reforms are to take place. They provide a clear articulation of teacher development and preparation through informative, experiential, negotiatory and negotiatory and experiential models. In Nepal, this particular consideration might apply considering the diverse contexts of teacher preparation and development that face with their context-specific challenges and requirements.

In the United States and United Kingdom, teacher professional development takes place around national standards that define competencies, ethical conduct, and lifelong learning. In the USA, competencies across four domains namely learner and learning, content, instructional practice, and professional responsibility are emphasized. Nevertheless, these competencies are determined differently in various states. Both pre-service and in-service training integrate academic coursework, practicum, mentoring, and continuous professional learning opportunities such as workshops and peer coaching. TPD programs in the USA are characterized by content focus, active learning, sustained engagement, and collaborative participation. Similarly, the Department for Education in the UK proposes national standards emphasizing high expectations, subject expertise, effective planning, and reflective practice. Professional Development Programs in the UK emphasize collaborative learning, action research, and specialized training. The National Professional Qualifications (NPQ), Early Career Framework (ECF), etc. play an imperative role in professional development of teachers in the UK. Despite various challenges (teacher scarcity, poor policy implementation, difficulties in hiring quality teachers, etc.), above-mentioned international practices jointly highlight sustained, context-specific, and evidence-based professional development programs to produce quality teachers from school to university level globally. The review of the teacher development and preparation practices in the selected countries shows that the teaching qualifications are clearly mentioned, and have aimed at enhancing quality education to meet the market demands.

Chapter II: Methodology

This need assessment study was mainly guided by mixed method design, specifically the quantitative-qualitative order, to gather comprehensive insights on pre-service teacher education curriculum related issues across five core subjects namely English, Nepali, Mathematics, Science and Technology, and Social Studies. It is to be noted that large chunk of data were gathered through qualitative methods mentioned below. Various gaps were identified based on the information collated from multiple sources. A diverse group of stakeholders such as policy developers, government officials, teachers, teacher educators, and students were involved in the study and information was collected through the interviews, focus group discussions, curriculum audit form, workshops, and consultations supported by the TECSES project. A series of workshops and seminars were conducted with these stakeholders jointly and separately to explore their opinion and experiences in relation to updating the curriculum for the bachelor level. These workshops provided experience-based insights to rationalize why the curricula was to be revised in terms of the program structure, content, methodologies and assessment.

Population and Sample

As mentioned previously, this study gathered information from key stakeholders in pre-service teacher education involving faculties and students from constituent campuses, affiliated colleges and central departments that have run B.Ed. and M.Ed. programs (as relevant) under Faculty of Education, Tribhuvan University. The study focused on five key subject areas namely English, Nepali, Science, Mathematics, and Social Studies Education at Bachelor's level. Further to this, the research team conducted several workshops with Subject Committees of sampled subjects, Steering Committee under the FOE, and the Ministry officials (MOEST, CDC, CEHRD, ERO and NEB) playing crucial role for making policy decision, and obtained their views and observations regarding the need for the revision of teacher education curricula. The population in this way was made as representative as possible, to bring in voices from key sectoral areas in education sector.

Five FGDs, comprising six to eight members in each, was conducted with B. Ed. fourth year and M. Ed. second year students specializing Nepali, English, Maths, Science, and Social Studies education subjects to identify the strengths and weaknesses of teacher education programs and their subject curricula. In addition, faculty members representing core subjects

from campuses were interviewed in person and through virtual mode to obtain their observations and experiences in relation to the implementation of the current curriculum.

Furthermore, all Standing Committee members of Nepali, Maths, Science, and Social Studies education subjects, and three experts from English Education participated in auditing the currently practised Bachelor's Level curricula, following the curriculum audit form developed by the researchers to provide policy-level insights and subject-specific feedback. Three workshops were conducted in Kathmandu participated by educationists, experts and government officials, who collectively discussed about the need for curricular reform in teacher education. More than 150 participants, representing MOEST, CEHRD, CDC, ERO, NEB, UGC, UNESCO, World Bank, University Grants Commission, head teachers of the public schools, and representatives from TECSES, joined the workshops and provided constructive comments and suggestions to improve the pre-service teacher education program.

Information Generation Methods

The study employed a multi-method process of data generation. It involved surveys with teacher educators, and in-depth and context-rich consultation with key stakeholders. These included survey with teacher educators, in-depth interviews, Focus Group Discussions (FGDs), curriculum audit workshops, discussions, and desk reviews. Interviews were conducted with faculties working at FOE and those teaching at Bachelor's level and Master levels. These faculty members implemented the curricula primarily related to Nepali Education, English Education, Mathematics Education, Science Education and Social Studies. Similarly, FGDs were conducted with students studying at fourth year in B. Ed. level or second semester in M. Ed. level to identify the gaps in teacher education curricula. Additionally, the members of Subject Committees used curriculum audit form to audit pre-service teacher education curricula of the selected subjects.

Desk review was conducted to gather information about the teacher education curricula, the curricular approaches adopted in development and implementation of school level curriculum, curriculum of TSC and in-service teacher training curriculum. It further involved review of school level curriculum and teacher education programs of several other countries. All of which provided with deep insights on how to establish coherence across school education, pre-service teacher education and in-service teacher education curricula, and identified different strengths and weaknesses of pre-service teachers' education curricula in Tribhuvan University.

Credibility and Authenticity of Information

Different methods were used to ensure credibility and authenticity of the information collected from multiple sources. The tools mentioned above were initially developed, shared, and revised as per the feedback of the informants. For instance, these tools/methods were shared with the Faculty Board, Subject Committees, and key experts for review and validation. Feedback from these stakeholders was incorporated to revise these tools/methods to make them clearer, relevant, and applicable. Primarily, triangulation, thick description, peer review, and expert validation were used to optimize the credibility and authenticity of information. Information gathered from various sources were compared and analysed through triangulation by appraising patterns and discrepancies in the information. In addition, thick description was used to provide a rich, detailed description of the context and participants. Furthermore, peer review and expert validation processes were integrated to confirm that the conclusions drawn were grounded in an accurate and trustworthy way.

Data Analysis

As this study involved data from the quantitative and qualitative methods, the quantitative ones were analysed using descriptive statistics and presented in tabular forms while the qualitative information was analysed thematically. The qualitative information collated from multiple sources were transcribed, coded, and analysed thematically to generate patterns and insights aligned with the objectives of research. Different verbatim from participants were analysed and presented as quotes to substantiate generated themes and findings of the study. The overall process of the methodological engagement in this study has been illustrated in the figure 1 below.

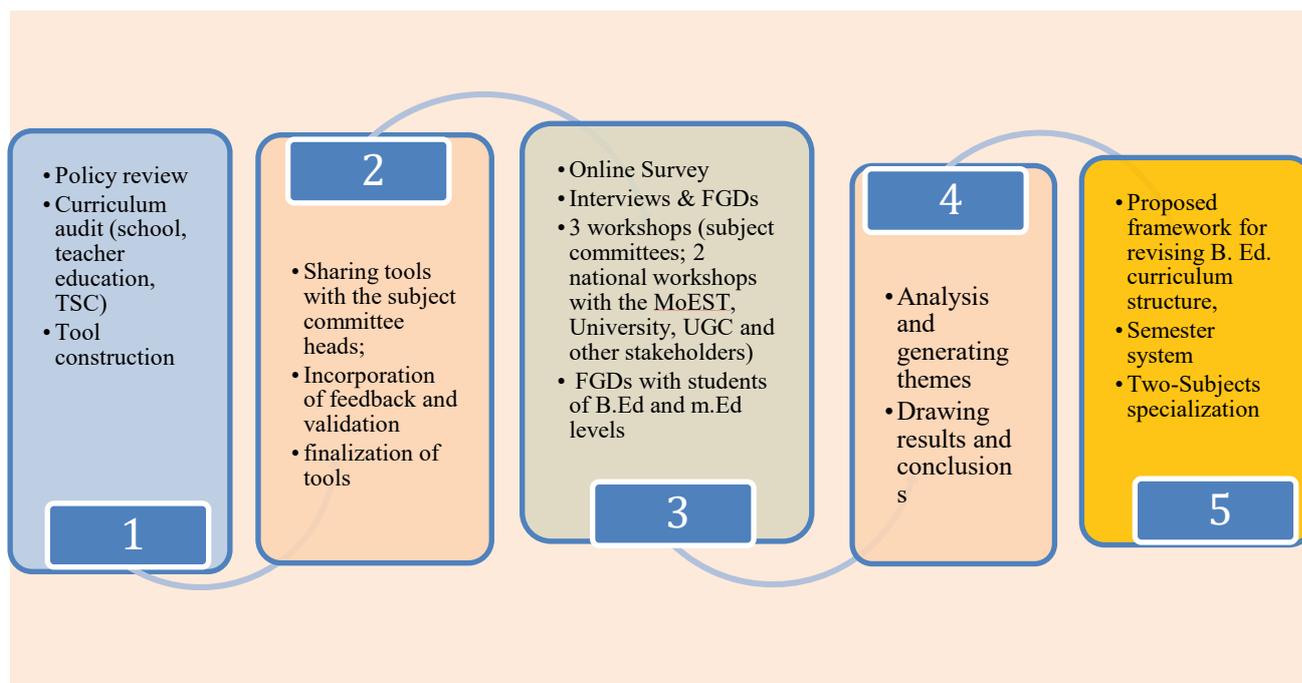


Figure 1: Methodological process in this study

As illustrated in the figure, the whole process has been organized in five stages, presented in a linear order. It clarifies that several different stakeholders ranging from the micro level to the macro level were engaged in this process.

Ethical Considerations

Ethical considerations were carefully acknowledged and integrated throughout the research process to optimize integrity and respect for all participants. Prior to data collection, informed consent was obtained from all informants after clearly explaining the objectives of this study, they were encouraged to participate voluntarily and had the right to withdraw at any time without any consequence. Participants were assured that their responses would remain confidential and used solely for research purposes. To protect their identities, pseudonyms were assigned to all individuals, groups, and institutions encompassed in this study to ensure that no personal or identifiable information was disclosed. It is intended that these ethical measures safeguard the privacy of participants and fostered an atmosphere of trust and openness to share authentic and credible information for the research.

Chapter III: Results of the Study

As indicated in the methodology above, the study involved a series of consultations with key stakeholders through workshops, seminars, focus group discussions and interviews. A national level workshop was conducted in Kathmandu participated by officials from the MoEST, and its line agencies such as CDC, TSC, CEHRD, and educators from TU. The workshop provided the team with more insights in relation to the need for the revision of Bachelor level curriculum in TU. Another key workshop was organized at the Faculty of Education, TU, and was participated by Subject Committee members of the selected subjects. Similarly, the FGDs were conducted with students from different subject groups. Further to this, perception data were obtained through survey with educators teaching at Bachelor level programs under faculty of education, including those from the public and affiliated campuses. The findings of the study thematically reported in this report build on the data obtained from these methods and processes. While reporting the findings, we have organized them into three broader categories- the first one is about strength of the presently practised curricula, the second with focus on what should happen at the policy and program level (the data of which we obtained from the national level workshop with ministry officials and other stakeholders including school head teachers, teachers and teacher education professionals) and the third one is on micro curriculum level discussing issues around the current curriculum in terms of objectives, contents, pedagogy and assessment (the data of which we obtained from consultations with university teachers and students).

Strengths of B.Ed. Level Programs

The B.Ed. level curricula implemented under the FOE, TU, reflect most prevalent and highly practiced concepts of curriculum as an instructional plan. This notion clearly provides curriculum developers with the components to be encompassed, especially learning outcomes to be achieved at the end of academic session, contents to be clarified to students, instructional techniques to be practiced inside the classroom to convey curricular contents and evaluation procedures to be followed for ensuring whether desired knowledge, skills, and values are developed within prospective teachers. As a result, the curricula designed under the FOE, TU encompass all essential components of curriculum development. It means; the curricula clearly stated measurable objectives, which help guide content, instructional activities, and assessment procedures of the program.

The emphasis on students' active engagement especially through different types of internal assignments and classroom participants encourages continuous learning and fosters higher order thinking skills (problem solving, critical thinking, creativity, innovative skills, for examples) among prospective teachers. For this, attention should be paid on the institutionalization of these provisions made by official approved teacher education curricula. Furthermore, practicum activities have also been provisioned to develop pedagogical skills within prospective teachers for implementing school curricula in different subject areas. It is intended that practicum course bridges theoretical knowledge with real classroom experience. This hands-on component equips prospective teachers with practical skills, confidence, and professional competence, making them better prepared for their future roles in teaching profession. Additionally, each curriculum developed for B.Ed. program has recommended references to be consulted to study contents from authentic sources, promoting academic rigor and supporting effective self-directed learning.

Curriculum Revision and its Direction

The participants from all sectors unequivocally emphasized that revising the current curriculum as per the changing contexts was mandatory and the revision should emphasise key values of the Nepalese society and the employment needs of the market. They highlighted the issues of teacher shortages in recent times, and the teacher education program should consider it while revising the curriculum structure. The Ministry officials prioritized two-major subjects program structure to address the current market demand and address the issue of potential shortage of teachers in the future. During the workshop, one of the officials from the Ministry said, *“Work for disruptive innovation/radical change rather than simple revision. Focus on dual subject specialization. In doing so, the curriculum design and delivery should see a shift from content to process, especially towards problem-based and project-based learning”*. Another participant from the TSC in Nepal thought that the pre-service teacher education should include updated and recent contents saying *“focus on recent issues, challenges and addressing them through pedagogical processes rather than forcing people to learn theory-laden contents that have limited practical use”*. All the participants emphasized curriculum revision to make it consistent, coherent and relevant to the market needs.

Most of the participants believed that curriculum revision should not be confined to the revision of its contents and processes rather it should be focused towards ensuring that it aligns with the goals and priorities of the MoEST. One participant from CEHRD suggested

“Strengthen link between MOEST and Faculty of Education to align FoE programs with school education program”. Similar concerns were raised by the educators and the officials as they were not satisfied with the performance of the graduates from the universities in the TSC exam. One educator from FoE TU said;

“We have not been able to prepare adequately to enable our students to pass the TSC exams as required. Although most of them are our products, not all those who attempted the exams could pass. I think there is some problem between what we are doing and what the TSC is expecting”.

Similarly, an official from the Curriculum Development Centre (CDC) explained:

“University should rethink the courses. The courses should be developed in line with school education programs. The integration of technology should be emphasized and the TPACK model is to be adopted in it”

Likewise, another official from CDC added:

“As we have a delinked teacher education curricula from the school education, this has created a lot of gaps. There is a little use of technology in curriculum delivery. Therefore, we should develop a shared vision for linking teacher education with school education”.

For them, curriculum revision was a broader concept and a step ahead to meet the goals of the nation for the production of quality teachers. Given the wider coverage and strength of FoE in pre-service teacher education and its potential for national contribution by producing quality teaching force, they thought that the teacher education curriculum in FOE, TU, is meaningful and deserves attention. Participants from CEHRD were willing to know how the pre-service teacher education curriculum connects with the in-service. A participant working at CEHRD for a decade commented, *“We have to consider how the pre-service education links with in-service teacher education, so that any initiative for change in teacher education will make meaning for continuous development of individuals as teachers.”* Another participant with similar experience working in the field of program implementation emphasized *“digital pedagogy and development of the mastery of contents as well competencies and skills”*.

One more participant representing the development sector said, *“I think one of the foremost needs is to identify the need and priorities for a teacher and its needs to be rigorously aligned in the curriculum with significant focus on pedagogy and support mechanism. Consistency across different institutions is one of the critical points which can be done through collaboration”*.

To make these things happen, we might need to consider the development of capacity of the faculty members. A participant from CEHRD said,

“The school curriculum should be taken as a baseline curriculum for the development of all curricula in the Faculty of Education and all subject curricula should be made competency-based. For this there is a dire need for development of capacity of the faculty members who are responsible for development and delivery of the curriculum”.

The current human resource needs skills for the development of new curriculum and its effective implementation. The interaction with key stakeholders, especially the educators in B.Ed and M.Ed program showed that there are very few opportunities available for them in developing their professional skills in putting the curriculum into practice.

In the survey as well, excessive emphasis was also put towards developing the current curriculum into a competency-based model. While asked about what specific competencies would be desirable for pre-service teacher education, the following were the competencies reported by the participants.

Reading, Writing, Critical Thinking and Research
Development of knowledge, skills, attitude towards teaching and intercultural communication
Do and learn skills
Communication skill, pedagogical skill, subject matter knowledge, professional ethics, Collaboration skill, cross-cultural skills, good citizenship, etc.
Pedagogical content knowledge
Competencies related to new instructional skills such as PBL, RBL, classroom management, etc.
Skill based, practical based and addressing to contemporary issues.
Appropriate and innovative pedagogical skills, become aware of theories, ability to manage and use teaching materials, etc.
Knowledge of content and language proficiency
Academic writing skills
Communicative and interpersonal competencies
Functional skills applicable for classroom context and education sector

Although these competencies overlap in several ways, they all tell the message that the curriculum developed in the future will address the market-required skills related to teaching profession. Revision of the pre-service teacher education would need to consider incorporating these skills in the curricula and prepare teachers for the emerging future markets.

Revisiting the Curricular Components

This study identified that significant changes were required in the curricula of the FOE currently operationalized under pre-service teacher education program. For example, the key stakeholders of curriculum implementation expressed grave concerns regarding the nature of the contents, the content load, the phrasing of objectives, pedagogical practices and assessment techniques as outlined in the curricula of the selected subjects. Some of the major issues highlighted were unclear competencies, vague and teacher-fronted pedagogical strategies, and practice of conventional assessment techniques suggested in the curriculum. These issues have been thematically presented as discussed in the following sections.

Revision of the objectives

Analysis of the specific objectives across some sampled courses from the specialization of social studies revealed overemphasis on lower-order cognitive skills, ranging from 52% to 72%, particularly knowledge and comprehension levels, and inadequate emphasis on application and higher-order cognitive development. This indicates a need to revise social studies curriculum to promote higher order thinking skills throughout all years.

In B.Ed. mathematics, for example, the distribution of the specific objectives in a particular course, among the 42 specific objectives of the course, 47% objectives are specific to knowledge level, 41 % are specific application level and 12% are to higher abilities. This shows a clear imbalance. Therefore, the curriculum needs rigorous revision.

In English education, the objectives stated in the courses have not adequately focusing on critical thinking, analysis, synthesis, evaluation and creation. Even if the objectives are mentioned in some courses, these are also not sufficiently replicated in the pedagogical practices. Under the instructional practices that focus on the delivery of the information-based contents, such higher abilities are neglected sustaining low-level teacher competencies. The revised curriculum needs to address this gap and focus on the higher order cognitive skills.

In the FGD with the students, the students pursuing major mathematics in M.Ed. reflected their experience and observation of B.Ed. curriculum goals and objectives. They

explained that the objectives are still not specific and practice-driven. The objectives are stated in abstract terms and demand knowledge and understanding at the cognitive domain ignoring the higher order application, analysis, synthesis and creativity. This shows that the objectives of the curricula for all subjects need further specification in terms of the competencies desired from the pre-service teacher education graduates.

Revision of Contents

All the members of the Subject Committees indicated that the some of the contents included in the current curriculum needed omission and some new contents needed to be added to make the curriculum more updated, relevant and market oriented. All of them aimed that the revised curriculum should align with the government's school curriculum and the needs for the quality education in schools. They mentioned that the current curriculum includes unnecessary overloading of the contents which made the educators worry about finishing the courses rather than aiming at developing students' skills and competencies

The curriculum audit by the Subject Committee of Social Studies indicates the presence of several outdated and misaligned content areas that require urgent revision to ensure better alignment with school curricula. Throughout the program, the curricula under the specialization of social studies remain theory-loaded. Additionally, there is a noticeable overlap with social studies contents and a simultaneous omission of essential topics. High level of difficulty, lack of inclusiveness, and poor linkage to practical classroom applications further hinder the effectiveness of the curriculum. Moreover, the current structure is not competency-based and fails to integrate 21st-century skills adequately, and signals the necessity of alignment with the expectations of school-level curriculum.

In the compulsory Nepali subject course, grammar-related contents have been included but it is not sufficient for those who have specialized in the subject. This content should be continued up to fourth year to provide comprehensive knowledge, FGD-1 mentioned. Contents included in various subject curricula are highly loaded and cannot be completed within a given time of the academic year if teachers use student-focused learning techniques to clarify. Consequently, teachers usually rely on lecture methods to deliver the prescribed subject matter within the assigned timeframe, as they will be questioned if the course is not finished in time. Therefore, curricular contents should be reduced, taking into consideration the time allocated for each course within a semester, FGD-5 with students concluded.

All focus group discussions with students concluded that a huge portion of contents included in the curriculum is theoretical and has little relevance in practical life. Therefore, more useful and practical contents should be incorporated into the curriculum to prepare future prospective teachers, FGD-1 concluded.

The contents are from the theories that are mostly old. There is very little about the new developments in science and innovation. I think we are learning the same contents that our brothers learnt decades ago. So, there must be changes in the current content and new contents should be added to the curriculum for science education. (FGD with Science Education students)

The contents in education should be equal to the contents in BSC so that we can be of similar quality in terms of contents and our pedagogical skills benefit us for being skilled in teaching. (FGD with Science Education students)

In the case of Mathematics and Social Studies in Education, the faculty raised the issue that the contents of the courses recommended are more difficult for the students who just join the university. There is a huge distance between the content areas of Grade XII and B.Ed. The revision needs to address this issue. Some of the contents, for example, the use of software for research and data analysis are appropriate for Master's level rather than Bachelor's level. In Science education, as some of the students enrolled in B.Ed. program is from education stream in their secondary level and some others are from the science stream; the present contents are easier for some and difficult for others. But they did not think that they are overburden by the course contents, but are concerned about "not being excited or feeling of wow" in terms of what they learnt in the B.Ed. program.

Concerns were also raised about inclusion of recent contents. For example, one retired professor from TU mentioned, "*I can see a lot of contents in the courses developed are too old, so I think such contents are to be replaced by new ones which were produced not more than within the last 10 years*". Some others believed that development of a curriculum framework for teacher preparation programs would contribute towards making the program updated and consistent across universities. The students of Mathematics education pointed out the issues, particularly, content load, content repetition and abstract and almost outdated contents in many of the courses recommended. One of the students who participated in FGD remarked:

I studied in a campus located in my district. I was taught by a teacher recruited on a part-time basis. Since the course was vague and content-loaded, our teacher could not finish the course. I could not cover the contents myself. I failed the exam. Now I realise, it happened not because of me but because of the curriculum, contents, content delivery and student assessment process. (FGD, Mathematics education)

Other students during the FGD pointed out several issues as ‘more theoretical -less practical’, ‘based on the teacher's one way decision on content selection, discontinuity of the courses of the higher secondary grades (Grade 11 and 12). A student who completed his Bachelor Degree in Mathematics from the campus located in the Kathmandu valley reflected:

I attended the class regularly. I passed the (B.Ed.) exams and scored good marks. However, I don't know, even today, what I learnt (am learning) and how and where I use this knowledge. So, mathematics curriculum and courses are mostly disconnected from our real-life situation. If we learn mathematics like this, in our teaching career in our future, we will definitely replicate it in our class. We cannot connect mathematics with the students' real life. So what I appeal is let's change the curriculum, courses and instructional methodology to prepare us to become competent teachers who believe in process-based practical approach of mathematics teaching.

The survey with the teacher educators also indicated that the current curriculum is heavily content-loaded which needs to be revised (see Figure 2).

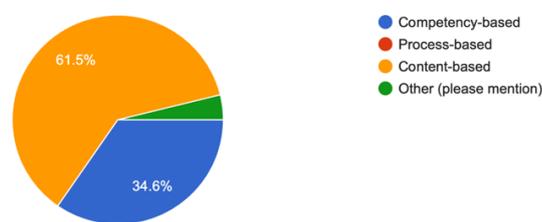


Figure 2: Teachers' perception about the current curriculum

Figure 2 above shows that the currently practised curriculum is heavily content-based as 61.5% of them mentioned ‘content-based’ while only 34.6% mentioned it is competency-based. Very few teacher educators mentioned that they were not aware of the nature of the curriculum. This also implies that relevant mechanism is to be developed to reach out to the teacher educators who either misperceived the curricular goals or did not understand the core goals of the currently practised curricula.

Weak Alignment Between Objectives, Contents, Instructional Techniques and Assessment

All the participants expressed their observation that there is very weak alignment between course objectives, the course contents, instructional techniques suggested for the delivery of the content, and assessment practices recommended for measuring students' learning. It was mentioned that in the current curriculum the objectives have been reported in a very superficial way that blurred the focus of the courses.

Based on social studies curriculum audit by Subject Committee members, there are significant misalignments among its various components. Firstly, there are gaps between the general and specific objectives, which indicates a lack of coherence and smooth progression in setting the curricular goals. Similarly, the alignment between specific objectives and curricular content was also found weak, in which the contents may not effectively support intended learning outcomes. Furthermore, the subject committees found a disconnect between what is intended to be taught and how it is delivered. The same situation was also found in the case of assessment procedures. The curriculum relies mainly on written examinations and fails to include performance-based and authentic assessments. These misalignments highlight the need for substantial revisions of social studies curriculum to ensure that all components work in harmony to support quality education.

Our curriculum does have some practical portions. However, it is not implemented for practical learning. I remember we did practical activities just to make the partial fulfilment of our assessment, not for real learning of the skills that we need to become the teachers of the 21st century. (FGD, Female Student, English Education, M.Ed. 2nd Semester)

I have closely observed the courses of the programme. There is an extensive overlap. For example, in English education, we have introduced the same content areas in different courses. Instead of maintaining the depth and range of the content areas, we are just introducing information-like matters. For example, we have introduced academic writing in different courses, but none of these courses have aimed to develop in-depth skills. (Interview, Senior educator at the university)

Though the curriculum includes useful contents relevant to the professional field of teaching, some of them are too advanced for the students' current level. Additionally, some of them seem outdated and need improvement.

The participants in the FGDs and also the interviews with the faculty of the public campuses outside Kathmandu reported that they could not join the curriculum development processes. They were involved only in the implementation of the courses developed by a couple of teachers who lived in Kathmandu. This weakened the strong collaboration among the implementing partners, causing the primary intention of the curriculum unknown or not adequately communicated to the implementing partners. Also, many senior teacher educators already involved in curriculum development at the university realised that there was a weak collaboration among the stakeholders, MoEST and its entities on the one hand and the campuses and their faculty on the other, in curriculum development.

Most of the subject committees pointed out that most of the content areas that the subjects/courses have included are designed to promote students' knowledge and comprehension. Only a small portion of the contents stress on higher level thinking skills including higher order application. (Conversation with members in a Subject Committee Meeting)

To maximize alignment between the B.Ed. curriculum and the competency-based school-level curriculum, several key aspects need improvement. Inclusion of learning outcomes from application and higher level, and the contents related to multiculturalism, indigenous knowledge and practices are also necessary to make the curriculum more inclusive and relevant. Currently practiced teacher education curricula lack sufficient digital integration and are dominated by lecture-methods. This condition limits its effectiveness in preparing teachers for dynamic, inclusive, and technology-driven classrooms. Teacher preparation curriculum should shift from a heavy reliance on written exams to competency-based assessment that includes performance-based assessment and authentic assessment. These gaps should be addressed for developing prospective teachers who are equipped to meet the demands of competency-based curriculum enacted in school level.

Internal assignments also create a burden throughout the academic session. The same types of assignments, such as report writing, are given in most subjects, leading to repetition. It becomes very difficult to manage time for completing assignments while also studying the curricular content, FGD-5 complained.

The members of the mathematics subject committee highlighted the gap of the objectives and contents. They pointed out that the objectives are not specific enough and

contents recommended are not still very specific for ensuring the enhancement of the competencies expected in the mathematics teacher education. Therefore, the curriculum needs to be revised and the objectives, contents and the teaching learning activities including assessments need to be mapped out in clear terms. The instructional methods and techniques are more generic so that need to be revised to accommodate more innovative approaches and techniques.

Content Overlapping Across Courses

The workshop discussions and presentations reveal that there are several areas showing content overlapping across the subjects. Some of them expressed that there are questions regarding the relevance of some of the subjects such as the nature of the Compulsory English and Nepali courses for the B.Ed. first year students. They were doubtful of whether and to what extent have the generic content-loaded language development courses improved students' learning. The Nepali subject committee meeting ended with a conclusive note that most of the content is theoretical and reiterates more than expected...gradation is not appropriate and content needs to be updated. As a result, the gap between school level curriculum and teacher education curriculum is getting higher.

The Subject Committee of Social Studies suggests additional content to align teacher education curriculum of Social Studies with school-level curriculum. For this, the presently operationalized National Curriculum Framework (NCF) and Sustainable Development Goals (SDGs) should be considered while designing teacher education curricula to increase the relevance. The program should incorporate entrepreneurship and job market-oriented content to prepare future educators for real-world challenges and employment opportunities. Inclusion of multiculturalism, indigenous knowledge and practices also helps to make the curriculum contextually grounded. Project-based learning activities integrated with ICT tools are also recommended to promote hands-on experience and digital literacy among prospective teachers.

The faculty members experienced in implementing the existing English Education curriculum strongly pointed out the concerns of content overlapping. The courses are more of generic competencies and overlapped rather than language teacher competencies expected by the national curricula and the market of teaching workforce. The courses that are being implemented have focused on theoretical knowledge rather than practical skills of language teaching. One participant said,

“More than 50% of the current contents of the curriculum are not relevant. We should aim to change the content as only 50 % of the current content can work and the additional 50% is to be included based on the market orientation.” (Member of the Subject Committee)

FGD with students from science stream showed that their contents are overlapped at several topics, and that made them feel that this is just a waste of time. Along with the repetition of the contents, they think that some contents are not coherent across years. For example, one student during FGD said, *“some topics taught in first year are not found in second year but they appear in third year. This makes us feel ‘what’? Why the content was not included in the second year?”* These views show that all subjects have frequent examples of repeated contents which could be replaced by the ones which are recent and interesting for the students.

Due to high-level of content overlapping and contents that make less relevance, the participants during the survey also mentioned that a huge part of the contents to be omitted to add new ones. Figure 3 illustrates this concern (in response to the question posed on 3.1).

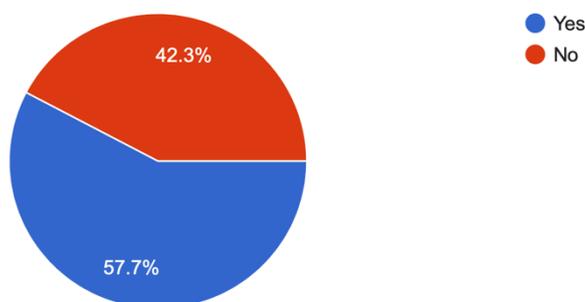


Figure 3: Working towards content revision

Figure 3 showed that 57.3% teacher educators mentioned that a lot of contents to be omitted, either due to overlapping or due to being outdated. Only 42.3% participants mentioned that the content revision was not needed.

Inadequate Emphasis on Pedagogical Skills

All the participants mentioned that the current curriculum does not provide adequate emphasis on the development of pedagogical skills on the graduates. The practical examinations conducted as part of the courses in different subject areas are fundamentally ineffective due to the pitfalls in implementation of the program. There is a great need for rethinking the current model of conducting practical exams.

Currently practiced curricula, as informed by Social Studies Subject Committee, emphasize classical skills and offered limited opportunities for practical exposure, which limit the ability of prospective teachers to apply knowledge in real classroom settings. In addition, very limited integration of ICT tools fails to prepare teachers for a techno-friendly instructional practice. The subject committee of Nepali language education indicated that instructional methods and activities are more subject-centred and theory-laden...not techno-friendly. This opinion leads to an understanding that more digital resources and lessons on digital literacy are required to be integrated in all subjects of pre-service teacher education.

The contents included in different subjects are often taught in a descriptive way, which does not help develop analytical and critical thinking, and creative skills in prospective teachers...These skills should be fostered in them by providing ample opportunities to practice and providing hands-on experiences. (FGD with Nepali subject teacher).

To develop necessary competencies for implementing school level social studies curriculum, several learning activities in the teacher preparation curriculum should be included. Priority should be given to enhance experiential and field-based learning, which enables prospective teachers to apply theoretical knowledge in real classroom settings. Collaborative and problem-solving methods should be integrated to foster teamwork and critical thinking. Furthermore, the curriculum should include more digital and ICT-integrated activities to prepare future teachers for techno-friendly classroom environments. Action research should also be carried out on a routine basis to encourage continuous self-assessment and professional growth. Furthermore, embedding 21st-century skills and inclusive pedagogy across all learning activities is essential to equip teachers with the ability to address diverse student needs in the classroom.

Student-teachers have to teach around 30 lessons as part of their practicum to develop teaching skills. However, this is often not sufficient to inculcate the skills necessary in implementing school-level curricula effectively. Therefore, the duration for practicum should be extended to at least six months, by paying minimum remuneration to the student teachers, to provide them with adequate experience and preparation for entering into the teaching profession or to help them develop appropriate pedagogical skills. (FGD with mathematics students)

The weakest part of our programme is the implementation of the teaching practice. In the past we would expect our students to attend the class regularly. Now, most of

our students are engaged in different jobs and do not attend the classes at the assigned schools regularly. As a result, they do not attain the skills, for example, classroom issues, collaboration with the subject teachers of the supportive schools, peer learning and peer observation and school activities in detail. (Interview, teacher educator from Central Department of Education)

Most classes are dominated by lecture methods. *‘Pair work, group activities and discussion are rarely conducted due to heavy content load prescribed by the curriculum’ (another student from mathematics group mentioned during FGD). Collaboration, problem-solving, experiential and field-based learning strategies/methods should be added in the curriculum. (Social Studies educator added). The instructional techniques are more generic and developed ‘one-size-fits-all’ skills. They should be specified on the basis of objective, contents and the competencies expected in the pre-service teachers. (One educator from English education)*

Assessment Practices

The faculties who are also members of the subject committees involved in the FGDs raised concerns regarding crucial need for developing a mapping matrix to implement the specific assessment activities and modalities in Bachelor’s degree curriculum. They pointed out that the assessment modalities are still monolithic and continue to promote paper-pencil-based tests. The curriculum needs to be revised addressing the diverse modalities of student assessment. The competency-based tests need to be designed and internal assessment should also focus on developing competencies of the pre-service teachers. Concerns about the assessment system currently in practice were also raised by Ministry officials. For example, one participant from CDC mentioned *“The current assessment is more summative, giving very little chance for the students to revise and improve their performance. This practice is not good for development of competencies. So, there must be a more formative assessment rather than a summative one, so that the future teachers will develop their skills for dealing with classroom problems”*.

“The assessment process focuses more on content knowledge...provision of internal evaluation for capacity development has not been implemented effectively...,” (One member of Nepali language Subject Committee said)

It is essential to incorporate a variety of assessment procedures in teacher education programs to measure expected learning objectives in B.Ed. curriculum. Emphasis should be given on formative assessment methods to provide ongoing feedback and support to students. Competency-based assessment is necessary to assess whether prospective teachers have acquired practical knowledge and skills required for implementing school curricula. Additionally, incorporation of project work, portfolio preparation, and case studies in assessment will encourage critical thinking, creativity, and real-world application of knowledge. The Subject committee of Social Studies indicated that these assessment procedures are helpful to develop competencies needed for effective implementation of school curricula. Specific benchmarks to be developed for the assessment of attainment of the curricular goals.

Most of the Mathematics students participating in the FGD pointed out the weakness in student assessment. They explained that the single-shot exam (University Board Exam) is not practical and good for enhancing the competencies of the pre-service teachers. A student said:

A single-take exam at the end of the academic year is not practical. We need to be engaged in a number of internal and formative assessment practices in mathematics at B.Ed. level. When I studied for B.Ed, our campus never conducted internal exams, neither did more practical activities. We faced the exam only at the end. It made us frustrated and we could not do well in the exam. We should change such a practice and provide students more opportunities to be assessed. (FGD with Mathematics students)

Emphasis on Academic Writing

The Subject Committees especially those from Social Studies education, science education, and mathematics education emphasized that the academic writing skills of the students were very low due to the lack of courses that aim at developing these skills. The core courses taught as part of the B.Ed. programs should introduce academic writing from a more practical focus to develop skills in writing and preparing them for the future higher education.

The subject committees of other subjects including English and Nepali language education also stressed the importance of academic writing from the beginning of the B.Ed. program. In this regard, the course of academic writing needs to be introduced in all subjects, not only in English education. The faculty who participated in the interview from these subjects pointed out that the students enrolled for the first year were poor at English language skills.

Since they are required to use more English in their academic programs, they should be given more exposure in English. The current course of compulsory English needs to be revised in to equip students with functional skills for professional communication. The students involved in the FGDs also reflected that they were facing academic hurdles because of low level English and academic writing skills.

Multicultural Inclusivity to be Emphasised

The workshop highlighted that the issues of multicultural diversity and inclusion have been understood and implemented in the curriculum narrowly. Inclusive pedagogy should be included as an embedded regular educational and pedagogical process rather than just a separate subject area because all potential teachers from all subject areas need to know what to do and how to transform their classroom contexts into inclusive educational spaces.

The current curriculum of Social Studies in Education still needs to integrate 21st century skills. ICT and digital skills, inclusion and life-long learning should be addressed in our curriculum and courses. (Subject Committees, Social Sciences, English, Mathematics)

The subject committees raised the concern that the contents and pedagogical approaches should be informed by the inclusivity and multiculturalism. The indigenous knowledge and practices should be incorporated into such contents. The Head of the subject committee of the Social Studies explained that the current B.Ed. curriculum needs to be revised to make it more inclusive respecting the values and practices of multilingualism and multiculturalism.

Integration of ICT into Education

Most participants thought that the technology integration has been very generic and the ICT has been taught as a separate subject which is fundamentally a fault line in developing teachers' competencies in using technologies effectively. They strongly proposed that technology use should be a common competence for all teachers. So, if we teach this separately, then only those who are taught will be able to make a few teachers like technology teachers and others not able to use it. In this regard, one educator said, *"Use of ICT tools in all the subjects rather than taking it as a separate subject should be focused, otherwise having IT-friendly teachers is likely to be a distant dream"*. Similar concerns were also raised by students from all subjects during the FGD. For example, students studying mathematics at the central campus mentioned during their discussion *"...ICT has not been properly utilized while*

implementing specific courses, teachers are not well trained properly to use ICT. ...intensive training should be provided to teaching staff before assigning them a schedule to teach a particular subject through virtual mode” (FGD with teacher educators).

Learning Management System (LMS), for example, Moodle is useful for running online classes and engaging students in productive tasks. Our university has managed Microsoft Teams which is useful mainly for running class but not engaging students in several tasks that are required for student assessment and feedback. Teachers are still not familiar with the innovative strategies and techniques of running online classes, and the curriculum so far we are using was developed on face-to-face class not the online class. ICT needs to be integrated in each of the subject specific curriculum in pre-service teacher education. (Interview with the faculty member)

Strengthening Physical Infrastructure

Implementation of a curriculum does not only mean about contents, teachers and techniques. It implies a collective and holistic vision for school improvement to make it effectively implemented. In most cases, the school infrastructure designed are generic. Consideration is to be made in making the infrastructure disability friendly. A coherent and whole school approach for the development of infrastructure that can accommodate all students should be focused. Alongside of the infrastructure, the establishment of quality libraries and their effective use is equally important. A separate lab should be established to teach various content areas of different subjects. For instance, students of applied linguistics reported that currently the campuses and departments do not have the opportunity to practice language-related skills in a lab setting. The skills intended by the curriculum cannot be effectively developed through lecture-based teaching alone, FGD-1 indicated.

Limited Resources

The Subject Committees pointed out some critical concerns of managing resources for the effective implementation of the curriculum. The curriculum revision is to consider the ‘what’ and ‘how’ aspects of the implementation. This leads towards management of appropriate resources. By resources, they meant the learning resources, for example, library/e-library, labs and other materials directly connected to the implementation of the curriculum and the physical infrastructure (buildings and learning spaces) for the students. Since the Bachelor’s Degree is particularly for preparing teachers for the school education, the revised curriculum

will have to map objectives and competencies, contents, learning resources, and human resource management.

Limitations also exist in terms of access to the students. For instance, reading materials, in some subjects, including social studies, are not fully accessible to students. As a result, the students must rely on PowerPoint presentations and handouts shared by subject teachers...(concern expressed during FGD). These materials are not sufficient to gain a deeper understanding of the prescribed contents as intended by curriculum, (one student during FGD-5 said).

Curriculum Alignment with Market Demand

Across all the workshops, interviews, FGDs and surveys, the market orientation was highly articulated. As the current graduates are struggling to meet the demands of the rapidly changing market, they all raised the issue of aligning the programs with the market. The members of the Subject Committee of Social Studies Education pointed out the need of curriculum change aligning the market needs, maybe, national and international markets in the present globalised context. Those of Mathematics and Science Education highlighted the need of integrating maximum practical portions in the curriculum. Also, the members of the English Education stressed on the practical skills that the pre-service teachers should know and use in their future career, i.e. teaching. All committees strongly argued that the present subject-specific curricula are more theoretical, descriptive and paper and pencil test oriented which cannot fulfil the demands of the current job markets. (Subject Committee, workshop)

Similar types of challenges were also identified from different workshops jointly organized by the Faculty of Education Tribhuvan University and TECSES. Participants in the workshops repeatedly emphasized that the existing teacher education model needs revision as per the contemporary educational needs of the nation and the global teacher education landscape. Stakeholders also raised concerns about structural issues such as outdated program format, insufficient integration of practical and skill-based learning, weak coordination between the Ministry and the universities, and the need for more flexible structures like semester systems with dual specialization pathways. These two concerns were highly emphasized, and agreed in all workshops.

The workshops concluded that the curricula, unchanged for more than a decade, remain heavily theoretical and is increasingly misaligned with competency-based curricula

implemented in school level for last six years. As a result, many graduates developed with weak subject knowledge, limited pedagogical skills and lower-order thinking abilities. This has contributed to a decline in the prestige of teaching profession, which no longer attracts good candidates as it does in countries like Japan, Korea, Finland, and other many more countries who have been giving good examples regarding teacher development and deployment practices to the globe. Public trust has also eroded because parents expressing serious doubts about the capability and commitment of community school teachers. Due to limited space and poor delivery, practicum course fails to bridge the gap between theory and classroom reality.

Key Gaps and Areas for Consideration for Curriculum Revision

The review of different policy documents and curricula of TSC, TPD and pre-service teacher education programs and engagements with the relevant stakeholders shows that several issues to be considered in revising the presently practiced pre-service teacher education curricula.

1. The education policy of the country defines TE programs at the university as being at the centre of pre-service teacher education for the country. FoE/TU has implemented 17 subject-specific programs for upholding the major responsibility of preservice teachers required for the nation. However, the curricula in practice have yet to address and incorporate the changing knowledge and skills for graduate employability. The curriculum is to be tuned towards this.
2. There are issues in relation to the implementation of TE programs. The curriculum has been practiced in diverse contexts, with diverse resources, infrastructure and delivery mechanisms, making the teacher education graduates' skills unequal. A more coherent pre-service teacher education framework is to be developed to inform and guide the overall process of teacher selection, professional development, and their retention. This could be done through ensuring that all graduates have attained the defined competencies.
3. The innovative instructional strategies that the TE program has specified for the effective implementation of the curriculum have not been used in the classroom. There are several issues behind that. They are:
 - (a) absence of teacher educator efficiency,
 - (b) student intake (low performing students join TE programs),
 - (c) limited resources

(d) feeling of job insecurity, and

(e) low valued social and cultural construction of teaching jobs.

4. The teacher education program of TU has yet to develop competency-based curricula to ensure that the future graduates understand and effectively implement the competency-based curriculum of the school education.
5. Regarding the integration of the competencies in TE curriculum, there is an absence of the strong collaboration between MoEST and universities, to establish a clear mapping of the teacher production and their continuous professional development.
6. The alignment between the curriculum of FoE, TU, and that of the TSC is weak, leading to multiple implications including teacher shortages, low-skilled teachers, etc. The teacher competency framework should guide all teacher education curricula.
7. Internship has not been adopted as an appropriate approach to teacher preparation at university. Short-term on-campus program hardly builds expected competencies in the preservice teachers, that ultimately affects the quality of in-service teachers' professional conduct and performance.
8. There is a strong gap in the curriculum alignment with the market demands and expectations. Most of the preservice teachers hardly feel secured for their future career to be engaged in the teaching profession.
9. The core courses of Bachelor and Master's Degrees have incorporated some content areas and some practical works to link to the world of work. However, the course contents need upgrading as per the changing knowledge landscape and their effective implementation in instruction.
10. There is a need for upskilling the teacher educators to enable them to address the curricular demands for supporting students' learning.
11. We need to redefine the modality of teacher education and teacher development, by integrating the ideals of high-tech education and humanity.
12. The curriculum revision should stress value systems, cultural integrity, compassion and inner transformation of the human being. In this regard, the pre-service teachers should be given a curricular space for transformative learning and behaviour change through critical self-reflection.

Chapter IV: Conclusions and Recommendations

This chapter briefly presents the conclusion and recommendation of the study. We have organized them in thematic categories as outlined below.

Conclusion

Overall, the review of existing policies, curricula, and engagement with stakeholders in understanding their perspectives about B.Ed. curriculum revision makes it clear that Nepal's pre-service teacher education system requires a comprehensive and forward-looking reform. While FoE/TU continues to carry the primary mandate for preparing the nation's teachers, its curricula and practices have not kept pace with the evolving demands of the profession, resulting in gaps in graduate competencies, inconsistent instructional practices, and weak alignment with national frameworks for curriculum, teachers' continuous professional development, and market expectations. Addressing these challenges will require a coherent national teacher education framework, stronger collaboration between MoEST agencies and universities, and a shift towards competency-based, context-responsive, inclusive and technologically enriched curricula. Equally important is the need to professionalize and empower teacher educators, strengthen internship models, and create meaningful spaces for transformative learning grounded in values, cultural integrity and reflective practice. Only through such integrated reforms can pre-service teacher education produce confident, competent and compassionate teachers capable of leading quality education in Nepal.

Based on these findings, the following recommendations have been made, some of them are generally referring to the macro issues, others meso level institutional and others are instructional issues concerned with teachers, students and the related stakeholders' capacities and actions.

Recommendations

Develop pre-service teacher education in line with the global best practices

The workshop drew on several internationally recognized frameworks to benchmark the reform efforts. Several presentations and discussions during the workshops focused on the development of 21st century skills on our prospective teachers. The global and heuristic models of teacher education provide research-based evidence and workable examples of high-performing teacher education systems. The review of the international trends of teacher preparation, development and implementation, the workshops conducted with several

stakeholders drew on several internationally recognized frameworks to benchmark Nepal's ongoing teacher education reforms, offering both research-based evidence and concrete examples of high-performing systems. As highlighted by the OECD framework, 13 key knowledge domains for 21st-century teachers, underscoring the need for Nepal to adopt a more holistic and evidence-informed understanding of teacher competence. The Faculty of Education, TU was also suggested using evidence and competency-based teacher development practices adopted by the Finland and Singapore.

Adopting a competency-based framework

There was a clear and widespread consensus to build the new curriculum around clearly defined competencies. This is an essential strategic move to align the B. Ed. program with the competency-based curriculum already implemented in school level in Nepal. By making this change, the university can bridge a critical gap, ensuring its graduates are prepared to effectively implement the school level curriculum. The urgency of this alignment was highly highlighted by a Curriculum Development Centre (CDC) official who noted, *"Everybody talks about competency-based education, [but] we don't know how to assess students [on] whether they have acquired [the] desired competencies."* These guiding principles namely, a transformational philosophy, inspiration from global best practices, and a commitment to competence, necessitate a complete renovation in the architecture of the B. Ed. program in Tribhuvan University, the nation's largest institution for preparing educational human resources. As per the CBC being an approach in the school education, the faculty of education needs to design a competency-based curricula so that prospective teachers can make sense of the curricula and its approach in their future marketplace.

Reconsider conventional pedagogy and assessment

The future curriculum should focus on implementation of more child-friendly, inclusive and context-specific models of pedagogy and assessment. It was concluded that structural reforms alone are insufficient. To achieve true transformation, these changes must be matched by a revolution in how individual courses are designed, taught, and assessed. The workshop outlined a decisive shift from a content-first model to a experience-first paradigm, fundamentally changing the nature of teaching and learning within the B. Ed. program.

Capacity development of teacher educators and curriculum developers

There are systemic as well as individual level challenges that the teacher educators and instructors face in the course of developing and implementing curriculum. Most of the teacher educators and faculty members pointed out that there is still a weak system of capacity development. The faculty members of English and Mathematics explained that they had individual efforts in their capacity enhancements. However, the faculty members of Social Studies and Science explained about a rare opportunity of their professional enhancement. Senior teacher educators strongly point out that faculty members working in the teacher education sector at the university should be granted with more opportunities because unless they are capacitated, the quality of the pre-service teachers cannot be enhanced and ensured. In this regard, the faculty members should be given the ample opportunity to participate in refresher training, curriculum development workshop, ICT training, national and international seminars and conferences. The Social Studies subject committee suggested refresher training for all curriculum developers to update them with current educational trends and practices. Furthermore, the overall structure of curriculum should be reviewed and improved to develop competencies necessary to implement school level curricula effectively. Before full-scale implementation, revised curricula should be piloted to identify potential gaps and areas for improvement.

The teacher educators serving in Mathematics, English and Science also argue that the opportunity should be equitably granted. The faculty members serving in the campuses, both the constituent and public, should be given more exposure to ensure the quality of teacher education program. A representative from the Community-based campuses strongly explained that the capacity development programs are still out of reach of the teacher educators and the course instructors of the public campuses. The campus chief of a community campus also pointed out the urgent step that the university needs to take is to capacitate the teachers working at the community-based campuses because the number of pre-service teachers who attend at the community-based campuses is remarkably higher than that of the constituent campuses. Unless the teachers of the community-based campuses are capacitated well, the quality pre-service teachers cannot be produced.

The foundational move to a Semester System

There was a strong and unequivocal consensus among all participants, especially from TU and MOEST, to replace the current annual system with a semester-based system. This is

viewed as the single most critical structural shift required. A semester system will allow for a more dynamic, responsive, and continuously assessed curriculum, moving away from the limitations of the current model.

Implementing a two-subject (double) specialization model

This study recommends the development and implementation of a double major (s two-subject specialization model) B.Ed. program. The workshop participants reached a clear agreement to move from the old major/minor system to a dual-specialization model, where students will graduate with two major subject concentrations. This structure directly addresses several shortcomings of the current program: it makes graduates more versatile and better suited to the staffing needs of schools. Furthermore, it significantly improves their employment prospects, aligning the program with a global trend driven by what one speaker termed a “crisis of confidence,” where students increasingly seek the security of double majors in a world being reshaped by Artificial Intelligence (AI). Two Subject Specializations (e.g., Specialization A & Specialization B) This new architecture provides a robust framework, but its success will depend on an accompanying revolution in the pedagogical and assessment methods used within each course.

Suggested Curriculum Structure (Core and Specialization subjects)

This study proposes the following B.Ed. program structure for future revision of the pre-service teacher education. The need analysis that comprised of the input and interview narratives of different stakeholders including the teacher educators, policy makers, subject committees, students, faculty and the students reveal certain grounds for the revision of the B.Ed. curriculum and the courses. Based on the insights from the multiple sectors and their emphasis on two major subjects’ structure, the research team proposes the following structure for B.Ed. Program.

Proposed Structure for B. Ed. Program

Semesters	Core Courses	Specialization I		Specialization II		Total Credits
	Core	Major I	Major II	Major I	Major II	
I.	3	3	3	3	3	15
II.	3	3	3	3	3	15

III.	3	3	3	3	3	15
IV.	3	3	3	3	3	15
V.	3	3	3	3	3	15
VI.	3	3	3	3	3	15
VII.	3	3	3	3	3	15
VIII.	3	3	3	3	3	15
Total	24	48		48		120

Competencies to be emphasized

The synthesis of the data from several sources shows that the future curriculum that is designed based on the competency-based approach, we should incorporate the following competencies.

- **Transversal competencies such as** digital literacy critical thinking and creativity, communication and collaboration, problem solving, and cross-cultural understanding. These competencies to be included as core competencies. They involve generic skills such as use of digital resources for teaching, using critical thinking and creativity skills while delivering the contents, making effective communication, solve practical problems, and develop techniques that relate to understanding of multiple cultures, contexts and pedagogical needs.
- **Content-specific competencies:** The competencies intended by the program, in relation to the subjects of specialization. The relevant knowledge of the contents in the specific subjects is desirable upon specialization as a part of the program. In this connection, specific subject area contents will be covered as major courses, complemented by minor subjects for additional knowledge base.
- **Pedagogy competency:** One of the backbones of the program is to enhance the creative and innovative pedagogical skills of the students for delivering the curricular contents in their respective classroom situations. The following major aspects shall be covered within this competency area.
 - *the know-how of teaching*
 - *teaching young learners*
 - *classroom management*
 - *lesion design and feedback*
 - *effective communication*

- **Social competency:** One of the important areas of pedagogy is to teachers' ability to understand the society, and conduct their activities as per the social, cultural and psychological status of the learners. The understanding of the social context of teaching and shaping behaviour accordingly is significant for teachers. This competency consists of the aspects individual's interaction as a social being in the society such as understanding values of the teaching context, diversity, inclusion, and social well-being.
- **Technological competency:** As the current teaching and learning conditions are changing, and moving towards more techno-friendly contexts of the pedagogy, teachers' ability to embed technology in their instructional practices is essential. The teaching learning contexts are shifting towards more online engagement alongside of the physical ones, for which teachers need to be equipped with skills in designing lessons for both online and offline purpose. This competency category covers the aspects such as online and virtual learning, assessment, designing more interactive materials and using the learning management systems.
- **Life-skills competency:** This competency consists of extended skills beyond their content specific ones. In this, teachers' ability to maintain their personal well-being, professional leadership and vocational skills that can complement their employability. These skills include personal and social well-being, leadership, management, and vocational skills.
- **Cultural competency:** Teachers need to be aware of the cultural background of their learners and design their classroom activities and communication skills as per the local cultural specificity. This includes both intercultural and cross-cultural competencies. These competencies can be developed through embedding the cultural elements within the specialization courses and core courses.

Organization of these competencies

The identified competencies will be encompassed by developing different types of curricula by grouping them into language courses, professional core courses, specialization I, specialization II, and practicum and internship courses. Transversal competencies, including digital literacy, critical thinking, communication, collaboration, problem solving, and cross-cultural understanding, will be organized within professional core and language courses for developing foundational skills within prospective teachers. Content-specific competencies will be reflected through specialization I and specialization II courses to strengthen content knowledge into two subject areas, aiming to mitigate the problems of teachers' scarcity in

school education system in Nepal. Pedagogical, social, technological, life-skills, and cultural competencies will be incorporated across professional core courses and further strengthened through practicum and internship courses, where learners will apply these competencies in real classroom contexts. This structured categorization ensures that each competency area is purposefully integrated into the curriculum to support holistic teacher development for school education in Nepal.

Core principles to be applied for revising the curricula

The proposed reforms are not merely about changing course titles or rearranging content. They are guided by a fundamental shift in educational philosophy – pragmatic philosophy will be applied, grounding in global best practices while being tailored to the specific context and needs of Nepal. The new vision moves from transmissional to transformational approaches, where the focus is on developing teachers as reflective, competent, and value-driven practitioners. This philosophical shift is best captured by the proposed move from a Knowledge-Skill-Attitude (KSA) approach to an Attitude-Skill-Knowledge (ASK) model. The consensus is that building the right professional mindset, values, and disposition (Attitude) must come first. This forms the foundation upon which practical abilities (Skill) and subject matter expertise (Knowledge) are built, ensuring that graduates are not just content experts but professional educators in the truest sense.

Structure of the Course

Each course will have some core components (course introduction, course competencies, learning outcomes, curricular contents, learning activities, assessment procedures, and references, for example) and then decision on each component will be made by considering philosophy of education, psychology of learning, sociological foundation of program, principle of inclusion, validity, significance, practicability, demand of world of work, etc. An example of a course, dealing with a chapter entitled ‘Philosophical Perspectives and Orientation (5hrs)’, has been given below for discussion of upcoming meeting.

- 1. Competency:** Ability to reflect on one’s purpose, values, and vision as a future teacher in Nepal, and to apply these in one’s teaching practice.
- 2. Learning Outcomes:** By the end of this unit, students will be able to:
 - Explain their personal reason for choosing teaching as a profession.
 - Identify and justify at least five core values they want to develop as teachers.

- Point out indigenous or cultural values from their own background that they want to apply in teaching.
- Demonstrate a short classroom activity that reflects the values they selected.
- Connect a few basic philosophical ideas (Eastern and Western) to their own teaching identity.

3. Content and Resources

- What philosophy means for teaching
- Key ideas from major Eastern and Western philosophies
- Indigenous and community-rooted values in Nepal
- Teacher as role model and reflective practitioner

Resource

Umar, A. (2019). *Teaching Philosophy Statement*. Amazon Digital Services.

4. Learning Experiences: Following learning experiences will be provided to the students:

- **Life-Story Reflection:** Students write a short narrative on “My Journey to B.Ed.” focusing on why they chose teaching.
- **Values Exploration (with AI/Internet):** Students search for 20 teaching-related values from Eastern and Western philosophies, choose the ones they want to possess, and rank their top 10.
- **Group Discussion on Teachers’ Values:** Groups discuss what values they liked in their school teachers and what values were missing. They prepare two lists:
 - Values to develop
 - Values to discourage/unlearn
- **Philosophical Ideals Search:** Students explore ideas from thinkers like Plato, Socrates, Buddha, Dewey, etc., and choose 3–4 philosophical values and ideas they want to follow.
- **Indigenous Philosophies Discussion:** Mixed groups share values from their cultural background (e.g., cooperation, respect, *sewa*, *sahana*) and discuss how these can be used in teaching.
- **Value-Based Micro-Teaching:** Students plan and demonstrate a short (5–7 min) teaching activity where their selected values are clearly visible.

5. Assignment: Write a short reflection within 1000 words on “What kind of teacher I want to be in Nepal,” explaining why you want to teach, the values and ideas that guide you, and how you will show them in your classroom.

Reflective Questions (Sample items for exam)

- What personal experience or moment in your life inspired you to choose teaching as your profession? Describe it clearly.
- Which one core value do you want to strongly live by as a teacher, and why does this value matter to you based on your own life story?
- From your own cultural or community background, what value or practice do you want to bring into your classroom? Explain with a real example.
- Think of one teacher who influenced you (positively or negatively). What did you learn from that teacher about the kind of teacher you want to become?
- Imagine your first classroom in the future. What fear, hope, or expectation do you have, and how will your personal values guide you in that situation?

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- शिक्षक सेवा आयोग (२०७६), माध्यमिक तहको खुल्ला प्रतियोगात्मक विषयगत परीक्षाको पाठ्यक्रम-२०७६, नेपाली, नेपाल सरकार ।
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Appendices

Appendix – 1

This questionnaire aims to gather information about B.Ed. level Math, Science, English, Nepali, and Social Studies curricula. You are requested to respond only by considering the subject you have been teaching at Bachelor's level. Your responses will help to identify areas for improvement in the curricula and implementation. Your participation is voluntary. The research team will respect privacy and confidentiality of the information you provide and will only be used for the research purpose. Your personal and institutional identity will be kept anonymous.

Name of the College: _____

Name (optional): _____

Email: _____ Phone number: _____

Subject: _____ Date: _____

1. Qualification: Master's M.Phil. PhD
2. Experience: 0 to 5 years 6 to 10 years 11 to 15 years
Above 15 years

3. Type of Appointment: Part-time Contract Permanent

4. What is the basis of the curriculum design of the present Bachelor Level program at TU?

Competency-based

Content-based

Process-based

Any other (please mention:.....)

5. What type of competencies are expected by B.Ed. curriculum in your specialized subject?

.....
.....

6. Could you please share what competencies a school teacher should have in your specialized subject?

.....
.....

7. Does the B.Ed. curriculum in your subject of specialization develop the expected competencies to produce competent teachers for school education? Give reasons.

.....
.....
.....
.....

8. Do you think there are certain contents to be omitted from current curriculum to align with school curriculum?

1 Yes

2 No

If yes, please list out contents to be omitted.

Year	Contents to be omitted	Reasons
1st Year		
2nd Year		
3rd Year		
4th Year		

9. Is there any content areas to be added in the current curriculum?

Yes

No

If yes, what contents should be added?

Years	Contents to be added	Reasons
1st Year		
2nd Year		
3rd Year		
4th Year		

10. Could you share any three activities in which students actively participated in learning process?

S.N.	Activities	How did students participate?
1.		
2.		
3.		

11. How should the following aspects of the curriculum be improved in your specialized subject?

Learning Outcomes	
Contents	
Activities	
Assessment	
Learning resource management	

12. What are the challenges you have faced in implementing your subject curriculum?

.....

.....

.....

13. What additional suggestions would you like to provide for revising the currently practised curriculum to produce competent teachers for school education?

.....

.....

Thank You

Appendix – 2

This FGD aims to gather the information about B.Ed. level Math, Science, English, Nepali, and Social Studies curricula including teaching-learning activities and assessment procedures. Your ideas come into discussion will help to identify areas of improvement in Bachelor's level curriculum. You are invited to share your opinion freely on each question based on your knowledge and experience. Your participation will be voluntary and you can leave the discussion any time if you feel uncomfortable to take part. The information provided will be used only as data for improving the quality of teacher education program under Faculty of Education, TU. Your personal and institutional identity will be anonymized.

College's name: _____

Date: _____

District: _____

Address: _____

S.N.	Name of Students	Level	Gender	Ethnicity	Age
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

1. Relevance of curricular contents (interesting, learnable, useful, updated) in teaching profession.
2. Prescribed contents can be taught within the stipulated time.
3. Consideration of learning pace and learning styles of learners while implementing curriculum.
4. Provides sufficient pedagogical skills during the course cycle for implementing school curriculum.
5. ICT integration in implementing TE curriculum.
6. Availability and use of learning resources (self-learning materials, workbooks, resource books, e-resources, etc.).
7. Focus on innovative and collaborative classroom activities (group work, problem solving, research-driven activities, ICT integrated, and hands-on activities).
8. Workload (internal assignment, classwork, homework, etc.) provided to learners is manageable.
9. Assessment practices and alignment with students' learning (internal and external).
10. Teacher's feedback and student learning.

Thank You

Appendix – 3

This workshop aims to gather information about Bachelor level Maths, Science, English, Nepali, and Social Studies curricula. Your responses will help to identify areas of improvement in the selected TE curricula. You are kindly requested to share ideas on each question based on your knowledge and experience. Your participation will be voluntary. The research team is committed to respect your privacy and confidentiality regarding the data you provide. Your personal and institutional identity will be anonymized.

Subject:
Number of Participants:

Date:
Venue:

1. Which of the following components are integrated into the curriculum? (Tick the multiple responses if necessary)

- a) Course introduction
- b) General objectives
- c) Specific objectives
- d) Contents
- e) Instructional methods
- f) Evaluation
- g) References

2. How do you assess the alignment between different components in the curriculum? (Are they properly aligned or any improvement needs to be made? Use separate sheet to write your response if needed)

- a) Alignment between general and specific objectives
.....
.....
.....
- b) Alignment between the objectives and content
.....
.....
.....
- c) Alignment between the objectives and instructional techniques/learning activities
.....
.....
.....
- d) Alignment between the objectives and assessment procedures
.....
.....

3. How many specific objectives have been formulated representing different cognitive levels in different chapters (Please select any curriculum from each year related to your area of specialization and audit the number of specific objectives in corresponding level in the table below).

Cognitive Levels/ Years	Information (knowledge and comprehension)	Application	Higher Ability
1st Year			
2nd Year			
3rd Year			
4th Year			

4. Do you think there are outdated contents to be revised in B.Ed. curricula to ensure their alignment with the school curricula? Mention below:

Years	Outdated contents to be revised	Reasons for revising the contents
1st Year		
2nd Year		
3rd Year		
4th Year		

5. Do you think there are still some contents to be included in B.Ed. curricula to ensure their alignment with the school curricula? Mention below:

Years	Contents to be included	Reasons for including the contents
1st Year		
2nd Year		
3rd Year		
4th Year		

6. What are the learning activities to be improved in TE curriculum to achieve the desired objectives to develop competencies necessary for implementing school curricula?

.....

7. What are the assessment procedures to be added in the curriculum to measure the expected learning objectives?

Year	Assessment procedures to be added	Reasons for adding the assessment procedures
1st Year		
2nd Year		
3rd Year		
4th Year		

8. Do you think the curriculum designed under the specialization develops expected competencies to be efficient school teacher in the subject area? How? Give reasons.

.....

9. What aspect of the curriculum should be improved to maximize the alignment between B.Ed. curriculum and competency-based school level curriculum in the subject area?

Aspects to be Improved	Reasons for Improvement

10. What additional suggestions would you provide to improve the B.Ed. curriculum to develop competent teachers to implement competency-based curriculum at school level?

.....

.....

.....

Thank You

Appendix – 4

This FGD aims to gather the information about B.Ed. level Math, Science, English, Nepali, and Social Studies curricula including teaching-learning activities and assessment procedures. Your ideas come into discussion will help to identify areas of improvement in Bachelor's level curriculum. You are invited to share your opinion freely on each question based on your knowledge and experience. Your participation will be voluntary and you can leave the discussion any time if you feel uncomfortable to take part. The information provided will be used only as data for improving the quality of teacher education program under Faculty of Education, TU. Your personal and institutional identity will be anonymized.

District: _____ Date: _____

S.N.	Name of Stakeholders	Qualification	Occupation	Experience	Gender	Ethnicity	Age
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

1. Strengths and weaknesses of currently practiced teacher education curricula of FOE, TU.
2. Role of TU for preparing prospective teachers to implement competency-based school curricula.
3. Adequacy of learning resources (textbooks, technology, laboratory equipment, digital contents).
4. Internal and external efficiency of B.Ed. program.
5. Availability of necessary infrastructure (classrooms, libraries, ICT, laboratories, and sports facilities) to implement TE curricula.
6. Current assessment practices (fairness, reliability, and validity).
7. Adequacy of the qualification and training of teacher educators to implement TE curriculum.
8. Sufficiency of professional development opportunities for teacher educators.
9. Suggestions for improving TE program to develop prospective teachers with intended competencies.

Thank You