Harmonization Between the Curriculum of Grades 11 and 12 and Bachelor Level and Ways of Improvement

Final Report

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Counsel & Counsel Pvt Ltd

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We hope this study will serve as a valuable resource for policy development and advocacy efforts aimed at improving Grades 11 and 12 curricula of the core subjects and ensuring vertical alignment with the Bachelor's level curriculum. Moreover, we are hopeful that the findings and recommendations made in this study will also provide important input for future revision of the bachelor's level curricula of higher education institutions in Nepal.

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Executive Summary

This study examined the alignment between the school level (Grades 11 and 12) and the Bachelor's level curricula. The curricula of core subjects, i.e., English, Nepali, Mathematics, and Social Studies in Nepal's school curriculum were analyzed and compared with that of the Bachelor's level. The primary concern was to assess the vertical alignment of these curricula so that the future curriculum development process can adopt a coherent mechanism to scaffold students' smooth transition from the school to the university level. The study compared curricular competencies, contents, instructional strategies, and student assessment methods prescribed in the curricula of the two levels. The study identified overlaps, gaps, and redundancies in the curricula of the selected school subjects with those of the same subject areas in the Faculty of Education (FoE), the Faculty of Management (FoM), the Faculty of Humanities and Social Sciences (FoHSS), and the Institute of Science and Technology (IoST) under Tribhuvan University. It also made an examination of the challenges faced by students and educators in learning and implementing the curricula. Based on these findings, the study has offered pragmatic recommendations to enhance continuity, coherence, and integration of the curricular elements such as competencies, contents, and implementation processes, drawing on best practices from the education systems in Nepal and beyond. More specifically, the study has recommended necessary improvements to enhance coherence between the curricula of the school level and higher education (especially in the disciplinary streams- Education, Management, and Humanities and Social Sciences).

The study employed a qualitative research methodology. The data were gathered through desk reviews, curriculum audit workshops, focus group discussions, and key informant interviews to examine the vertical alignment between the curricula of Grades 11 and 12 and the Bachelor's level of Tribhuvan University (TU), Nepal, the challenges experienced in implementing the curricula, and desirable improvements in the future. The Bachelor's curricula of Tribhuvan University were selected considering that the FoE, FoM, FoHSS, and IoST have the largest coverage in Nepal, i.e., approximately more than 75% of the current enrolments are in TU, and these core subjects are taught at the Bachelor's level of TU. This makes the analysis of TU's curricula more representative of the Bachelor's level curriculum in Nepal. However, at the same time, the research team consulted professors from Kathmandu University (KU) and Mid-West University (MWU) to understand the trends in selection of curricular contents, instructional methods, and assessment practices in these

institutions. Subject experts from Nepali, English, Mathematics, and Social Studies were engaged throughout the research process. Tools such as curriculum alignment matrix, interview guidelines, and workshop forms were developed, validated through expert workshops attended by the officials of the CDC, subject-specific experts, as well as the research team members. Four subject-specific curriculum audit workshops, four focus group discussions, and interactive feedback sessions were conducted with curriculum developers, university faculty, textbook writers, and school teachers. The virtual key informant interviews with experts from KU and MWU provided a deeper understanding of the higher education curricula development and implementation processes. The key findings and recommendations have been reported as follows:

Key Findings

Mathematics

- The Grades 11 and 12 curricula focus on applied mathematics to help students connect the mathematics learning contents with their everyday life, but at the Bachelor level, the emphasis shifts to more abstract and theoretical understanding, including proof-based learning, higher-order algebraic structure, and deeper analysis. The Grades 11 and 12 mathematics curricula provide sufficient content information, but efforts to relate this content to real-life situations of learners through instructional strategies need further attention.
- Some of the competencies and learning outcomes of Grades 11 and 12 mathematics curricula do not have a perfect match. For instance, the competency in statistics and probability focuses on higher-order thinking skills, while the learning outcomes focus on conceptual understanding of the content matters.
- Regarding the contents of the school level curriculum, it introduces foundational concepts in algebra, calculus, analytical geometry, statistics and probability that are aligned with the Bachelor's level curriculum extending to abstract algebra, advanced calculus and multivariate analysis, analytical geometry, probability and statistics but the part of foundational geometry is missing in Grades 11 and 12 which is extensively used in Bachelor's level. In sum, the Grades 11 and 12 mathematics contents are aligned with the Bachelor's level mathematics contents.

- Similar content coverage is seen in both the Grades 11 and 12 mathematics curricula of Nepal and the CBSE Grades 11 and 12 curricula of India. Nepal's Grades 11 and 12 mathematics curricula focus on theoretical as well as practical application of mathematical concepts, while CBSE curricula mostly focus on applications rather than on theoretical understanding.
- During the Focus Group Discussions (FGDs), teachers, experts, and students shared that the Grades 11 and 12 mathematics curricula contain a substantial amount of content. They also recommended that practical applications should be promoted with a conceptual understanding of mathematical concepts.
- The instructional process of Grades 11 and 12 is explicitly stated and includes more student-centric methods of teaching, but the different streams' mathematics curricula at the bachelor's level either do not explicitly mention instructional methods or, if mentioned, they are mostly teacher-centered, with a focus on lecture and discussion. Teachers were concerned about the mismatch between the contents of the course and instructional methods, as they realized that if they adopted student-centered strategies, they would not be able to complete the course content in time.
- Regarding assessment and evaluation, Grades 11 and 12 curricula have prescribed both formative and summative assessment practices, whereas the Bachelor's level curricula include summative assessment.

Social Studies

- The analysis of the curricular competencies, learning outcomes, and contents highlights that issues, including a lack of coherence, insufficient depth, improper order, and theoretical inconsistencies in subjects like Economics, Sociology, Geography, Political Science, and History, may impede students' readiness for the demands of university education. This issue requires further exploration.
- Despite several methods of content delivery suggested in the curricula, elaboration of the instructional methods would benefit teachers to learn how to make effective use of them in achieving curricular goals.
- There must be a better balance between theoretical knowledge and practical application. This involves not only improving the sequencing of content but also fostering greater engagement by linking the learning content with students' experiential learning. It is

crucial to develop students' critical thinking skills to meet the rigorous demands of university-level study.

- The study strongly emphasizes that curriculum reform is essential for developing relevant content as per the market changes, ensuring coherent learning experiences, and facilitating smooth student progression. A major oversight identified is the lack of thematic integration in current curriculum planning, which prevents the effective representation and emphasis of interdisciplinary and trans-disciplinary learning.
- Despite improvements in assessment practices in recent years, there is a tendency to heavily focus on theoretical knowledge by expecting students to attend a final written examination, particularly evident at the Bachelor's level. Consideration is to be made to include formative assessment practices in the Bachelor's level curricula.
- There is a need for a stronger commitment to collaborative work among all key stakeholders: curriculum designers, teachers, universities, and policymakers. This type of unified effort is essential for preparing the school-level curricula that support students to effectively transition to higher education. The study calls for jointly organized workshops, participatory curriculum development to identify the most relevant contents from geography, political science, economics, and history.

English

- The English curriculum of Grades 11 and 12 in Nepal has been organized based on the competencies of language skills and aspects. Competency-based curriculum should focus on language proficiency development rather than the knowledge of the contents, especially from literary as well as other interdisciplinary texts. This curriculum has focused on literary as well as interdisciplinary texts to develop language proficiency as well as content knowledge.
- The English subject curricula of the Grades 11 and 12 have a weak alignment in terms of the curricular competencies with the Bachelor of Education Compulsory English curriculum. The reason is that the former was more a competency-based curriculum, and the latter was more a content-based curriculum. Creating coherent curricular goals would benefit the students entering the Bachelor's level in terms of how they deal with the course while transitioning from the school level to higher education.

- There is misalignment between the Grades 11 and 12 curricula and the Bachelor of Arts English curriculum, as the latter is a thematic curriculum that aims to develop students' reading and writing skills, with high-level reading engagement and critical analysis of the reading texts. Such texts and engagement can develop reading and writing skills, but how the communication skills are developed is unclear.
- The reading and writing elements are extensively focused, and the listening and speaking elements are less focused in both levels. This was found through the desk review and focus group discussions with teachers and students. A language curriculum should have an explicit mention of the oral skills, which are missing in all the Bachelor-level curricula.
- Reading texts at the Bachelor level was found more complex not meeting the students' current level of English proficiency which contributed to demotivation in reading in English ultimately affecting their writing engagement. In terms of instructional strategies, the Grades 11 and 12 curricula are far more updated compared to the Bachelor's level curricula. For example, the Grades 11 and 12 curricula prescribe interactive strategies that help make learning more communicative and lively. But the Bachelor's level curricula (e.g., B.Ed.) prescribed both teacher-centered (e.g., lecture, demonstration, illustration) and student-centered techniques (pair work, mini projects, group work, presentation, etc.).
- The space given to project-based learning is very limited in Grades 11 and 12, and it is almost non-existent in Bachelor's level curricula. There is a good alignment between the Grades 11 and 12 curricula in terms of the assessment systems specified. However, specific assessment plans and procedures were not specified in the BA and BBS level English curriculum compared to those of B.Ed. The final written exam was the only assessment strategy, and the assessment of listening and speaking abilities was unclear.

Nepali

- The Nepali language curriculum at the school level should serve as the foundation for the Nepali curriculum at the Bachelor's level; therefore, the curriculum for Grades 11 and 12 supports higher education. The objectives of the language curriculum in Grades 11 and 12 are based on competency levels and learning outcomes, and since they exist as general and specific objectives at the Bachelor's level, uniformity between them is necessary. While the Nepali language curriculum at the school level focuses on linguistic skills, the language curriculum at the Bachelor's level focuses on both linguistic skills and literary

appreciation. Thus, a balance of literary appreciation is needed in the language curriculum for Grades 11 and 12. Overall, however, the curriculum for Grades 11 and 12 appears to be more updated compared to the Bachelor's level.

- Regarding grammatical content, some topics are included in Grade 11, some in Grade 12, and some are distributed across both grades, while all these topics are included at the Bachelor's level. Unlike in Grades 11 and 12, the Bachelor's level aims to practise grammatical concepts through guided and independent writing. A sequential interrelationship and a simple-to-complex order are evident in the content of both levels. In terms of comprehension and expression, the scope of content is expanded in grade 12 compared to grade 11. When it comes to the Bachelor's level, practical writing in comprehension and expression has been made even more extensive. It seems appropriate to expand the content of Grades 11 and 12 by using the Bachelor's level as a reference.
- There is sufficient genre diversity in text construction for Grades 11 and 12, whereas a limited number of genres are included at the Bachelor's level. Similarly, based on text sequencing, cyclical sequencing methods are adopted in Grades 11 and 12, while linear sequencing methods are observed at the Bachelor's level. Since Nepali is included as a compulsory subject at both levels, it would be appropriate to adopt a single sequencing method.
- While an activity-based teaching-learning strategy is adopted in Grades 11 and 12, a predominance of theoretical teaching-learning strategies is observed at the bachelor's level. The curriculum for Grades 11 and 12 expects skill-based activity-oriented teaching-learning processes and practical work, but the teaching-learning facilitation process at the bachelor's level needs to be made different from traditional methods by emphasizing activities, projects, and self-learning. Internal and external evaluation systems are in place for both Grades 11 and 12 and in Humanities, but a separate system for internal evaluation is not found at the Bachelor's level in Education.

Key Recommendations

Mathematics

- It is recommended to include competencies that promote curiosity, confidence, love, and appreciation towards mathematics.
- Ensure the alignment of competencies and learning outcomes. Competencies emphasize higher-order thinking skills while learning outcomes focus on lower-order skills. Revise

learning outcomes to include application-based and promote analytical skills. Also, balance the distribution of cognitive levels according to Bloom's Taxonomy.

- Revisit the content coverage of mathematics because the experts recommended streamlining the topics by removing redundant and reducing overloaded content such as 'integration', and focus on the application part of the mathematics content.
- Revise learning outcomes to relate to learning strategies like inquiry-based learning, project and problem-based learning, and collaborative teaching-learning approaches.
- Teachers believed that integration of technology in math teaching was challenging. So, it is recommended that the human resource development centers integrate technology in their training packages to promote technological competencies of teachers.
- In practice, internal assessment strategies are not effectively implemented. So, concerned authorities should establish a monitoring body to ensure the effective implementation of developed rubrics and guidelines for internal assessment, ensure transparency and accountability in grading through support and monitoring, and encourage portfolio management of students.

Social Studies

- Integrate fundamental sociological and anthropological theories and fundamental concepts (e.g., social structures, institutions, significant theorists) into the Grades 11 and 12 curricula to establish a more robust theoretical foundation for students.
- Develop the History curriculum to begin with ancient civilisations and general civilisational themes before transitioning to contemporary historical and political developments.
- Enhance the theme of "Caste, Ethnicity, and Identity" to guarantee a deliberate progression in the content of this theme. Include foundational definitions, meanings, and characteristics in Grade 11 Social Studies, using examples such as the identities of Dalits, Janajatis, and Madhesis. The curriculum in Grade 12 Life Skills should explicitly include content on the impact of caste and ethnicity on social behaviour, access to rights, and discrimination, as well as the integration of real-life stories.
- Incorporate more contemporary skills into the curriculum by revising the curriculum to include essential modern skills, such as active participation in civic matters, environmental consciousness, and digital capabilities, to ensure that the content reflects contemporary global transformations.

- Reorganise the curriculum to encourage interdisciplinary projects (e.g., combining Geography with Economics or History with Civics Studies) in order to cultivate real-world problem-solving skills and critical thinking by emphasising the connections between subjects.
- Develop a methodical approach to the regular evaluation of the Grades 11 and 12 curricula to ensure the continuous incorporation of current and pertinent information and the elimination of obsolete content.
- Organise annual seminars that involve all stakeholders in order to encourage collaborative curriculum development.
- Provide teacher training that is subject-specific and driven by demand, with a focus on practical pedagogy.

English

- Development of a coherent curriculum in the Bachelor of Education level by following a competency-based curriculum that aims at developing students' fundamental skills in English language use in their practical and professional areas. Development of communicative competence in English is the primary purpose of inclusion of compulsory English at both levels.
- The contents in the current Grades 11 and 12 curricula are to be revised by incorporating more contents that relate to the recent global development, AI technology, digital learning and so on, and the same to be extended to Bachelor's level.
- As the primary goal of the English curriculum for Bachelor's level students is to develop their English proficiency, the Bachelor's level curriculum can be made less content-laden, and more a functional one to develop students' reading, writing, listening and speaking skills, that also develop their vocabulary and grammar simultaneously.
- The listening and speaking skills in Grades 11 and 12 are less focused and these skills are almost given zero focus in the Bachelor level curricula of the selected streams. As stated by students, these skills are rarely taught in schools and universities even if they are included in the curriculum.
- The Grades 11 and 12 curricula may focus on developing students' basic skills in academic writing. As of now, the academic writing part is missing in the currently practiced curricula to some extent. So, introduction of some academic writing content would be desirable in Grades 11 and 12 curricula.

- The complexity of reading text (both literary and interdisciplinary) should be reduced in order to maintain the readability of the texts for the target age group in Grades 11 and 12, as well as at Bachelor's level.
- In terms of the instructional strategies, the Bachelor's level curricula should provide more interactive, student-centered and communicative learning activities to provide students with extended engagement in English language use in real-life-like situations.
- More space for formative assessment to be expanded by providing students with space for project work and other real-life-like activities so that they can practice language to prepare for their future education and career.
- The review of the curriculum of Grades 11 and 12 and bachelor levels showed relatively less space to engage students in technology-mediated and technology-enhanced learning activities. So, this study recommends that the curriculum should be made more interactive in the digital mode and adopt flipped learning techniques.
- The texts prescribed for reading should be simplified, shortened and the activities in relation to the text's comprehension should be increased.

Nepali

- To ensure a strong foundation for higher education, it is recommended to achieve uniformity between the objectives of the Grades 11 and 12 and Bachelor's level Nepali language curricula.
- For better preparation of students, the Grades 11 and 12 Nepali language curriculum should integrate a balanced focus on literary appreciation, complementing its current emphasis on linguistic skills.
- To create a seamless academic progression, the content of Grades 11 and 12, particularly in comprehension and expression, ought to be expanded to align with and build upon the practical writing emphasis at the Bachelor's level.
- Considering Nepali's compulsory status at both educational stages, it is advisable to adopt a unified approach to text grading across both school and Bachelor's levels, rather than employing different methods.
- The Bachelor's level teaching-learning process should transition from a predominantly theoretical approach to one that incorporates activity-based learning, projects, and self-study, mirroring the more modern and engaging strategies utilized in Grades 11 and 12.

- To ensure consistency across academic programs, it is crucial to implement a standardized system for internal and external evaluation across all Bachelor's level programs, including Education, aligning it with practices in other faculties like Humanities and the Grades 11 and 12 system.

सारांश

प्रस्तुत अध्ययन नेपालको विद्यालय शिक्षाअन्तर्गत माध्यमिक तह कक्षा ११-१२ का अनिवार्य विषयहरू (नेपाली, अङ्ग्रेजी, गणित र सामाजिक अध्ययन तथा जीवनोपयोगी शिक्षा) र उच्च शिक्षा (स्नातक तह) का पाठ्यक्रमहरूका निहित तादात्म्यको विश्लेषणमा केन्द्रित छ । यस अध्ययनको मुख्य उद्देश्य उक्त पाठ्यक्रमहरूको तहगत सन्तुलन (vertical alignment) को मूल्याङ्कन गर्नु रहेको छ । यसैले प्रस्तुत अध्ययनमा दुई शैक्षिक तहमा रहेका सक्षमता (competencies), विषयवस्तु (contents), शिक्षणसिकाइ रणनीतिहरू (instructional strategies) र विद्यार्थी मूल्याङ्कन विधिहरूको तुलना गरिएको छ । अध्ययनमा विद्यालय तहका पाठ्यक्रमहरूलाई र त्रिभुवन विश्वविद्यालयअन्तर्गत शिक्षाशास्त्र सङ्काय, व्यवस्थापन सङ्काय, विज्ञान र मानविकी तथा सामाजिक शास्त्र सङ्कायका सोही विषयक्षेत्रका पाठ्यक्रमहरूसँग तुलना गरी विषयवस्तुको पुनरावृत्ति तथा अन्तराल पहिचान गरिएको छ । यस्तै प्रस्तुत अध्ययनमा नेपाल र नेपालबाहिरका शिक्षा प्रणालीका उत्कृष्ट अभ्यासहरूको सन्दर्भलाई आधार बनाई पाठ्यक्रमका तहवहरूमा निरन्तरता, सुसङ्गतता र समन्वय कायम गर्न आवश्यक व्यावहारिक सुझावहरू प्रस्तुत गरिएको छ । विशेषत: विद्यालय तह र उच्च शिक्षाका पाठ्यक्रमबिचको सम्बन्धलाई अझ सुदृढ बनाउन शिक्षा, व्यवस्थापन र मानविकी तथा सामाजिक शास्त्र सङ्कायका विषयहरूमा सुधारका लागि आवश्यक सुझावहरू प्रस्तुत गरेको छ ।

यस अध्ययनमा गुणात्मक अनुसन्धान विधिको अवलम्बन गरिएको छ । कक्षा ११-१२ तथा त्रिभुवन विश्वविद्यालयको स्नातक तहका पाठ्यक्रमका बिचको तहगत सन्तुलन, कार्यान्वयनमा देखिएका चुनौती र भविष्यमा गरिनुपर्ने सुधारहरूको अन्वेषणका लागि डेस्क समीक्षा, पाठ्यक्रम परामर्श परीक्षण कार्यशाला, समूह छलफल र विज्ञहरूसँगका अन्तर्वार्तामार्फत आवश्यक सामग्री सङ्कलन गरिएको छ । अध्ययन र विश्लेषणका लागि मुख्य सामग्रीका रूपमा त्रि.वि.का स्नातकस्तरीय पाठ्यक्रमहरूलाई लिइएको छ । त्रिभुवन विश्वविद्यालयका स्नातक तहका पाठ्यक्रमहरू छनोट गर्नुको मुख्य कारण नेपालमा शिक्षाशास्त्र सङ्काय, व्यवस्थापन सङ्काय, मानविकी तथा सामाजिक शास्त्र सङ्काय र विज्ञान तथा प्रविधि अध्ययन संस्थानको सबैभन्दा ठुलो पहुँच हुनु हो अर्थात् हालको कुल भर्नाको लगभग ७५% भन्दा बढी विद्यार्थी त्रिविमा छन् र यी मुख्य विषयहरू त्रिविको स्नातक तहमा पढाइन्छन् । साथै त्रिविका प्राध्यापकहरू नयाँ विश्वविद्यालयहरूमा विशेषज्ञका रूपमा पाठ्यक्रम विकासमा सक्रिय रूपमा संलग्न हुने गरेको पाइन्छ । अन्य नयाँ विश्वविद्यालयका पाठ्यक्रमहरू पनि त्रिविको स्नातकस्तरीय पाठ्यक्रमबाट प्रभावित देखिन्छन् । यसर्थ त्रिविको स्नातक तहका पाठ्यक्रमलाई नेपालकै प्रतिनिधिमूलक पाठ्यक्रमका रूपमा लिन सकिन्छ तर पनि अनुसन्धान टोलीले काठमाडौँ विश्वविद्यालय र मध्यपश्चिम विश्वविद्यालयका प्राध्यापकहरूसँग परामर्श गरी तिनका पाठ्यक्रमसम्बद्ध सामग्री, शिक्षण विधि र मूल्याङ्कन प्रक्रियाका बारेमा आवश्यक जानकारीसमेत लिएको थियो । यस क्रममा नेपाली, अङ्ग्रेजी, गणित र सामाजिक अध्ययनका विषय विशेषज्ञहरूको समेत सहभागिता थियो । पाठ्यक्रम सन्तुलन, म्याट्रिक्स, अन्तर्वार्ता, दिशानिर्देश र कार्यशाला फारामहरू जस्ता उपकरणहरूको विकास गरिएको थियो । यी उपकरणहरू विषय विशेषज्ञहरू र अनुसन्धान टोलीको सहभागितामा आयोजित कार्यशालाबाट

प्रमाणीकरण गरिएका थिए । चारओटा विषयगत पाठ्यक्रम अडिट कार्यशाला, चारओटा विषयमा नै केन्द्रित समूह छलफल र पाठ्यक्रम निर्माता, विश्वविद्यालयका प्राध्यापक, पाठ्यपुस्तक लेखक तथा विद्यालय शिक्षकहरूसँग अन्तक्रियात्मक सत्रहरू सञ्चालन गरिएका थिए । यसका अतिरिक्त काठमाडौँ विश्वविद्यालय र मध्यपश्चिम विश्वविद्यालयका विशेषज्ञहरूसँग गरिएका भर्चुअल अन्तर्वार्ताबाट उच्च शिक्षाका पाठ्यक्रमको विकास तथा कार्यान्वयन प्रक्रियाबारे थप अन्तर्दृष्टि प्राप्त भएको थियो ।

अध्ययनका मुख्य निष्कर्ष र सिफारिस/सुझावलाई निम्नानुसार प्रस्तुत गरिएको छ:

मुख्य निष्कर्ष

गणित

- कक्षा ११-१२ का पाठ्यक्रमले गणितलाई दैनिक जीवनसँग जोड्ने प्रयोजनसहित प्रयोगात्मक पक्षमा केन्द्रित गरेको छ तर स्नातक तहका पाठ्यक्रमको जोड भने विषयगत सैद्धान्तिक ज्ञान निर्माणमा बढी देखिन्छ । तसर्थ सक्षमताको आधारमा कक्षा ११-१२ र स्नातक तहको तुलना गर्नु वाञ्छनीय देखिँदैन । यसरी कक्षा ११-१२ को पाठ्यक्रमले गणितलाई व्यावहारिक र प्रयोगमूलक बनाउने परिकल्पना गरे पनि यसमा राखिएका सिकाइ उपलब्धि र विषयवस्तुले त्यो कुरालाई पूर्ण पुष्टि भने गर्न सकेको देखिँदैन ।
- कक्षा ११ र १२ को गणित पाठ्यक्रमका केही बिषयबस्तुहरुका सक्षमता र सिकाइ उपलब्धिहरू मेल नखाएको देखिन्छ। उदाहरणका लागि, तथ्याङ्क र सम्भाव्यता अध्ययनबाट उच्च-क्रमको सक्षमता अपेक्षा गरिएको छ तर सिकाइ उपलब्धि मुलतः: विषयवस्तुको अवधारणात्मक विकासमा मात्र केन्द्रित भएको देखिन्छ । यसबाट सक्षमताले खोजे जस्तो उच्च तहको सिकाइ सम्भव नहुने देखिन्छ ।
- विद्यालय तहको पाठ्यक्रमले समेटेका विषयवस्तु खास गरी Algebra, Calculus, Analytic Geometry, Statistics and Probability हरू स्नातक तहको पाठ्यक्रमले समेटेका मुख्य विषयवस्तुसँग मेल खाने देखिए पनि स्नातक तहमा समावेश गरिएका विषयवस्तुहरूले बढी गणितीय संरचनामा जोड दिने खालका देखिन्छन् । स्नातक तहमा व्यापक रूपमा प्रयोग हुने Foundational geometry कक्षा ११ र १२ मा नहुदा केहि नपुग देखिएपनि कक्षा ११ र १२ को गणित विषयवस्तुहरू स्नातक तहको गणित विषयवस्तुसँग मिल्दोजुल्दो छन्।
- नेपालको कक्षा ११-१२ तथा CBSE कक्षा ११-१२ को गणितको पाठ्यक्रमको तुलना गर्दा पनि तादात्म्य नै देखिन्छ । दुबै पाठ्यक्रममा समान किसिमका विषयवस्तु समावेश गरेको पाइन्छ । खासगरी नेपालको ११ र १२ मा गणितीय सैदान्तिक तथा व्यबहारिक दुवै ज्ञान लाइ जोड दिएको छ भने ऋद्यक्ष पाठ्यक्रमले सैदान्तिक भन्दा व्यबहारिक पक्षलाइ जोड दिएको देखिन्छ ।
- अन्तरक्रियामा शिक्षक तथा बिध्यार्थीहरुले कक्षा ११ र १२ को गणित पाठ्यक्रम ले बिषयगत ज्ञानलाइ बढी जोड दिईएकोले सैदान्तिक साथ साथै व्यबहारिक पक्षलाइ पनि प्राथमिकीकरण गर्नु पर्ने धारणा व्यक्त गरे।
- कक्षा ११-१२ को पाठ्यक्रमले मूलतः विद्यार्थीकेन्द्रित शिक्षण विधिहरू अपनाउन जोड दिएको छ भने स्नातक तहका पाठ्यक्रममा विस्तृत रूपमा शिक्षण विधिको उल्लेख गरिएको पाइँदैन । शिक्षण विधि उल्लेख गरिएका

विषयमा पनि खास गरी शिक्षककेन्द्रित विधि नै उल्लेख गरिएको पाइन्छ । यस दृष्टिले कक्षा ११-१२ को पाठ्यक्रमले बढी विद्यार्थीकेन्द्रित र सक्रिय सिकाइको स्वरूपलाई ग्रहण गरेको छ । तर पाठ्यक्रममा राखिएका सिकाइ उपलब्धि, विषयवस्तु र शिक्षण विधिबिचमा तालमेल नमिल्दा उल्लिखित शिक्षण विधिको प्रभावकारी प्रयोग हुनेमा भने सन्देह रहेको देखिन्छ ।

- मूल्याङ्कन र परीक्षणको सन्दर्भमा कक्षा ११-१२ का पाठ्यक्रमहरूमा निर्माणात्मक र निर्णयात्मक दुवै मूल्याङ्कन अभ्यासहरू तोकिएका छन् भने स्नातक तहका पाठ्यक्रमहरूमा निर्णयात्मक मूल्याङ्कन मात्र समावेश गरिएको पाइन्छ ।

सामाजिक अध्ययन

- पाठ्यक्रमका सक्षमता, सिकाइ उपलब्धि र विषयवस्तुको विश्लेषण गर्दा अर्थशास्त्र, समाजशास्त्र, भूगोल, राजनीतिशास्त्र र इतिहास जस्ता सामाजिक क्षेत्रका विषयहरूमा सुसङ्गतताको अभाव, पर्याप्त गहनताको अभाव, अनुचित क्रमबद्धता र सैद्धान्तिक असङ्गतिहरूका कारण विद्यार्थी विश्वविद्यालय तहको अध्ययनका लागि आवश्यक तयारीमा कमजोर हुन सक्ने देखिएको छ ।
- पाठ्यक्रममा विभिन्न शिक्षण विधिको सुझाव दिइए तापनि ती विधिहरूलाई कसरी प्रभावकारी रूपमा प्रयोग गर्ने भन्नेबारे विस्तृत विवरणको अभाव छ । शिक्षकमाझ ती विधिहरूको प्रयोगबारे स्पष्ट मार्गदर्शन भएमा पाठ्यक्रमका उद्देश्यहरू हासिल गर्न मदत पुग्ने देखिएको छ ।
- सैद्धान्तिक ज्ञान र व्यावहारिक प्रयोगबिच राम्रो सन्तुलन हुनुपर्दछ । यसको अर्थ विषयवस्तुको उचित क्रमबद्धता मात्र नभई विद्यार्थीको अनुभवात्मक सिकाइसँग विषयलाई जोडेर बढी संलग्नता विकास गर्नु पनि हो । विश्वविद्यालयका उच्चस्तरीय शैक्षिक आवश्यकता पूरा गर्न विद्यार्थीमा समालोचनात्मक सोच सिपको विकास गर्नु अत्यन्त आवश्यक छ ।
- यस अध्ययनले जोडदार रूपमा पाठ्यक्रम सुधारको आवश्यकता औंल्याएको छ । यसको उद्देश्य बजारको परिवर्तनअनुसार सान्दर्भिक विषयवस्तु विकास गर्नु, सुसङ्गत सिकाइअनुभव सुनिश्चित गर्नु र विद्यार्थीको सहज रूपान्तरणमा सहजीकरण गर्नु हो । पहिचान गरिएको एक प्रमुख कमी भनेको वर्तमान पाठ्यक्रम योजनामा विषयगत एकीकरणको अभाव (lack of thematic integration) हो । यसले अन्तरविषयगत (interdisciplinary) र बहुविषयगत (trans-disciplinary) सिकाइको प्रभावकारी प्रतिनिधित्व र जोड दिन नसक्ने स्थिति बनाएको छ ।
- हालका वर्षहरूमा मूल्याङ्कन अभ्यासहरूमा सुधार देखिए पनि अझै पनि विशेष गरी स्नातक तहमा विद्यार्थीलाई अन्तिम लिखित परीक्षामै केन्द्रित गराउने प्रवृत्ति कायमै छ । त्यसैले स्नातक तहका पाठ्यक्रममा रचनात्मक/निरन्तर मूल्याङ्कन (formative assessment) पनि समावेश गर्नतर्फ विचार गरिनुपर्छ ।

- पाठ्यक्रम विकासमा संलग्न सबै प्रमुख सरोकारवालाहरू : पाठ्यक्रम निर्माता, शिक्षक, विश्वविद्यालय र नीति निर्माताबिच पारस्परिक सहयोग (collaborative work) का लागि दृढ प्रतिबद्धताको आवश्यकता छ । यस प्रकारको एकीकृत प्रयास विद्यालय तहको पाठ्यक्रम तयार गर्न अत्यन्त महत्वपूर्ण हुन्छ । यसले विद्यार्थीलाई उच्च शिक्षातर्फ सहज रूपान्तरणमा सहयोग पुऱ्याउँछ । अध्ययनले भूगोल, राजनीतिशास्त्र, अर्थशास्त्र र इतिहास विषयबाट सबैभन्दा सान्दर्भिक विषयवस्तुहरू पहिचान गर्नका लागि संयुक्त रूपमा आयोजित कार्यशालाहरू, सहभागितामूलक पाठ्यक्रम विकासका लागि आह्वान गरेको छ ।

अङ्ग्रेजी

- शिक्षाशास्त्र स्नातक तहमा विद्यार्थीको व्यावहारिक र व्यावसायिक क्षेत्रमा अङ्ग्रेजी भाषाको प्रयोगमा आधारभूत सिपहरू विकास गर्ने लक्ष्य राख्ने सक्षमतामा आधारित सुसङ्गत पाठ्यक्रम विकास गरिनुपर्छ । दुबै तहमा अनिवार्य अङ्ग्रेजी समावेश गर्नुको प्राथमिक उद्देश्य अङ्ग्रेजीमा सञ्चार सक्षमता (communicative competence) विकास गर्नु हो ।
- कक्षा ११-१२ का पाठ्यक्रमहरूमा विषयवस्तुलाई हालको विश्वव्यापी विकास, एआई प्रविधि, डिजिटल सिकाइ र यस्तै कुराहरूसँग सम्बन्धित विषयवस्तुहरू समावेश गरेर परिमार्जन गरिनुपर्छ र सोही कुरालाई स्नातक तहमा विस्तार गरिनुपर्छ ।
- स्नातक तहका विद्यार्थीका लागि अङ्ग्रेजी पाठ्यक्रमको प्राथमिक लक्ष्य उनीहरूको अङ्ग्रेजी प्रवीणता विकास गर्नु भएकाले स्नातक तहको पाठ्यक्रमलाई कम विषयवस्तु केन्द्रित (content–laden) र अधिक कार्यात्मक (functional) बनाउन सकिन्छ । यसबाट विद्यार्थीको सुनाइ, बोलाइ, पढाइ र लेखाइ सिपको विकासका साथै शब्दावली र व्याकरण सिकाइमा समेत सहयोग पुग्ने देखिन्छ ।
- कक्षा ११-१२ का पाठ्यक्रममा शैक्षिक प्राज्ञिक लेखन सिप विकास गर्न प्राथमिकता दिनुपर्छ । हाल प्रचलनमा रहेका पाठ्यक्रममा प्राज्ञिक लेखनको अंशको प्रायः अभाव छ । त्यसैले, कक्षा ११-१२ का पाठ्यक्रमहरूमा केही प्राज्ञिक लेखनका विषयवस्तुहरू समावेश गर्नु वाञ्छनीय हुने देखिन्छ ।
- कक्षा ११-१२ साथै स्नातक तहमा लक्षित उमेर समूहका लागि पाठको पठनीयता कायम राख्न पढ्नुपर्ने पाठ (साहित्यिक र अन्तरविषयात्मक दुवै) को जटिलता घटाउनुपर्छ ।
- स्नातक तहको पाठ्यक्रममा शिक्षण विधिहरू बढी अन्तर्क्रियात्मक, विद्यार्थी केन्द्रित र सञ्चार आधारित बनाउने व्यवस्था मिलाइनुपर्छ । यसबाट विद्यार्थीलाई वास्तविक जीवन जस्तै परिवेशमा भाषा प्रयोग गर्न सहयोग पुग्छ ।
- रचनात्मक/निरन्तर मूल्याङ्कनका लागि विद्यार्थीलाई परियोजना कार्य र वास्तविक जीवन जस्तै कार्य गर्ने अवसर दिनुपर्दछ । यसबाट विद्यार्थीलाई भविष्यको शिक्षा र पेसाका लागि भाषा अभ्यास गर्न सहयोग पुग्छ ।
- कक्षा ११-१२ तथा स्नातक तहका पाठ्यक्रमहरूको समीक्षा गर्दा प्राप्त भएको निचोड के हो भने प्रविधि आधारित वा प्रविधिसम्बद्ध सिकाइको अभाव देखिन्छ । त्यसैले पाठ्यक्रमलाई डिजिटल मोडमा थप अन्तर्क्रियात्मक बनाउन

र फ्लिप्ड लर्निङ (विद्यार्थीले घरमा सामग्री अध्ययन गर्ने कक्षामा अभ्यास गर्ने विधि) प्रविधि अपनाउनुपर्ने देखिन्छ । पढ्नका लागि निर्धारित पाठहरूलाई सरलीकृत र छोटा बनाउनुका साथै पाठको बोधसँग सम्बन्धित क्रियाकलापहरू बढाउनुपर्ने देखिन्छ ।

नेपाली

- विद्यालय तहको नेपाली भाषा पाठ्यक्रम स्नातक तहको नेपाली पाठ्यक्रमको आधारशिला हुनुपर्दछ भन्ने मान्यता वर्तमान कक्षा ११-१२ को पाठ्यक्रमसँग मेल खाने देखिन्छ । कक्षा ११-१२ को भाषा पाठ्यक्रमका सिकाइ उपलब्धिहरू विद्यार्थीको क्षमता र स्तर स्नातक तहमा सामान्य र विशिष्ट उद्देश्यका रूपमा रहेकाले तिनीहरूबिच एकरूपता आवश्यक छ । विद्यालय तहको नेपाली भाषा पाठ्यक्रम भाषिक सिपहरूमा केन्द्रित हुँदा स्नातक तहको भाषा पाठ्यक्रम भाषिक सिप र साहित्यिक विषयवस्तुको आस्वादन दुबैमा केन्द्रित छ । यसरी कक्षा ११-१२ को भाषा पाठ्यक्रममा साहित्यिक आस्वादनको सन्तुलन आवश्यक देखिन्छ । समग्रमा स्नातक तहको तुलनामा कक्षा ११-१२ को पाठ्यक्रम बढी अद्यावधिक देखिन्छ ।
- व्याकरण सामग्रीका सन्दर्भमा केही विषयवस्तु कक्षा ११ मा, केही कक्षा १२ मा र केही दुबै कक्षाहरूमा बाँडिएका छन् । स्नातक तहमा भने यी सबै विषयहरू समाविष्ट छन् । कक्षा ११-१२ भन्दा फरक स्नातक तहमा निर्देशित र स्वतन्त्र लेखनमार्फत व्याकरणका अवधारणाहरूको अभ्यास गर्ने लक्ष्य राखिएको छ । दुबै तहका सामग्रीमा क्रमिक अन्तरसम्बन्ध र सरलदेखि जटिल क्रम स्पष्ट छ । बोध र अभिव्यक्तिमा कक्षा ११ को तुलनामा कक्षा १२ मा सामग्रीको दायरा विस्तार गरिएको छ । स्नातक तहमा आउँदा बोध र अभिव्यक्ति खण्ड चाहिँ व्यावहारिक लेखनलाई अझ व्यापक बनाइएको छ । स्नातक तहलाई सन्दर्भका रूपमा प्रयोग गरी कक्षा ११-१२ को बोध सामग्री विस्तार गर्नु आवश्यक देखिन्छ ।
- कक्षा ११-१२ को पाठ निर्माणमा विधागत विविधता पर्याप्त छ भने स्नातक तहमा चाहिँ सीमित सङ्ख्यामा मात्र विधाहरू समावेश गरिएका छन् । त्यसै गरी पाठ अनुक्रमका आधारमा कक्षा ११-१२ मा चक्रीय अनुक्रमण विधिहरू अपनाइएको छ भने स्नातक तहमा रेखीय अनुक्रमण विधिहरू देखिन्छन् । नेपाली दुबै तहमा अनिवार्य विषयका रूपमा समावेश भएकाले एउटै अनुक्रमण विधि अपनाउनु उपयुक्त हुन्छ ।
- कक्षा ११-१२ मा क्रियाकलापमा आधारित शिक्षणसिकाइ विधि अपनाइएको छ भने स्नातक तहमा सैद्धान्तिक शिक्षणसिकाइ विधिको प्राधानता देखिन्छ । कक्षा ११-१२ को पाठ्यक्रममा सिप आधारित, क्रियाकलाप उन्मुख शिक्षणसिकाइ प्रक्रिया र व्यावहारिक कार्यहरूको अपेक्षा गरिएको छ भने स्नातक तहमा शिक्षणसिकाइ सहजीकरण प्रक्रियालाई परम्परागत तरिकाबाट फरक बनाई क्रियाकलापहरू, परियोजनाहरू र स्व-अध्ययनमा जोड दिनुपर्ने देखिएको छ । आन्तरिक र बाह्य मूल्याङ्कन प्रणाली कक्षा ११-१२ र मानविकी दुबैमा लागु छ तर शिक्षाशास्त्र सङ्कायमा आन्तरिक मूल्याङ्कनको व्यवस्था नभएकाले सोको व्यवस्था मिलाउनुपर्ने देखिन्छ ।

मुख्य सिफारिस/सुझाव

गणित

- गणितप्रति सकारात्मक मनोवृत्ति विकास गर्ने खालका सक्षमताहरू समावेश गर्नुका साथै जिज्ञासा, आत्मविश्वास र गणितप्रतिको प्रेम र आस्थालाई अभिवृद्धि गर्ने सक्षमताहरू समावेश गरिनु उपयुक्त देखिन्छ ।
- सक्षमता र सिकाइ उपलब्धिहरूको सङ्गति सुनिश्चित गर्नुपर्ने देखिन्छ । सक्षमताहरूले उच्चक्रमको सोचाइ कौशल (HOTs) मा जोड दिएका छन् भने सिकाइ उपलब्धिहरू निम्नक्रमका कौशलहरू (LOTs) मा मात्र केन्द्रित हुँदा सिकाइ प्रक्रियामा तालमेल नहुने देखिन्छ । रराखिएका सक्षमता र सिकाइ उपलब्धिहरुको पुनराबलोकन गरि, सिकाइ उपलब्धिलाइ व्यवहारिक र विश्लेषणात्मक सिप बिकासमा जोड दिने गरि पुनराबलोकन गर्नुपर्ने देखिन्छ। तसर्थ ब्लुमको वर्गीकरण (Bloom's Taxonomy) अनुसार संज्ञानात्मक स्तरको सन्तुलित वितरण सुनिश्चित गर्नुपर्छ ।
- विज्ञहरूको सुझावअनुसार गणितका विषयवस्तुको भारलाई पुनर्विचार गर्नुपर्ने देखिन्छ। धेरै विषयवस्तु दिनुभन्दा पनि राखिएको विषयवस्तुको प्रयोग पक्षलाई व्यापक गर्न सके सिकाइ अझ प्रभावकारी हुने देखिन्छ। खास गरी Calculus मा Integration को विषयगत ज्ञानभन्दा पनि प्रयोगात्मक पक्ष तथा Algebra मा उही विषयवस्तुलाई ११-१२ दुबैमा समावेश गर्नुभन्दा एकै कक्षामा राख्दा प्रभावकारी हुने भन्ने विज्ञको सुझाव रहेकाले यसमा विशेष ध्यान दिनुपर्ने देखिन्छ ।
- विभिन्न पक्षहरूसँगको छलफलले शिक्षकहरूमा गणितलाई प्रविधिसँग जोड्ने सक्षमतामा कमी रहेको देखाएकाले शिक्षकहरूको क्षमता विकासमा जोड दिनु आवश्यक देखिन्छ ।
- शिक्षक तथा विज्ञहरूका अनुसार व्यवहारमा आन्तरिक मूल्याङ्कन प्रक्रिया प्रभावकारी रूपमा लागु भएको पाइँदैन । तसर्थ आन्तरिक मुल्यांकनका लागि निर्मित मापदण्ड (rubrics) र मार्गनिर्देशहरुको प्रभावकारी कार्यान्वयन, पारदर्शिता तथा जबाफदेइता, बिध्यार्थीहरुको व्यक्तिगत बिबरण व्यवस्थापनको लागि सम्बन्धित पक्षबाट प्राविधिक सहयोग, प्रभावकारी अनुगमन, तथा प्रोत्साहन हुनुपर्ने देखिन्छ ।

सामाजिक अध्ययन

- कक्षा ११-१२ को पाठ्यक्रममा समाजशास्त्र र मानवशास्त्रका आधारभूत सिद्धान्तहरू (जस्तै : सामाजिक संरचना, संस्था र महत्वपूर्ण सिद्धान्तकारहरू) समावेश गरी विद्यार्थीका लागि थप सुदृढ सैद्धान्तिक आधार तयार गर्नुपर्छ ।
- इतिहासको पाठ्यक्रम पुरातन सभ्यता र सभ्यताको सामान्य अवधारणाबाट सुरु भई वर्तमान ऐतिहासिक तथा राजनीतिक घटनाक्रमतर्फ क्रमिक रूपमा लैजानुपर्छ ।
- 'जात, जातीय र पहिचान' का विषयवस्तुमा क्रमबद्ध रूपमा विकास सुनिश्चित गर्न यसको विषयवस्तुलाई अझ स्पष्ट र विस्तारित बनाउनु आवश्यक छ। कक्षा ११ को सामाजिक अध्ययन तथा जीवनोपयोगी शिक्षामा दलित,

जनजाति र मधेसीहरू जस्ता पहिचानहरूको उदाहरण प्रयोग गर्दै आधारभूत परिभाषा, अर्थ र विशेषता समावेश गर्नु आवश्यक देखिन्छ । कक्षा १२ को सामाजिक अध्ययन तथा जीवनोपयोगी शिक्षामा जात र जातीयताले सामाजिक व्यवहार, अधिकारमा पहुँच र विभेदमा पार्ने प्रभावका साथै वास्तविक जीवनका कथाहरू समावेश गरिनुपर्छ ।

- आधुनिक आवश्यक सिपहरू जस्तै : नागरिक मामिलामा सक्रिय सहभागिता, वातावरणीय सचेतना र डिजिटल क्षमताहरू समावेश गर्न पाठ्यक्रममा परिमार्जन गरी समकालीन विश्वव्यापी परिवर्तनलाई समेट्नुपर्छ ।
- पाठ्यक्रमको पुनःसंरचना गर्दा विभिन्न विषयबिचको अन्तरसम्बन्ध स्पष्ट होस् र विद्यार्थीले वास्तविक जीवनका समस्या समाधान गर्न र समालोचनात्मक सोच विकास गर्न सकुन् भन्ने उद्देश्य लिनुपर्छ । (जस्तै : भूगोललाई अर्थशास्त्रसँग वा इतिहासलाई नागरिकशास्त्र अध्ययनसँग जोड्ने) ।
- कक्षा ११-१२ को पाठ्यक्रममा समसामयिक र सान्दर्भिक विषयको निरन्तर समावेश र अप्रासङ्गिक सामग्री हटाउने सुनिश्चितताका लागि नियमित रूपमा मूल्याङ्कन गर्ने विधिको विकास गर्नुपर्छ ।
- सबै सरोकारवालाहरूको सहभागितामा वार्षिक गोष्ठीहरू आयोजना गरिनुपर्छ । यसबाट सहकार्यमा आधारित पाठ्यक्रम विकासमा सहयोग पुग्छ ।
- आवश्यकतालाई ध्यानमा राखी विषयकेन्द्रित व्यावहारिक शिक्षण विधिमा आधारित भएर शिक्षक तालिम प्रदान गरिनुपर्छ ।

अङ्ग्रेजी

- शिक्षाशास्त्र स्नातक तहमा विद्यार्थीको व्यावहारिक र व्यावसायिक क्षेत्रमा अङ्ग्रेजी भाषाको प्रयोगमा आधारभूत सिपहरू विकास गर्ने लक्ष्य राख्ने सक्षमतामा आधारित सुसङ्गत पाठ्यक्रम विकास गरिनुपर्छ । दुबै तहमा अनिवार्य अङ्ग्रेजी समावेश गर्नुको प्राथमिक उद्देश्य अङ्ग्रेजीमा सञ्चार सक्षमता (communicative competence) विकास गर्नु हो ।
- कक्षा ११-१२ का पाठ्यक्रमहरूमा विषयवस्तुलाई हालको विश्वव्यापी विकास, एआई प्रविधि, डिजिटल सिकाइ र यस्तै कुराहरूसँग सम्बन्धित विषयवस्तुहरू समावेश गरेर परिमार्जन गरिनुपर्छ र सोही कुरालाई स्नातक तहमा विस्तार गरिनुपर्छ ।
- स्नातक तहका विद्यार्थीका लागि अङ्ग्रेजी पाठ्यक्रमको प्राथमिक लक्ष्य उनीहरूको अङ्ग्रेजी प्रवीणता विकास गर्नु भएकाले स्नातक तहको पाठ्यक्रमलाई कम विषयवस्तु केन्द्रित (content–laden) र अधिक कार्यात्मक (functional) बनाउन सकिन्छ । यसबाट विद्यार्थीको सुनाइ, बोलाइ, पढाइ र लेखाइ सिपको विकासका साथै शब्दावली र व्याकरण सिकाइमा समेत सहयोग पुग्ने देखिन्छ ।
- कक्षा ११-१२ का पाठ्यक्रममा शैक्षिक प्राज्ञिक लेखन सिप विकास गर्न प्राथमिकता दिनुपर्छ । हाल प्रचलनमा रहेका पाठ्यक्रममा प्राज्ञिक लेखनको अंशको प्रायः अभाव छ । त्यसैले, कक्षा ११-१२ का पाठ्यक्रमहरूमा केही प्राज्ञिक लेखनका विषयवस्तुहरू समावेश गर्नु वाञ्छनीय हुने देखिन्छ ।

- कक्षा ११-१२ साथै स्नातक तहमा लक्षित उमेर समूहका लागि पाठको पठनीयता कायम राख्न पढ्नुपर्ने पाठ (साहित्यिक र अन्तरविषयात्मक दुबै) को जटिलता घटाउनुपर्छ ।
- स्नातक तहको पाठ्यक्रममा शिक्षण विधिहरू बढी अन्तक्रियात्मक, विद्यार्थी केन्द्रित र सञ्चार आधारित बनाउने व्यवस्था मिलाइनुपर्छ । यसबाट विद्यार्थीलाई वास्तविक जीवन जस्तै परिवेशमा भाषा प्रयोग गर्न सहयोग पुग्छ ।
- रचनात्मक/निरन्तर मूल्याङ्कनका लागि विद्यार्थीलाई परियोजना कार्य र वास्तविक जीवन जस्तै कार्य गर्ने अवसर दिनुपर्छ । यसले विद्यार्थीलाई भविष्यको शिक्षा र पेसाका लागि भाषा अभ्यास गर्न सहयोग गर्छ ।
- कक्षा ११-१२ तथा स्नातक तहका पाठ्यक्रमहरूको समीक्षा गर्दा प्राप्त भएको निचोड के हो भने प्रविधि आधारित वा प्रविधिसम्बद्ध सिकाइको अभाव देखिन्छ । त्यसैले पाठ्यक्रमलाई डिजिटल मोडमा थप अन्तक्रियात्मक बनाउन र फ्लिप्ड लर्निङ (विद्यार्थीले घरमा सामग्री अध्ययन गर्ने कक्षामा अभ्यास गर्ने विधि) प्रविधि अपनाउनुपर्ने देखिन्छ । पढ्नका लागि निर्धारित पाठहरूलाई सरलीकृत र छोटा बनाउनुका साथै पाठको बोधसँग सम्बन्धित क्रियाकलापहरू बढाउनुपर्ने देखिन्छ ।

नेपाली

- उच्च शिक्षाका लागि बलियो आधार सुनिश्चित गर्न कक्षा ११-१२ तथा स्नातक तहका नेपाली भाषा पाठ्यक्रमहरूबिच उद्देश्यमा समानता ल्याउनु आवश्यक देखिन्छ ।
- विद्यार्थीहरूलाई अझ राम्रो तयारी गराउन कक्षा ११-१२ को नेपाली पाठ्यक्रममा भाषिक सिप मात्र नभई साहित्यिक पक्षको मूल्याङ्कनमा पनि सन्तुलित ध्यान दिनुपर्छ ।
- विषयवस्तुको शैक्षिणिक निरन्तरतालाई सहज बनाउन कक्षा ११-१२ को विषयवस्तु विशेष गरी बोध र अभिव्यक्तिलाई स्नातक तहको व्यावहारिक लेखनको बलियो आधारमा विकास गर्न मिल्ने गरी विस्तार गर्नु आवश्यक छ ।
- नेपाली विषय कक्षा ११-१२ र स्नातक तहमा अनिवार्य विषय भएको सन्दर्भमा पाठ्यपुस्तकको मूल्याङ्कनमा अहिले जस्तो फरक विधि नअपनाई एकीकृत दृष्टिकोण अपनाउनु उपयुक्त हुन्छ ।
- स्नातक तहको शिक्षणसिकाइ प्रक्रिया अझै पनि धेरै सैद्धान्तिक छ । यसलाई मुख्यतया क्रियाकलाप आधारित सिकाइ, परियोजना कार्य र स्वअध्ययन जस्ता कक्षा ११-१२ मा अपनाइएका आधुनिक विधिमा प्रविधिहरू समावेश गरेर सुधार गर्नु आवश्यक देखिन्छ ।
- स्नातक तहका सबै कार्यक्रम (विशेषत: शिक्षाशास्त्र सङ्काय) मा आन्तरिक र बाह्य मूल्याङ्कनका लागि एकीकृत प्रणाली लागु गर्नु आवश्यक देखिन्छ । यसले मानविकी तथा सामाजिक शास्त्र र कक्षा ११-१२ मा प्रचलनमा रहेका मूल्याङ्कन अभ्याससँग सङ्गति मिलाउन सहयोग गर्ने देखिन्छ ।

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Abbreviations and Acronyms

Abbreviation	Full Form
CBSE	Central Board of Secondary Education
CDC	Curriculum Development Centre
KII	Key -Informant Interview
KU	Kathmandu University
MoEST	Ministry of Education, Science and Technology
MWU	Mid-Western University
NCF	National Curriculum Framework
NEP	National Education Policy
NOU	Nepal Open University
PU	Purbanchal University
TU	Tribhuvan University

Chapter I: Introduction

The Context

Curriculum alignment refers to the process of ensuring that curricular contents, instructional methods, and assessment systems are consistent and coherent across different levels of education. According to Anderson and Krathwohl (2001), curriculum alignment is the extent to which academic material, learning objectives, instructional methodologies, and assessment methods and procedures are organised to produce a cohesive learning experience among students across various educational levels. Curriculum alignment is defined as the compatibility between a country's central curriculum, determined by the Ministry of Education, Science and Technology, and what teachers do during the teaching process (Jones, 2019). The alignment of curricula helps create a structured and logical progression of learning, where each stage builds on the previous one, facilitating a smoother transition for students as they advance through their education (Verma, 2023). By aligning curricula, educators can ensure that key concepts and skills are reinforced and expanded upon at each level, reducing gaps in knowledge and enhancing overall student understanding. Effective curriculum alignment also promotes collaboration among teachers and institutions, leading to more coordinated and effective instructional strategies (Mauceri Education, 2023). A coherent curriculum structure from one level to another supports student success by providing a clear and cohesive educational pathway to be adopted by students to adopt.

Vertical alignment in curriculum design means putting learning goals, content, and assessment procedures in a logical order across grade levels so that students have a consistent and cumulative learning experience. It makes sure that what students learn in one grade prepares them for the next. This helps them build on what they already know and understand more deeply than before (Johnson et al., 2020). Vertical alignment of high school curriculum with university-level curriculum is crucial for ensuring a smooth transition for students in terms of the content and process of their learning. This alignment helps bridge content gaps, ensuring that students build on their knowledge progressively and are well-prepared for the academic challenges of higher education. It promotes consistency and continuity in learning, reducing unnecessary repetition and allowing students to develop a deeper understanding of subjects (Johnson, 2019). Additionally, vertical alignment fosters collaboration among educators, enabling them to coordinate and plan instruction effectively, which ultimately enhances student success (Brown, 2021). By aligning high school and university curricula, the institutions can equip the students

with skills pertaining to preparation for college and career readiness, making the educational journey more cohesive and effective (Johnson, 2019).

In the changed context of Nepal's political and administrative structure, it is important to develop a relevant curriculum and an effective implementation of the curriculum in coordination with the key agencies in education at the Federal, Provincial, and Local levels of the government. As per the changing context of education, discourse on revision of the curriculum is underway, which demands exploration of the alignment between the curricula of the school and university levels. The present research relates to this concern, hence is the rationale of this study.

The National Education Policy 2019 (2076 BS), under Secondary Education Policy 10.9, mentions the structural integration of secondary education and the effective operation and management of authorized schools. It also emphasizes integrating Grades 11 and 12 as an inseparable part of school education. Educational institutions running the Grades 11 and 12 will also be required to expand to secondary education (Grades 9-12) or basic education, including secondary education (Grades 1-12) within a specified period or operate only higher education courses.

The National Curriculum Framework for School Education-2019 (2076), developed as a dynamic document addressing knowledge development and expansion, technological changes, and local, national, and international educational issues, will be implemented. The framework includes provisions for adjusting potential future changes in the curriculum. The competencies outlined in the secondary education (Grades 9-12) curriculum include developing a foundation for higher-level studies. Similarly, the competencies for secondary education (Grades 11 and 12) include developing subject-specific and methodological foundations for higher-level studies.

In this context, only by studying the balance as well as coherence of curriculum content and textbooks across different grade levels and ensuring alignment between all subjects can the expected learning outcomes be achieved. Therefore, a comparative study of the alignment between the curriculum of Grades 11 and 12 and the bachelor's level curriculum is necessary to identify and implement improvement measures for the future to enhance the quality of education. This study aims to explore the curriculum alignment between the school level (Grades 11 and 12) and higher education (Bachelor level), drawing on the cases of specific subjects such as English, Nepali, Mathematics, and Social Studies. The research outcomes are expected to bring harmonization between the school-level curriculum and higher education by recommending necessary improvements to enhance the quality of education.

Rationale and Objectives of the Study

The National Education Policy 2076 (MoEST, 2019) explicitly identifies "lack of proper linkage between school and university education" as a major challenge facing Nepal's education system. Government policies and research consistently show that many students enter university without the skills or knowledge they need to succeed. Teachers at the bachelor's level often find students underprepared, especially in subjects like math and science. This disconnect leads to repeated content, mismatched expectations, and even the need for remedial classes. Without a smooth and coordinated curriculum pathway, students struggle academically and professionally, which ultimately affects their confidence and job readiness. Studying curriculum harmonization is essential to create a more connected, supportive, and effective education system that helps students thrive from school to university and beyond.

The overarching purpose of this assignment was to study the harmonization between the curriculum of Grades 11 and 12 and the Bachelor's level curriculum and suggest ways of improvement. The specific objectives of the assignments are as follows:

1. To compare the vertical sequence and alignment of the curriculum of selected subjects (i.e., Nepali, English, Maths, and Social Studies) in Grades 11 and 12 with that of the Bachelor level.
2. To identify necessary aspects of improvements in the vertical sequence of the curriculum of selected subjects in Grades 11 and 12, with that of the Bachelor's level
3. To make recommendations for improvement in the curriculum of the selected subjects of Grades 11 and 12 and the Bachelor's Level.

Research Questions

Based on the objectives of the study, the following research questions were formulated.

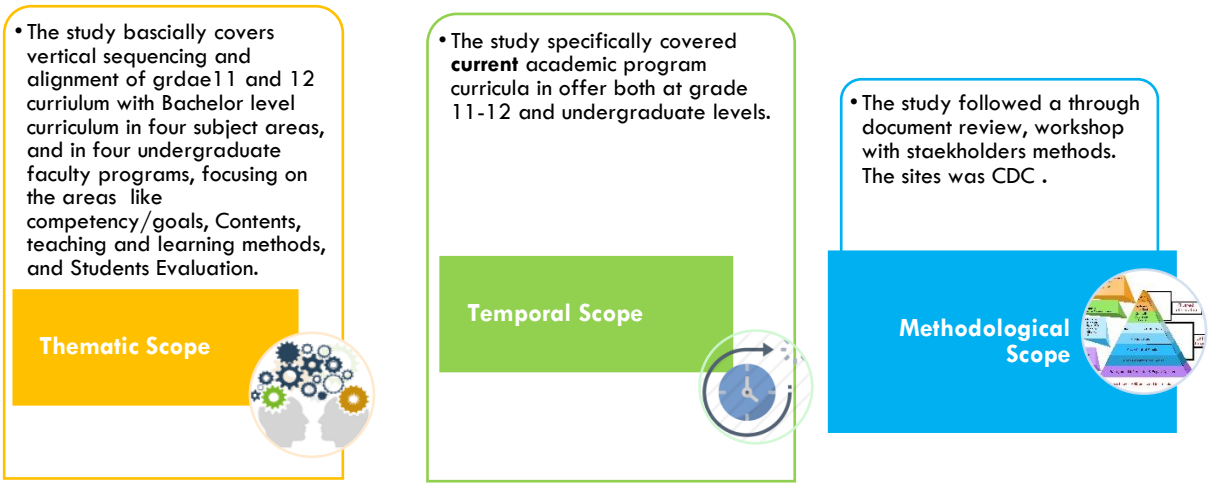
- How do the curricula of selected subjects (Nepali, English, Maths, Social Studies) in Grades 11 and 12 align with the Bachelor level curricula of these subjects in terms of concepts, skills, and competencies maintained between these levels?
- What are the key differences and gaps in goal/competency, contents, teaching and learning strategies, and students' evaluation across these educational levels?
- What are the key challenges faced by teachers and students in the implementation of the curricula?

- What strategies can be adopted to maintain smooth and coherent curriculum alignment between the school curricula and that of higher education?

Scope of Work

we conceptualize the scope of this research at three levels – thematic, temporal and geographical as outlined below.

Figure 1 *Scope of Work*



Delimitations of the study:

1. The study was delimited to four core subjects: Nepali, English, Mathematics, and Social Studies, excluding other academic disciplines from the analysis as per the ToR.
2. It focused exclusively on vertical alignment in terms of curricular goals/competencies, content, pedagogy, and assessment, without addressing other curricular or systemic dimensions such as teacher preparation, instructional resources and infrastructure.
3. For international comparison, the study was delimited to a comparative review of Grades 11 and 12 Mathematics and English curricular between Nepal (CDC) and India (CBSE**)**, leaving out other subjects and countries.
4. The curriculum analysis was confined to the Grades 11 and 12 curricula developed by the Curriculum Development Centre (CDC) and the Bachelor-level curricula of Tribhuvan University (TU)**;** curricula from other universities were not chosen for detailed review.
5. The study was delimited to the analysis of the curricula of the Faculty of Education, Faculty of Humanities and Social Sciences, Faculty of Management

of Tribhuvan University, and the Institute of Science and Technology, in alignment with the four core subjects of the Grades 11 and 12 curricula developed by the Curriculum Development Centre (CDC).

6. This study was primarily a qualitative one so it used only qualitative research methods such as desk reviews, consultation and audit workshops, key informant interviews (KIIs), and focus group discussions (FGDs).

Structure of the Report

This report has been organized in to five chapters. Chapter I deals with context, rationale and objectives, research questions and scope of the study. Chapter II reviews the conceptual understanding on curriculum harmonization and curriculum structure with specific example of countries- USA, India, Finland and South Korea. Chapter III explains the methodology adopted in this study. Chapter IV deals with the subject-wise findings of the study. Chapter V presents the subject-specific conclusions, and recommendations.

Chapter II: Review of Literature

This chapter delves into the philosophical and theoretical understandings of curriculum harmonization and its importance. Although this study was focused on the Grades 11 and 12 curriculums of Nepal, a brief review of curricular practices in other countries such as the India, United States, Finland, and South Korea has been made to get a wider understanding. This chapter mainly includes a review of the CDC (Nepal) and CBSE (India) curriculum structures, disciplinary content coverage, principles guiding instructional strategies, assessment practices and grading systems. The selection of the United States, Finland, and South Korea is based on their unique educational philosophies, varied socio-cultural contexts, and internationally acknowledged curricula. For example, the US has innovation-driven model; Finland has the equity-focused and student-centered education system; and South Korea has high-performing, discipline-based structure. Review of the education systems of these countries provided us with valuable comparative insights for comprehending effective curricular Harmonization and development. In the sections below we present a brief theoretical discussion of curriculum development approaches.

Approaches of Curriculum Development

Every curriculum has to be guided by certain philosophical perspectives and processes based on that. The development of school curricula is significantly influenced by philosophical thought, which serves as the foundation for educational objectives, content selection, instructional methods, and assessment strategies. It is important for educationist to consider why a particular curriculum was developed, who were involves and what were the primary goals of having this or that curriculum. Understanding of this provides a foundational idea of the goals of a curriculum and competencies defined. We draw on different theoretical models of curriculum development to understand the goals of curriculum harmonization studies.

Tyler's Rational Model (1949) is a linear, objectives-driven approach that systematically addresses educational purposes, experiences, organisation, and evaluation. Similarly, Taba's Grassroots Model (1962) emphasises an inductive, teacher-led process that commences with the diagnosis of learner requirements and proceeds to construct the curriculum from there, providing a greater degree of adaptability and responsiveness to local contexts. Stenhouse's Process Model (1975) reorients the emphasis to the instructional

process, positing that the curriculum is a hypothesis that teachers are responsible for testing and refining. This model promotes teachers as researchers who modify their methods in response to practice and inquiry. Freire's Critical Pedagogy (1970) provides a transformative philosophical foundation that goes beyond these structural models, advocating for a liberatory education. Freire challenged conventional "banking" education by advocating for "problem-posing" dialogue, which critically engages learners with real-world issues to cultivate critical consciousness and promote social change. In practice, educators frequently incorporate elements from these diverse theories to develop curricula that are not only effective in attaining learning outcomes but also relevant, adaptive, and empowering for students in their respective educational environments.

Pragmatism, as articulated by John Dewey, revolutionised curriculum development by promoting experiential learning and problem-solving. According to Dewey, education should equip students with the skills necessary to tackle real-world obstacles, ensuring that the curriculum is student-centered and dynamic (Dewey, 1916). Conversely, existentialism emphasises self-directed learning and personal choice, advocating for curricula should be adaptable and tailored to the unique interests and emotions of each student (Goodlad, 1984). Essentialist and perennialist philosophies seek to preserve societal values and knowledge across generations, are consistent with the perspective that curriculum is cultural reproduction. Essentialism prioritises the development of good character and knowledge in fundamental academic subjects to provide students with the necessary skills for societal engagement. Progressivism advocates the needs of the learner and incorporates real-world problem-solving and interdisciplinary content. Reconstructionism advocates for preparing students to transform society by addressing global issues and social justice (Tanner & Tanner, 2007).

These theories and models facilitate educators in addressing basic questions related to why certain contents are included, what instructional methods are framed, which assessment practices to be adopted and why. Curriculum theorists have also proposed a variety of metaphors to conceptualise curriculum, each of which reflects unique philosophical orientations. These include curriculum as content, planned activities, intended outcomes, cultural reproduction, experience, and distinct tasks. Similarly, the notion of curriculum as an experience is in alignment with constructivist and progressivist philosophies, which prioritise contextual learning and personal development (Ornstein & Hunkins, 2009).

The curriculum planning literature outlines a collaborative process that involves the input of educators, administrators, and stakeholders to ensure that the curriculum reflects shared values and educational priorities for the development of a program philosophy and rationale statement (Waters & Marzano, 2005). In this study, we explored the experiences of key stakeholders of education system to understand how they feel about the Grades 11 and 12 curricula in terms of the defined competencies, content coverage, instructional strategies and assessment patterns, and how that aligns with that of bachelor's level curricula, particularly in core subject areas.

Due to variations in educational purpose, learner maturity, knowledge orientation, and instructional context, the philosophy of curriculum development varies significantly between school and university levels. The primary objective of curriculum development at the school level is to impart fundamental knowledge, fundamental skills, and social values. Dewey's (1916) pragmatism has significantly influenced school curricula that aimed to promote experiential learning and problem-solving as vital elements of meaningful education (Dewey, 1916). The present curricula of school level have set the curricular goals that are largely grounded around how effectively we engage students in building strong experiential environment. In the similar vein, the higher education curricula aims to produce qualified human resource in the disciplinary areas. Unlike the more standardised and centralised school curricula, university curricula are frequently developed autonomously by academic departments, which enables them to be more responsive and flexible in response to emergent research, global challenges, and disciplinary shifts (Barnett & Coate, 2005).
Additionally, school curricula are developed to facilitate the gradual cognitive and moral development of younger learners. Structured learning environments and teacher-led instruction are prioritised. Conversely, university students are presumed to be self-sufficient learners who are capable of self-regulation and critical thinking. This transition requires a curriculum that is not only more specialised and adaptable, but also reflective of a variety of global perspectives and epistemologies (Wheelahan, 2010) as well as connect and build on the curriculum practised at the school level. The present study explored how has this alignment been established and what challenges exist in making the curriculum more coherent across school and university levels.

Conceptualizing Curriculum Harmonization

Curriculum Harmonization is essential to ensure coherent and useful learning experiences in all academic level. This discussion conceptualized the curriculum and challenges of having alignment in the curriculum from one academic level to other. It can be examined at multiple levels. Fraser and Bosanquet (2006) delineate four distinct categories. In the first category, curriculum refers to the content and structure of a specific unit. The second category focuses on content and structure within the program framework. Both categories reflect a product-oriented perspective of the curriculum. The third category defines curriculum by focusing on the student's learning experience. The fourth category defines curriculum as a collaborative process of knowledge construction that includes both students and teachers. The latter two categories are characterized by a process-oriented approach.

Based on these conceptual dimensions, Biggs and Tang (2011) argue that curriculum alignment at the program level, characterized by the constructive coherence among teaching, learning, and assessment, is crucial for maintaining teaching quality. Transforming learning objectives into measurable outcomes and improving student learning requires that every activity aligns with the established objectives. Achieving alignment within a single course or module is relatively straightforward; however, establishing alignment at the program level presents significantly greater challenges.

Research studies regarding the instructional strategies in the undergraduate curriculum revealed a lack of communication between students and instructors across different courses. Allen (2004) argues that achieving alignment in higher education curricula is often difficult due to inadequate communication among educators and continual changes in programs, modules, and personnel over time. Educators engaged in cross-curricular learning trajectories often possess insufficient understanding of the diverse elements of instructional strategies that make up the learning trajectory effective.

Vertical sequencing of curriculum is a methodical way to arrange learning experiences in a developmentally progressive way across grade levels or educational stages. Rooted in constructivist learning theory, this approach expands on Bruner's (1960) idea of the spiral curriculum, where key ideas are revisited at rising degrees of complexity as students' progress (Bruner, 1960). Recent findings from the TIMSS-2023 study confirm that well-sequenced and coherent mathematics and science curricula significantly enhance student performance by supporting logical skill progression and effective learning strategies

(Reynolds et al., 2024). This literature supports the claims that curriculum alignment across Grades and levels is needed for promoting students' academic performance.

Mapping learning progressions, where each grade level's content serves as both preparation for following learning and consolidation of prior knowledge, involves this process (Darling-Hammond & Adamson, 2014). Particularly during important transition times, such as the shift from secondary to postsecondary education, when misalignment frequently results in remedial requirements, alignment is especially vital (Conley, 2007). Effective vertical sequencing depends on teachers across grade levels working together to identify necessary ideas, express prerequisite skills, and match assessment with teaching strategies (Wiggins & McTighe, 2005).

Studies back the advantages of deliberate vertical sequencing. According to Polikoff et al. (2021), schools with consistent vertical alignment experienced more student performance increases than those with fragmented curricula. This strategy promotes deeper conceptual knowledge and helps to close material gaps and avoid needless repetition (Anderson & Krathwohl, 2001). Vertical sequencing in STEM fields enables students to grow more complex problem-solving abilities (National Research Council, 2012). Well-organized courses also help to promote fairness by offering all students obvious paths to mastery (OECD, 2018).

Though it has advantages, vertical sequencing is difficult to implement. Venezia and Jaeger (2013) draw attention to structural obstacles produced by broken educational systems where curricula are created separately across levels. Many teachers, according to Fullan (2016), lack training on how their instruction fits into more general curricular sequences. Implementation is made more difficult by misalignment with standardized tests since teachers must balance following the curriculum with preparation for high-stakes tests (Polikoff, 2012). Furthermore, especially in underfunded schools, insufficient cooperation time and resources impede alignment initiatives (Darling-Hammond, 2017).

Modern best practices include formation of professional learning communities, where educators analyse students' work and debate the alignment of curricular patterns (Hattie, 2012). Curriculum mapping technologies show learning progressions and gaps (Jacobs, 2004). Tracking student development through formative evaluation improves outcomes (Heritage, 2010). New technologies include competency-based progression models (Sturgis & Casey, 2018) and social-emotional learning in academics (Jones & Doolittle, 2017).

Vertical sequencing is essential for constant, cumulative learning throughout education. AI-driven individualized learning trajectories and multidisciplinary sequencing should be studied to better mimic real-world problem-solving (National Academies of Sciences, Engineering, and Medicine, 2018).

Harmonization of the curriculum involves the alignment of educational standards, content, and assessments across a variety of systems. However, it presents numerous challenges dependent upon political, cultural, and institutional contexts. Studies show that these challenges are the result of competing priorities between standardisation and contextual relevance in decentralised education systems and transnational initiatives (European Commission/EACEA/Eurydice, 2020).

While looking at the political perspectives, curriculum decisions often become knotted in ideological debates about educational purpose and national identity. For instance, the European Higher Education Area's Bologna Process, although successful in developing structural alignment across 48 countries, still struggles with the functional Harmonization of learning outcomes and quality assurance mechanisms (Zgaga, 2020; as cited in Chankseliani & Sopromadze, 2023).

Equity is another problem with making the curriculum the same across the nation. Tabulawa (2013) found that curriculum changes in sub-Saharan Africa favoured urban and elite views and ignored indigenous knowledge systems and rural realities. This is especially true in India, where the National Education Policy (2020) has found difficulty in bringing together 22 official languages and hundreds of local dialects because of the country's linguistic diversity. Schools and regions with fewer resources consistently fall behind in adopting standardised curricula. This makes existing educational inequalities worse and raises questions about the legitimacy of knowledge and cultural representation in curriculum design (Apple, 2019; UNESCO, 2022).

Furthermore, curriculum implementation may further bring complexity in the harmonization of the curriculum. Fullan's (2015) study shows that educational initiation of curriculum harmonization fails to prepare teachers adequately for curriculum transitions, with less than 30% having sufficient training and support. The East African Community's harmonization project also illustrates this problem, where irregular teacher preparation across Kenya, Tanzania, and Uganda led to widely varying implementation quality (East African Community Secretariat, 2014).

Moreover, inefficacy among the teachers results in "curriculum confusion," where teachers find it difficult to navigate poorly sequenced and overloaded content (Priestley & Philippou, 2018). Moreover, the lack of alignment between curriculum and assessment systems creates additional confusion, as seen in Australia's national curriculum implementation, in which state-level assessments failed to adequately replicate the new standards (Klenowski & Wyatt-Smith, 2014).

The increasing demand for digital learning tools and resources has led to the development of competing curricular systems that are not part of official frameworks (Nichols & Garcia., 2022). Global competency frameworks become odd with national educational goals, which creates a debate on what is important locally and what is expected internationally (Care et al., 2018). The COVID-19 pandemic has made it challenging to make predictions about progress and maintain equity and equality in learning (UNESCO, 2022). These results indicate that future attempts to harmonise must be more flexible and adaptable, establishing a balance between system coherence and contextual responsiveness and fixing problems that keep coming up. This suggests that future Harmonization efforts should adopt more flexible, adaptive approaches which will balance system coherence with contextual need and acceptance while addressing insistent equity gaps while implementing capacity and resource distribution.

Curriculum Framework and Harmonization Practices in Other Countries

This study also reviewed the curriculum framework and the harmonization practices in some other countries such as USA, India, Finland and South Korea. A brief description of their provisions and practices has been reported country-wise in the following sections.

United States of America (USA)

The curriculum and vertical sequencing of the U.S. education system reflects its various stakeholders. The U.S. grants significant power to state and local governments, leading to significant variations in state curriculum policies (Ballotpedia, n.d.). This contrasts with centralised education systems. The 2010 Common Core State Standards Initiative (CCSS) sought to standardise K–12 standards, particularly in English Language Arts and Math (Porter, et al., 2011). Research found that many states accepted these requirements, however adherence varied, and some states amended or replaced them (as cited in Baez-Hernandez, 2019). This brings gaps in curriculum alignment between high school to college,

vertical sequencing gets difficult. Research shows 40% of first-year college students need remedial courses. The difference between what high school students should know when they leave and what college students should know when they start is substantial (Chen, 2016). Low-income kids and underfunded schools are more affected by this "remediation crisis" and equity disparities widen (Scott-Clayton, 2018).

There are promising U.S. vertical alignment options. For example, dual enrolment programs have enabled high school students get college credits (An, 2013). The Community College Research Centre found that dual-enrolment students have increased graduation rate (Barnett, 2015). Vertical sequencing can also be practice using competency-based education paradigms like Western Governors University. They prioritise mastery above seat time (Johnstone & Soares, 2014). These approaches allow students to progress at their own speed while meeting high requirements. To improve vertical alignment, the US needs to address a number of important issues. It is hard to make sequences in decentralised systems (Kaplan & Owings, 2013). There are more and more alternative credentials and micro-certifications, which means that new ways to align them are needed outside of traditional schools (Gallagher, 2016). US education reform, curriculum alignment aims to enhance academic coherence and student performance. Decentralized K– 12 and higher education systems complicate vertical and horizontal alignment (Coburn et al., 2016).

Squires (2008) claims that curriculum alignment, the coordination of standards, instruction, and assessment helps to raise student performance. His work emphasizes research-based strategies teachers may use to satisfy state requirements. Squires thinks that to alter teaching, deliberate, continuous, and professional development-backed alignment is required. Examining techniques for assessing curriculum, instruction, and test harmony, Martone and Sireci (2009) underline alignment. Misaligned test outcomes, they claim, could compromise student learning and result in poor teaching choices. Their findings confirm the idea that, particularly in standards-based responsibility systems, alignment enhances the validity of assessment tools. Using the Common Core State Standards (CCSS), Coburn, Hill, and Spillane (2016) investigate alignment in practice. Their study revealed that policy-level agreement does not ensure classroom consistency. Arguing that misalignment results from differing interpretations and capacity constraints at all levels, they underline the need of methodical consistency among curriculum developers, teachers, and administrators.

According to the National Research Council (1999), good assessment systems have to fit state standards and educational strategies. The report cautions that unequal tests could give priority to "teaching to the test" over more profound knowledge. It encourages thorough alignment plans taking into account material needs and cognitive complexity.
Pemberton et al. (2006) at last offer techniques for including tests into teaching and curriculum. The study indicates that educators have to plan and work together to make sure what is taught, how it is taught, and what is assessed are connected. Using tools and frameworks they describe; teachers can map curriculum to standards and so enhance instructional design.

The US's disjointed educational administration still causes issues despite advances in curricular alignment, particularly via CCSS and state-led changes. Studies indicate that the complete advantages of alignment call for consistent collaboration across all school levels, ongoing professional development, and clear policy.

India

The curriculum progression in Indian curriculum can be conceptualized from its framework and policy. The National Curriculum Framework for School Education (NCF-SE) 2023 gives a clear roadmap for schools to implement the 5+3+4 schooling model proposed in the National Education Policy 2020. A core principle focused on learning standards, content selection, pedagogical approaches, and assessment methods at all three structures of schooling: foundational, preparatory, middle, and secondary. This framework aims at practical implementation, providing guidance that is both comprehensible and actionable for teachers and parents, thus facilitating tangible changes in educational practices.

The NCF-SE 2023 emphasizes on clear learning standards with the focus on competency issues for each discipline for providing a clear direction for teachers and other stakeholders, which aligns with the broader goal of holistic development seeking to foster academic knowledge, critical thinking, creativity, and fundamental values. To achieve this, the curriculum is designed to empower teachers and schools, uplifting creativity and engagement in the teaching-learning process, and promoting varied pedagogical Methods that is personalized to different age groups and contexts, including experiential, play-based, and inquiry-based methods.

Furthermore, the framework advocates cultural integration, examining Indian knowledge and values from ancient to contemporary phases across various subjects. It also

advocates for multidisciplinary education to nurture an integrated perspective and holistic understanding among students. The framework ensures quality of education by addressing equity and inclusion. The framework also put emphasis on Art, Physical Education, and Well-being, combining specific learning standards and suggested time allotments.

The framework emphasized Environmental Education across all stages of schooling as a focus for contemporary challenges with integrating Vocational Education with specific standards, content, pedagogy, and assessments. Furthermore, Multilingualism is also in focus, with the expectation of having proficiency in at least three languages, along with Indian languages. While in core subjects, the framework enhances Mathematical and Scientific Literacy with the priority on conceptual understanding, procedural fluency, and the development of scientific inquiry skills. In addition to this, as an interdisciplinary approach Social Science education is adopted, exploring themes across human societies and natural environments. Moreover, the Secondary level offers flexibility and choice for students to select subjects based on their interests and aspirations.

Finland

Finland's curriculum alignment policies are acknowledged for improving educational fairness, consistency, and creativity. The Finnish National Agency for Education's National Core Curriculum (NCC) forms the basis of this system. Emphasizing necessary competencies and educational goals, the NCC is a framework that lets municipalities and schools tailor the curriculum to fit local needs (Vitikka, Krokfors, & Hurmerinta, 2012). From early childhood to higher secondary levels, this national direction-local autonomy balance maintains vertical coherence across the educational spectrum.

A defining characteristic of Finland's curriculum change is participation. The NCC's evolution and modification are participated in by teachers, scholars, students, parents, and others. This inclusive strategy ensures that the curriculum fits modern society needs and promotes teacher professional ownership, therefore improving implementation fidelity (Halinen, 2017). Every ten years, the curriculum is changed to fit changes in society, technology, and the labor market (Pietarinen, Pyhältö, & Soini, 2017). Distinctive from others, the Finnish curriculum gives priority to transversal traits including critical thinking, cultural literacy, entrepreneurship, and sustainable development. Every course and grade level includes these competencies, therefore ensuring that students gain the academic knowledge and required life skills required for success in modern society (Finnish National

Board of Education, 2016). The phenomenon-based and multidisciplinary curriculum encourages students to solve practical problems spanning many fields.

Finnish curricular alignment also depends on the integration of assessment and learning. Above high-stakes standardized testing, Finland gives priority to formative, peer, and self-assessments in line with learning goals. This approach improves the links between teaching and assessment, encourages metacognition, and supports growth (Sahlberg, 2011). Finland is a good example of how to improve educational quality and equity by means of standardized, student-centric policies by combining national curricular frameworks with local execution.

South Korea

The Korean National Curriculum Framework attains comprehensive curriculum harmonization through a meticulously structured approach that aligns its principal vision with practical implementation strategies across all school levels. Fundamental to this is **a** unified vision and competencies, which aims to cultivate "self-directed, creative, cultivated, and harmonious persons." This vision is operationalized through six key competencies: self-management, knowledge-information processing, creative thinking, aesthetic-emotional, collaborative communication, and civic competencies, which are fostered across the entire educational process, including both disciplines and Creative Experiential Activities.

The framework ensures strong vertical sequencing across school levels by implementing a phased approach. Elementary school centres on foundational habits and integrated disciplines before transitioning to specialized subjects. Middle school introduces electives and a "Free Semester Program" emphasizing career exploration and project-based learning. Secondary school uses a credit-based system with both general and specialised subjects like AI Basics and Robotics, which are meant to prepare students for diverse career.

The framework also emphasizes on horizontal integration of cross-curricular themes like safety, digital literacy, and environmental sustainability. For example, safety education is incorporated into "Moral Life" and experiential drills, while digital literacy is compulsory to both elementary and middle schools' level. Career education is also integrated, notably through the free semester program in middle school and high school field practicums, reflecting a commitment to uniting these crucial themes into the full educational program.

Furthermore, the Korean framework also balance national standards with local needs by incorporating flexibility within the national standards. Schools has the autonomy to

modify up to 20% of instructional hours (excluding Physical Education and Arts) to accommodate local need. The framework also allows high schools to offer interdisciplinary or industry-based specialized courses, while rural schools can have leverage with multi-grade classes and community partnerships to reduce resource gaps. This balance ensures diversity at the local, school, and student level while establishing uniformity across the nation.

Effective implementation is supported by a robust system of collaborative governance and support Systems. School Curriculum Committees, comprising teachers, parents, and industry experts, provide crucial advice on implementation. Local Education Offices offer guidelines for curriculum adjustments and facilitate resource sharing. The Ministry of Education ensures quality by conducting achievement tests and audits at national level. To assure quality assurance and equity, the framework mandates personalized support, including remedial programs for low achievers, multicultural students, and assistive technologies for learners with disabilities. Assessment practices prioritize performance-based assessments with open-ended questions to examine competencies of the students.

Chapter III: Methodology

This chapter presents the research design, population and sample, methods and tools of data collection and data analysis, quality standards and ethnical protocol maintained in this study.

Research Design

This study adopted qualitative research design. The qualitative tools and methods of qualitative data collection were commonly used. Experts from the respective fields of their subject areas (i.e., Mathematics, Nepali, English, and Social Studies) were involved in this study from the very beginning. The tools and methods used were designed for the study's requirements and also complied as per the scope of the work.

Tools of Data Collection

Tools for studying the vertical sequencing and curriculum alignment including Desk Review Matrix for comparison of Grades 11 and 12 CBSE Curricula with CDC curricula (Annex 1), Detail Research matrix for curriculum alignment (Annex 2), workshop form for stakeholders' perspectives (Annex 3), alignment matrix (A), FGD guidelines (Annex 4), interview with university teachers (Annex 5) and interview questions for students (Annex 6) were developed. These tools were presented at the consultation meetings with CDC experts for their review. Based on their feedback, these tools were revised and finalized. The matrix was developed for reviewing the Grades 11 and 12 curricula of Nepal. The alignment matrix was created to compare the curriculum competencies/goals, content, teaching-learning activities, and student's evaluation across grade levels. Similarly, workshop form that included open-ended questionnaire was developed for examining the participants' perspectives on vertical sequencing of the selected school curricula and the bachelor level curricula. The participants also provided their opinion regarding the improvement in the current curricula of the selected subjects.

After analysing the findings from expert review, feedback form and interview the findings of the study was shared with group of curriculum expert to ensure the validation of the research findings. Expert view was noted and further clarification was made in to the report and the findings of the study were finalized. During the whole work regular consultation was done with the expert assigned by CDC.

Methods of Data Collection

This study collected data from a comprehensive review of the policy documents and research literature, interviews with several stakeholders, focus group discussions and consultative curriculum audit workshops involving key stakeholders such as university professors/educators, curriculum developers, subject experts, teachers and textbook writers. A thorough desk review of the Grades 11 and 12 curricula from Nepal and India was made. To achieve this, the curricula of Grades 11 and 12 from both CBSE and CDC were compared in terms of competencies, content, teaching strategies, and student evaluations in English and mathematics. This review encompasses analysing course structures, learning outcomes, and competencies, mapping content progression across different educational levels, identifying gaps, redundancies, and misalignments, and preparing a comparative review report. The study primarily focused on the curricular components like competencies/goals, contents, teaching and learning methods/activities, and student evaluation. However, as per the nature of the curriculum designs and components included in the curricula of both levels, other relevant aspects such as challenges faced by the teachers and students in the implemented curricula were analysed and potential ways for improvements were suggested.

The bachelor-level curricula of the Faculty of Education (for English, Nepali, Social Studies and Mathematics), Faculty of Management (English, Mathematics), Faculty of Humanities and Social Sciences (English, Nepali and Mathematics), and Institute of Science and Technology of Tribhuvan University (Mathematics) were considered for the exploration of alignment with the Grades 11 and 12 curricula developed by CDC and implemented in the schools. The reason for choosing Tribhuvan University is its status as the largest university in Nepal, providing a comprehensive range of core and major subjects at the bachelor's level, and having a wider national coverage in providing mass higher education accessible to the general public. This facilitates an examination of the alignment between these disciplines and the core curriculum for Grades 11 and 12 (Mathematics, English, Social Studies, and Nepali). Moreover, experts from Tribhuvan University are engaged in the formulation of curricula for the majority of universities throughout Nepal. The analysis focused on comparing the curricula of the school level with that of the Bachelor level.

Subject-wise curriculum audit workshops were conducted in each of the four selected core subjects- Mathematics, Nepali, English, and Social Studies. The workshops conducted at the CDC halls were attended by curriculum experts, curriculum developers, university

professors, school teachers and textbook writers. Structured group discussions were conducted by the researchers from their respective subject areas. Each workshop had a facilitator and the discussions took place group-wise. The groups were formed faculty-wise and were supported by the research team members and the curriculum experts from the CDC. The participants discussed on four areas, i.e., goal and competency, contents, teaching and learning strategies, and students' evaluation prescribed in the respective subject curriculum of Grades 11 and 12, and bachelor level. Key topics related to curriculum alignment and vertical sequencing were discussed and notes were prepared based on their reading of the curricula, comparison and observations. Participants were provided with pre-designed forms to fill out at the end of each session. These forms included open-ended questions to capture detailed feedback on specific aspects of the curriculum and their suggestion for improvements. Participants were requested to submit their forms anonymously to encourage honest and open feedback. All the information in the forms were kept confidential. Table 1 below details out the participants of the workshops conducted in each subject.

Table 1: Curriculum audit workshop and participant details

Subject-specific workshops	**Venue**	**Participants**	**Key activities during workshop**
English	CDC Hall	Educators, curriculum experts, teachers, textbook writers, researchers	Presentation, thematic discussion, completing the workshop form, responding to questionnaire, FGD
Mathematics	CDC Hall	Educators, curriculum experts, teachers, textbook writers, researchers	Presentation, thematic discussion, completing the workshop form, responding to questionnaire, FGD
Social Studies	CDC Hall	Educators, curriculum experts, teachers, textbook writers, researchers	Presentation, thematic discussion, completing the workshop form, responding to questionnaire, FGD
Nepali	CDC Hall	Educators, curriculum experts, teachers, textbook writers, researchers	Presentation, thematic discussion, completing the workshop form, responding to questionnaire, FGD

Additionally, key informant interviews (KII) were conducted with curriculum experts and developers from TU, CDC, Kathmandu University, Purbanchal University, and Mid-

West University. These interviews focused on the curriculum development process, emphasizing vertical sequencing and alignment. The experts were consulted through virtual interview sessions individually.

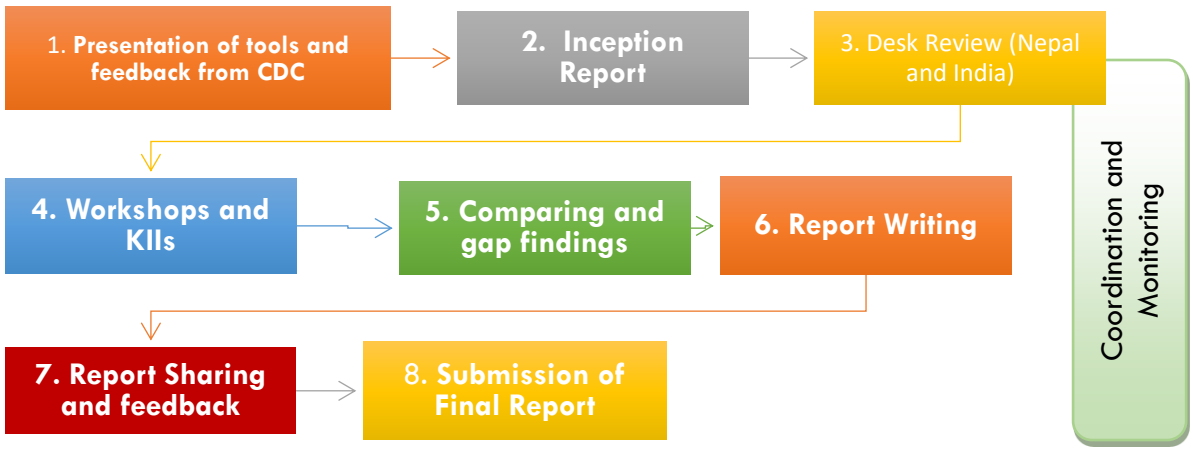
After each workshop, focus group discussions (FGDs) were conducted with the stakeholders, where participants were divided into smaller groups to discuss specific topics in detail. Each group was provided with a set of guiding questions to ensure focused discussions as expected by the research questions. Designated note-takers documented the key points and feedback from each focus group.

Data Analysis Procedures

The data collected for this study were analyzed thematically. While analyzing the data, the researchers worked together in coding, organizing and thematizing the findings. The themes were decided in relation to the research questions of the study. Data from all sources were equally included, to make the report data-rich.

In summary, the flowchart illustrates the major steps/tasks that was undertaken to accomplish this research.

Figure 2 *Methodological Steps of the Study*



Quality Assurance

The Team leader and deputy team leader oriented and monitored all human resources that were employed in the research process, and coordinated with CDC to ensure the rigour and quality of the study. The following quality assurance measures were applied prior to data collection, during data collection, and post-data collection phases including while analysing the data and writing the report.

Prior to Data Collection Phase

Before initiating data collection, research team prepared an inception report with the detail of data collection tools, methodology, and work plan. This report underwent review and approval by the Curriculum Development Centre (CDC), especially the participants in the workshop, ensuring alignment with the study objectives and requirements. Research team worked closely with CDC to review relevant documents, finalize study tools, and address any logistical or administrative considerations. Regular communication and coordination with CDC ensured that the study remained on track and met quality standards. Research team conducted a series of meetings/workshops with CDC experts and subject-specific experts to finalize the tools and methodology for conducting the study. Prior to fieldwork, the research team conducted virtual sessions to provide orientations to the selected researchers involved in data collection, including interviews and the workshops. This training focused on familiarizing staff with study protocols, ethical considerations, and data collection techniques, ensuring consistency and reliability across data collection activities.

During Data Collection Phase

Research team members were in touch with the CDC appointed expert for quality management and coordination during the fieldwork. Throughout the data collection phase (Workshop and interview), supervisors (senior researchers) provided ongoing oversight and support to field teams. This included monitoring the implementation of study protocols, resolving any issues or discrepancies, and ensuring adherence to ethical standards and quality assurance measures. Research team also invited CDC officials to monitor the field-level information collection process in order to ensure the quality of information and the quality of the operating process, and provided feedback to the consulting firm for improvement if any. Field teams adhered to standardized procedures and protocols during data collection, including consistent administration of interviews, observations, and focus group discussions. This ensured that data was collected uniformly across different sites and respondents, minimizing variability and bias. Consent was obtained from respondents to gather data from them. Key Informant Interviews (KIIs) were also conducted virtually with curriculum experts from TU, KU, Mid-West University, and CDC. The consultations were focused on stakeholders' perspectives and experiences regarding curriculum alignment and necessary improvements.

Post Data Collection Phase

Following data collection, research team conducted thorough data cleaning and verification procedures to identify and rectify any errors, inconsistencies, or missing information. This involved cross-checking data entries, resolving discrepancies, and ensuring data accuracy and completeness. All the data was stored in password-protected computers where all the personal identifiers were deleted and were accessible only to the core team members. In addition, no personal identifiers were disclosed anywhere in the study. Prior to finalizing the study report, a quality assurance review was conducted to assess the overall quality and integrity of the data, analysis, and findings. This review involved internal and external stakeholders, including CDC, to provide feedback and recommendations for enhancing the robustness and credibility of the study outcomes. This was performed in CDC in a discussion meeting with CDC experts. Research team updated the contact person of the CDC on a regular basis and asked for suggestions to maintain the quality.

Ethical Protocols

Maintaining confidentiality and ethical norms during the entire research process was one of the prime concerns of this activity. We were aware of ethical guidelines and considerations while conducting research with stakeholders of education sector. We adhered to the basic ethical principles of research, including informed consent, anonymity, no harm, autonomy of the participant, and fair presentation of empirical data. Moreover, we also followed the guidance of the 'Research Integrity and Quality Assurance Panel' of the Consulting Firm that focused on research ethics and quality commitment (attention to detail and accuracy, delivering the highest quality of research insights, quality for long-standing relationships with our clients, and the highest level of quality throughout all our engagements).

The team ensured that the research was conducted in an ethical and sensitive manner. Through reflective practice and self-evaluation, we implemented monitoring systems to highlight shortcomings and reviewed our procedures and practice accordingly on a regular basis. Finally, all raw data, including datasheets or any other documentation and information, was submitted to the CDC upon completion of the assigned task.

Chapter IV: Analysis of Grades 11 and 12 Curriculum of Nepal and India

In this part of the study CDC, Nepal Grades 11 and 12 curriculum and Central Board of Secondary Education (CBSE) senior secondary curriculum of India are reviewed in terms of curriculum structure, Goal/ competencies, content area, and Assessment strategies.

Curriculum Structure

School Education Curriculum Structure of Nepal is distributed into Early Childhood Development and Education (ECDE), Basic Education and Secondary Education. ECDE (for 4-year-olds) focuses on holistic development through an integrated approach, fostering physical, emotional, social, and cognitive skills without formal reading or writing. Basic Education (Grades 1-8) begins with an integrated curriculum (Grades 1-3) emphasizing multidisciplinary and interdisciplinary learning, allowing for mother-tongue instruction and activity-oriented learning to build foundational knowledge and essential behavioural skills. As students' progress through Basic Education (Grades 4-5 and 6-8), the curriculum expands to include more specialized subjects while continuing to integrate crucial life skills like critical thinking, decision-making, and digital literacy. Secondary (Grades 9-12) is categorized into General, Technical and Vocational, and Traditional streams, including Gurukul, Madrasa, and other systems. Grades 9 and 10 in the General stream have five compulsory subjects Nepali, English, Mathematics, Science & Technology, and Social Studies along with two optional subjects. For Grades 11 and 12, Nepali, English, and either Social Studies & Life Skills Education or Mathematics are compulsory, complemented by three optional subjects chosen from four available groups. This structure aims to provide a comprehensive and varied educational pathway for students, accommodating diverse learning needs and career aspirations.

The National Curriculum Framework for School Education (NCF-SE) 2023, of India gives the guideline of 5+3+3+4 schooling model, which align with the National Education Policy 2020, India (NEP 2020). It provides a clear guideline for all four stages of schooling (Foundational, Preparatory, Middle, and Secondary) which covers learning standards, content, pedagogy, and assessments. Fundamental principles incorporate ensuring comprehensive coverage and practical implementation, setting clear learning standards focused on competency development, and fostering holistic development that goes beyond knowledge to critical thinking and values. The framework integrates Indian cultural values

and multidisciplinary education, empowers teachers, supports many pedagogical approaches experiential, play-based, inquiry-based, and Equity, inclusion, fresh focus on Art and Physical Education, environmental education, and vocational education also rank highly. NCF-SE also supports multilingualism, mathematical and scientific literacy, social sciences' multidisciplinary learning, flexibility and choice in the Secondary Stage, including multidisciplinary areas of study to meet modern issues.

Comparison

Both India and Nepal are modernising their educational systems with an eye towards practical skills and holistic growth. Beginning integrated early childhood and basic education, Nepal's model moves to a single-track secondary system with general, technical, and traditional streams. Under its NEP 2020 and NCF-SE 2023 India uses a 5+3+3+4 structure stressing cultural values, multidisciplinary learning, and flexible pedagogy across all levels, especially in secondary education. Aiming for thorough, relevant, and flexible education, Nepal directly integrates traditional systems; India's approach generally imbues cultural values and diverse learning methods.

Goals/ Competencies

The CDC has formulated nine competencies to be developed for Grades 11 and 12 students whereas CBSE senior Secondary curriculum (Grades 11 and 12) stated twelve goals and features (See Table 2).

Table 2: Comparison of Competencies of Grade 11 and 12 with CBSE Curriculum

CDC Grades 11 and 12 Competencies	**CBSE senior Secondary Competencies/features (Grades 11 and 12)**
1. *Upholding human values, norms, and democratic culture while assuming the responsibility of a conscious citizen for the promotion of the nation and nationalism.* 2. *Familiarizing oneself with national and international contexts, embracing diversity, harmony, and coexistence, and contributing to the creation of a civilized, cultured, and equitable society.*	1. *provide ample scope for holistic i.e., physical, intellectual and social development of students;* 2. *emphasize constructivist rather than rote learning by highlighting the importance of hands-on experience;* 3. *enlist general and specific teaching and assessment objectives to make learning competency- based and attain mastery*

3. *Utilizing appropriate, creative, and relevant linguistic and communication skills with confidence in daily activities as well as in academic pursuits.* 4. *Developing a positive attitude towards learning for personal growth and fulfilment of needs, along with fostering self-study habits and the pursuit of knowledge and skills.* 5. *Developing life skills by understanding the congruence with life, livelihood, career, and socio-cultural behaviours.* 6. *Adopting a healthy lifestyle and playing a role in environmental conservation and sustainable development.* 7. *Analysing natural and social phenomena, understanding their causes and effects, and demonstrating positive behaviour.* 8. *Entering the world of work with confidence, showing respect for labour.* 9. *Developing and applying technical knowledge, skills, aptitudes, and professional and managerial capabilities.*	*over laid down competencies;* 4. *encourage the application of knowledge and skills in real-life problem-solving scenarios;* 5. *uphold the 'Constitutional Values' by encouraging values-based learning activities;* 6. *promote 21st Century Skills, Life Skills, Financial Literacy, Digital Literacy, Health and Wellness, Road Safety, Citizenship Education, Disaster Management and multilingualism;* 7. *integrate innovations in pedagogy such as experiential, activity centered, joyful learning, Sport and Art-Integrated Learning, toy-based pedagogy, storytelling, gamification etc. with technological innovations (ICT integration) to keep pace with the global trends in various disciplines;* 8. *promote inclusive practices as an overriding consideration in all educational activities;* 9. *enhance and support learning by different types of assessments; and* 10. *strengthen knowledge and attitude related to livelihood skills;* 11. *foster multilingual and multicultural learning and national understanding in an interdependent society;* 12. *integrate environmental education in various disciplines from classes I- 12.*

Both the Grades 11 and 12 Curriculum Development Centre (CDC) of Nepal and India's CBSE Senior Secondary curriculum are essentially dedicated to generate well-rounded, moral citizens. Both systems highlight the acquisition of skills essential for the twenty-first century including critical thinking, communication, and digital literacy as well as the expansion of human values, democratic principles, and a strong sense of national identity. While Nepal's CDC stresses practical application, analyses events, and technical/professional capabilities, CBSE especially supports constructivist learning via hands-on experience, creative pedagogies like art-integrated learning and gamification, and diverse assessment methods. CBSE stresses multilingual and multicultural learning for an interdependent society and both courses stress the need of environmental preservation and sustainable development. CBSE then further details their integration across all Grades. Though they differ somewhat in their stated pedagogical approaches and particular points of emphasis within their larger, shared goals, both systems eventually want to equip students with basic life skills, prepare them for the world of work, and encourage positive contributions to society.

Discipline/Area of Coverage

Nepal's secondary education spans Grades 9 to 12**,** encompassing three distinct streams: general, technical/vocational, and traditional. This includes age-old systems like Gurukul, Gonpa, Vihar, Madrasa, and Mundhum. The curriculum follows a single-track approach. In Grades 9 and 10, students in the general stream take five compulsory subjects—Nepali, English, Mathematics, Science and Technology, and Social Studies—along with two electives. For Grades 11 and 12, Nepali, English, Social Studies, and either Life Skills Education or Mathematics are mandatory. The table outlines the credit and working hours for each subject in Grades 11 and 12, with a total of 27 credit hours and 864 working hours per grade. Students choose three elective subjects in coordination with the local government and school, considering their interests and available resources. They must pick one subject from any three of the four elective groups. Ideally, students continue with their Grade 11 elective or a related subject in Grade 12; if unavailable, a suitable alternative from the same group should be chosen. For those looking to broaden their learning, additional non-credit elective subjects can be taken from previously unselected groups. Furthermore, the curriculum allows for subject-specific practical hours, and schools are required to provide practical exercises for

all compulsory and elective subjects. These can range from lab work and projects to community engagement, presentations, and research.

The CBSE Senior Secondary Level curriculum is organised around seven primary learning areas: Languages, Humanities and Social Sciences, Sciences, Mathematics, Business and Commerce-based electives, Visual, Performing, and Creative Arts, Skill Electives, Health and Physical Education, and General Studies. These disciplines are essentially divided into electives and required courses, which let students select a mix that fits their interests and professional goals while guaranteeing a general basic understanding. These disciplines' curricula centre on developing particular competencies, including effective communication in languages, understanding of society interactions in humanities, scientific attitude and application in sciences, problem-solving in mathematics, professional competencies in skill subjects, and encouragement of appreciation for arts and holistic well-being through health and physical education. General Studies seeks to offer a whole appreciation of knowledge outside of specific disciplines.

Comparison:

Regarding discipline/content area, Nepal's secondary education (Grades 9–12) combines to three electives selected from four groups with compulsory subjects in which includes Nepali, English, Math, Science & Technology, and Social Studies/Mathematics, all within a single-track (flexible) structure across general, technical/vocational, and traditional streams. By contrast, India's CBSE Senior Secondary curriculum arranges its materials into seven more broadly defined, more explicitly defined learning areas: Languages, Humanities and Social Sciences, Sciences, Mathematics, Business and Commerce-based electives, Visual, Performing, and Creative Arts, Skill Electives, Health and Physical Education, and General Studies. Aiming for a comprehensive knowledge, both systems offer core and elective subjects to suit different interests. CBSE's classification of academic and applied disciplines allows students to create a more varied interdisciplinary learning experience that spans traditional academics into areas like creative arts and skill-based electives.

Teaching and Learning Strategies

CDC Grades 11 and 12 teaching and learning activities are stated in four points. In secondary education**,** teaching-learning activities must adop**t** student-centred and child-friendly teaching methods. Computer technology can also be utilized as needed for

instruction in general, traditional, and technical and vocational education**.** Learning facilitation activities should be conducted with student learning at the core**.** The learning process should be activity-based, providing more opportunities for learning by doing rather than focusing solely on theoretical aspects. Information and Communication Technology (ICT) should be used in teaching and learning according to available resources, means, and needs

Teaching and learning of the CBSE curriculum is a diversified process under control by pedagogical leadership, learner-centric approaches, and teamwork. It starts with the creation of a School Curriculum Committee in charge of defining educational activities, evaluation strategies, and feedback systems. Teachers in every field make up this committee. Furthermore, assured by this committee are gender-sensitive, inclusive, age-appropriate, consistent with the NCF-2005 and constitutional values all instructional resources. Essential pedagogical leaders, principals oversee the direction of instruction and learning, coordinate the annual pedagogical plan, and focus all school operations towards the development of student competency. They are expected to inspire creative pedagogy combining art, sports, and ICT as well as to support fun experiential learning. By using learner-centric approaches that support cooperative skill development, critical thinking, and active learning while also including the arts into the classroom and addressing the particular needs of every student, teachers are crucially involved in this process.

The basis of the curriculum is competency-based learning, which stresses the experiential and active pedagogies that let students show the intended learning objectives, therefore ensuring that no kid is missed. Lesson/Unit Plans developed by teachers include precise learning objectives, a range of pedagogical approaches, interdisciplinary links, and assessment tools. By encouraging peer learning, mental wellness, and health, the classroom and school surroundings are meant to support whole development. The curriculum also gives Cross-Curricular Linkages top priority in order to help to integrate past knowledge with current material. It also fervently supports the inclusion of the arts into all fields of education as a pedagogical instrument and required course of study to help to develop life skills and increase understanding. Finally, the creation of 21st Century Skills (Learning, Literacy, and Life Skills) and the assurance of inclusive education for every student are under higher priority. Sensitisation campaigns and required appointments of specific teachers help to accomplish these skills.

Comparison

The CDC and CBSE curriculum advocate for student-centred, activity-based learning, emphasising "learning by doing" and the use of Information and Communication Technology (ICT). Nepal's CDC mostly provides basic principles for teaching-learning activities applicable to its general, traditional, and technical streams, but the CBSE framework delivers a more comprehensive and structured methodology. Under principals who advocate for competency-based learning, integrate the arts, sports, and information and communication technology, and endorse experiential learning, CBSE delineates a pedagogical leadership model with a School Curriculum Committee responsible for creating activities, assessment, and feedback. The CBSE emphasises inclusive practices, mental wellness, cross-curricular connections, and the cultivation of 21st-century skills through targeted sensitisation campaigns and teacher appointments, while also prioritising lesson/unit planning with defined objectives, interdisciplinary links, and assessments.

While checking gaps it can be observe that Nepalese curriculum lacks comprehensive institutional framework for pedagogical leadership, systematic curriculum planning at the school level, and specific strategies for integrating broader aspects like mental wellness, cross-curricular themes, and thorough 21st-century skill development beyond general ICT usage. Nepal's curriculum focused on student-centric and activity-based learning, whereas CBSE describes a more solid, multi-layered implementation strategy that lets teachers and school leadership drive pedagogical innovations and guarantee general student development.

Student Assessment Procedures

Nepal's CDC curriculum for Grades 11 and 12 utilizes a blended assessment approach, comprising 25% internal and 75% external evaluation. The internal component, serving as a formative assessment, integrates continuous feedback through class participation (3%), terminal examinations (6%), and a substantial 16% for practical/project work, all aimed at improving student learning. The summative assessment combines these internal scores with external examination results, which can be theoretical (81%), practical/project (16%), or both, with specific time allocations and separate grading. This system, which employs a letter grading (GPA-based) system, mandates practical/applied practice across all subjects and includes accommodations for students with special learning needs, ensuring a comprehensive evaluation of both theoretical knowledge and applied understanding. CDC adopts a structured

7-point grading scale (A^+ to D^+), where specific mark ranges correspond to each grade, and a minimum of 35% (1.6 GPA) is required to pass each subject.

Indian curriculum primarily relies on a single, high-stakes external examination at the end of the academic year for their senior secondary levels. For Class 12, the CBSE in India conduct a comprehensive external board examination. CBSE is notable comprehensively shifting towards a higher percentage of competency-based questions (50% for 2024-25), along with MCQs and constructed response questions, reflecting an emphasis on application and critical thinking. Indian education systems have transitioned towards a letter or grade point system, aiming to alleviate the intense pressure associated with raw marks and promote a more holistic view of student performance. CBSE utilizes a structured 9-point grading scale (A1 to E), where specific mark ranges correspond to each grade, and a minimum of 33% is required to pass each subject, with separate passing criteria for theory and practical components where applicable. The final result card typically displays Grades and a Cumulative Grade Point Average (CGPA). Furthermore, CBSE (2025-2026) curriculum states the followings guidelines to facilitate this transformation in secondary stage

1. Emphasize regular formative assessments to facilitate meaningful learning and constructive feedback, especially considering the greater subject depth.
2. Continue utilizing classroom assessments, with self-assessment playing a significant role in student learning.
3. Design assessments to evaluate competencies using diverse methods such as case-based questions, simulations, and essay-type questions, fostering creativity.
4. Utilize a variety of assessment methods, including written tests, practical tests, projects, and open- book tests, with comprehensive summative assessments conducted at the end of each year or term, often in the form of board examinations.

Comparison

Nepal's CDC curriculum places a strong and explicit emphasis on continuous, formative internal assessment contributing significantly to the final grade, aiming for ongoing learning improvement. This contrasts with CBSE's predominant reliance on a high-stakes, summative external examination. The primary gap in Nepal's CDC assessment, compared to CBSE, is the less explicit focus on a mandated, high percentage of competency-based questions in its external examinations. While Nepal's exams touch upon knowledge, practical

application, problem-solving, critical analysis, and creation, CBSE has formally committed to a significant percentage of competency-based questions, driving a clear shift towards higher-order thinking skills in its external evaluation.

Analysis of Mathematics Curriculum of CDC and CBSE

Nepal and India have common features of education system. In Nepal, there are several institutions where Indian Board of Education System is conducted. The interchange of students between Nepali and Indian boards is common. So, it is rationale to analyse Nepal Grades 11 and 12mathematics curriculum with CBSE mathematics curriculum of same level. In this section, we discuss how different aspects of mathematics curriculum like competencies, content areas, teaching and learning process, and assessment and evaluation are matched or mismatched between Nepal and India.

Competencies

The CBSE curriculum outlines objectives of the mathematics course at Grades 11 and 12 with to develop broader attitudinal, personal and societal awareness in addition to mathematical skills while the secondary education curriculum of Nepal of Grades 11 and 12 mathematics focuses on specific mathematical concepts, techniques and their applications.

Table 3: Competencies of Grades 11 and 12 Mathematics and Objectives CBSE Curriculum

Grades 11 and 12 (Nepal)	**CBSE (Indian Board)**
Level-wise Competencies	**Objectives**
On completion of this course, students will have the following competencies: 1. use basic properties of elementary functions and their inverse including linear, quadratic, reciprocal, polynomial, rational, absolute value, exponential, logarithm, sine, cosine and tangent functions. 2. use principles of elementary logic to find the validity of statement and also acquire knowledge of matrix, sequence and series, and combinatory.	The broad objectives of teaching Mathematics at senior school stage intend to help the students: 1. to acquire knowledge and critical understanding, particularly by way of motivation and visualization, of basic concepts, terms, principles, symbols and mastery of underlying processes and skills. 2. to feel the flow of reasons while proving a result or solving a problem. 3. to apply the knowledge and skills

3. identify and derive equations for lines, circles, parabolas, ellipses, and hyperbolas. 4. solve the problems related to real and complex numbers. 5. articulate personal values of statistics and probability in everyday life. 6. use vectors and mechanics in day-to-day life. 7. apply derivatives to determine the nature of the function and determine the maxima and minima of a function in daily life context. 8. explain anti-derivatives as an inverse process of derivative and use them in various situations. 9. apply numerical methods to solve algebraic equation and calculate definite integrals and use simplex method to solve linear programming problems (LPP). 10. use relative motion, Newton's laws of motion in solving related problems.	acquired to solve problems and wherever possible, by more than one method. 4. to develop positive attitude to think, analyze and articulate logically. 5. to develop interest in the subject by participating in related competitions. 6. to acquaint students with different aspects of Mathematics used in daily life. 7. to develop an interest in students to study Mathematics as a discipline. 8. to develop awareness of the need for national integration, protection of environment, observance of small family norms, removal of social barriers, elimination of gender biases. 9. to develop reverence and respect towards great Mathematicians for their contributions to the field of Mathematics

CBSE course's objectives aim to help students to acquire knowledge and critical understanding through motivation and visualization, particularly of basic concepts, symbol, principles and command of underlying process and skills. Students should develop the skills to solve problems by multiple methods, develop a positive attitude on students for logical thinking, analyze, articulate and develop interests on participants. Objectives also include the application of mathematical concept in daily life activities, focus to develop interest in learning mathematics and fostering awareness of societal needs like national integration, environment protection, family norms, social barriers and gender biases. It also focuses to develop the admiration and respect towards the mathematicians and their contribution. In Nepali curriculum, the more focus is on mathematics concept development rather than connecting the

aspects of learning mathematics to develop social values. More importantly the learning outcomes of each content of Grades 11 and 12 mathematics of Nepali curriculum missed the applied and social dimensions of mathematics.

Content Coverage

CBSE and the Secondary Education Curriculum of Nepal share many common areas of mathematics content. The CBSE curriculum puts sets and functions as the fundamental concepts for the course at grade 11. That includes sets, relation and functions, and trigonometric functions while Nepal's grade 11 curriculum include the logic and set and function with in the content area of Algebra. In addition to that, curve sketching, sequence and series, matrices and determinants, quadratic equation, and complex numbers are included in the Algebra whereas in CBSE's algebra course includes complex numbers and quadratic equations, linear inequalities, permutation and combinations, binomial theorem, and sequence and series. The course continuity is given in grade 12 in both country's curriculum where CBSE contains relation and function as unit first which include types of relation, one to one and onto function and inverse trigonometric functions and under algebra CBSE includes matrices and determinants. In Nepal, grade 12 curriculum gives continuity of algebra contents but slightly different than CBSE, it includes permutation and combination, binomial theorem, complex numbers, sequence and series and matrix-based system of linear equations. CBSE curriculum considers set, relation and functions as fundamental concepts in mathematics and useful for all content areas and Nepali curriculum includes these concepts within the algebra domain and this can be narrowed usefulness of the set and functions within in algebra but the concept of set, relations and functions is crucial in calculus and other content domains as well including algebra. Regarding other concepts of algebra in both curricula. The Nepali curriculum covers a broad spectrum of algebra contents across Grades 11 and 12 but it is better to incorporate some aspects of CBSE curriculum into Nepali algebra content as well.

Regarding calculus, the CBSE grade 11 curriculum includes limits and derivatives but Nepali curriculum includes limits, continuity, derivatives and antiderivatives all in grade 11. CBSE curriculum includes continuity only in grade 12. The calculus content of Nepali curriculum mostly focuses techniques of calculating limit, derivative and integration rather than on conceptual understanding and applications as focused in CBSE curriculum. The content of Grade 11 of calculus of Nepal covers broader range than CBSE curriculum and looks like

content overloaded compared to CBSE grade 11 calculus content. Few specific topics mentioned in CBSE grade 12 are not explicitly listed with the same emphasis in Nepali curriculum like Fundamental Theorem of Calculus, derivatives of inverse trigonometric functions and a distinct unit on applications of integrals focusing on area under curves. However, some additional contents like L'Hospital's rule, integrals of rational functions and exact differential equations covered only in Nepali 12 curriculum. The both curriculums have similar structure of contents however the focus of CBSE curriculum is more on application of derivative and integration and Nepal's mathematics curriculum is more on technique to calculate derivatives and integration of the given function.

Next area of comparison is geometry. CBSE grade 11 includes coordinate geometry covering straight lines focusing on slope, angle between lines, various forms of equations (point-slope, slope-intercept, two-point, intercept) and distance of a point from a line. It also includes conic sections introducing sections of cone (circle, ellipse, parabola, hyperbola, degenerated cases) and covering standard equations and simple properties of parabola, ellipse and hyperbola, as well as the standard equation of a circle. While, Nepali XI mathematics curriculum includes analytic geometry covering the length of the perpendicular form a point to a line, bisectors of the angles between two straight lines, pair of straight lines with general equation, condition for representing a pair of lines, homogeneous equation, angle between pair of lines and bisectors. The continuity of conic section is given in Nepal's curriculum which include condition of tangency of a line to a circle, equations of tangent and normal to a circle, standard equation of a parabola, equations of tangent and normal to a parabola, and standard equations of ellipse and hyperbola.

The CBSE Grade 11 syllabus explicitly includes fundamental forms of straight lines equations like point-slope, slope-intercept, two-point, and intercept forms. These are essential building blocks. Ensuring clear coverage of these basic forms in Nepali Grade 11 Analytic Geometry would provide a stronger foundation before moving to concepts like pair of lines. Vector geometry is included in both 11 and 12 of Nepal's curriculum while in CBSE it is included only in grade12. In grade 11 curriculum of Nepal, basic concepts of vectors like collinear and non collinear vectors, coplanar and non-coplanar vectors, linear combination, linearly independent and dependent of vectors are included. The continuity is given in grade 12 focusing on product of vectors (scalar and vector product) including definitions, angle, interpretation, properties, application in geometry and trigonometry. While CBSE curriculum

of grade 12 includes a unit on vectors covering the concepts of vectors and scalars, magnitude, direction cosine and ratios, types of vectors, position vector, vector operations, position vector dividing a segment, scalar and vector product of two vectors with definition, interpretation, properties and application. The similarity in the content structure is found however vector should be included in the single grade or divided in both Grades is the topic of discussion.

Regarding three-dimensional geometry, CBSE grade11 includes an introduction to three-dimensional geometry covering coordinate axes and coordinate planes in three dimensions, coordinates of a point and distance between two points. The remaining contents direction cosines and direction ratios of a line joining two points, cartesian equation and vector equation of a line, skew lines, shortest distance between two lines and angle between two lines are included in grade12. While in Nepal, Grade 11 curriculum covers the content I coordinate in space covering points in space, distance between two points and directions cosines and ratios of a line. CBSE and Nepal's curricula both introduce 3D coordinates and distance. CBSE grade 12 significantly expands upon this by covering lines in 3D (equations, skew lines, shortest distance), which is not explicitly listed in the Nepal's curriculum. In trigonometry, CBSE grade 11 includes a unit on trigonometric functions covering positive and negative angles, radians/degree measure, definition using unit circle, fundamental identities, signs of functions, domain, range, graphs, sum, difference of identities, multiple-angle identities. In Nepal, grade 11 curriculum includes trigonometry covering inverse circular functions and trigonometric equations and general values and in grace 12 properties of a triangle and solution of a triangle are included. The trigonometry content of Nepal mostly focusses on technical skills to operate trigonometric functions while CBSE curriculum focuses on conceptual understanding of the trigonometric concept which is lacking in Nepali curriculum.

Statistics and probability are the next area of content which is explicitly covered in both Nepali and Indian curricula. Both curricula contain measure of dispersion. While Nepal's statistics curriculum contains some extra contents like skewness, Karl Pearson's coefficient of skewness, correlation and regression. In probability, CBSE curriculum seems more elaborative. It includes more advanced topics like conditional probability, total probability, Bayes' theorem and introduces the concept of a random variable and its probability distribution, along with the mean of a random variable together with fundamental concept of probability. The contents like Bayes' theorem, random variable and their probability distributions and mean can be included

in Nepal's curriculum also because this concept is connected with higher concept and useful for other applied field like programming.

Linear programming contents is included in both curricula but in Nepal some additional contents are also included like numerical computation, numerical integration, system of linear equations and the alternative contents from mechanics includes statistics and dynamics. The appropriateness of these contents should be discussed.

An overall analysis of the content areas in both the CBSE and Nepal curricula for Grades 11 and 12 reveals both similarities in core subjects and differences in emphasis and structure. Both curricula encompass fundamental branches of higher secondary mathematics, including Algebra, Calculus, Statistics, and Probability**.** They also cover geometry-related topics, with CBSE detailing Coordinate Geometry in grade 11 and Vectors and Three-Dimensional Geometry in grade 12, while Nepal includes Analytic Geometry and Vectors across both Grades. Calculus holds a significant weightage in both**,** being a major unit in CBSE Grade 12 and having substantial working hours allocated across both Grades in Nepal. A notable difference is the inclusion of Trigonometry as a distinct main area in Nepal, spread across both Grades, whereas CBSE integrates Trigonometric Functions within the Sets and Functions unit in Grade 11 and Inverse Trigonometric Functions within Relations and Functions in grade 12. Nepal's curriculum also presents a choice between Computational Methods and Mechanics in grade 12, offering students a specialized pathway, while CBSE includes Linear Programming as a standalone unit in grade 12 While both build upon mathematics from lower Grades, the specific distribution and depth of topics within these broad areas, such as the detailed statistical techniques like Correlation and Regression covered in Nepal or the advanced probability theorems and random variables in CBSE, highlight variations in their respective focuses and preparation for future studies.

Overall, the CBSE curriculum focuses more application-orientated and conceptually sequenced contents, whereas Nepal's curriculum, though broad and rich in contents coverage, sometime lacks clarity and a sequential conceptual build-up is necessary for deeper understanding.

Teaching and Learning Activities

The CBSE curriculum does not explicitly include the teaching and learning activities while Nepal's curriculum of both Grades includes inductive and deductive methods, problem-

solving method, case study, project work, question answer and discussion method, discovery method, use of ICT and cooperative learning approach. The methods included in the Nepali curriculum strongly emphasizes active learning, creative problem solving and the use of diverse methods that promote student participation. CBSE curriculum does not have listed methods but the objectives mentioned there focus on motivation and visualization of mathematical concepts. Regarding preferred teaching and learning activities of Nepal provide explicit recommendations of diverse, active teaching methodologies and features a more heavily weighted and structurally detailed project and practical work components. Nepal's curriculum divided internal evaluation into classroom participation, marks from trimester examinations, project works or practical work with possible areas and final external examination.

Assessment and Evaluation

The CBSE and Nepal's Grades 11 and 12 curricula both include internal and external components of student assessment and evaluation. There is slightly difference in the weightage of internal and external marks allocation of both countries. In CBSE, 20 marks in internal and 80 marks in external examination are allocated while in Nepal the internal mark is 25 and external is 75. CBSE has two criteria for internal examination periodic tests (best two out of the tests conducted) and mathematics activities. NCERT lab manual is preferred for mathematics activities. CBSE curriculum also includes typology of questions to be asked in final examination covering the taxonomy from remembering to creating.

In conclusion, Nepali and Indian mathematics curriculum have several common aspects. The content area of both countries is almost similar. However, the focus of the contents differs largely. The Nepali mathematics curriculum focuses on developing conceptual and mathematical understanding of students whereas Indian curriculum focuses on to develop the skills and attitude to apply the learned concepts in the real field. The Indian curriculum focuses on developing a positive attitude towards mathematics and highlights the application of mathematics in the real fields. This could be the potential area of improvement in Nepali curriculum. So, content could be similar but if we change focus and teaching and learning process accordingly the motivation of students in learning mathematics can be increased.

A Comparative Analysis of the CDC and CBSE English Curricula

This study aimed at comparing the curricular competencies, contents, pedagogical processes, and assessment methods in the curricula of Grades 11 and 12 prepared and

executed by CDC, MOEST Nepal and CBSE India. The primary goal of doing this is to explore how these two curriculum development agencies have framed their curricula and what can be learnt from each other to inform future directions of the curriculum development process.

In Nepal, the CDC develops the curricula for school level and is implemented by schools. As of now the assessment of grade 12 is handled by National Examination Board (NEB). The overall control and monitoring of the examination remain within the scope of NEB. The earlier stream-based system has been scraped and currently the subject-specific curricula have been prepared and implemented across the country, adopted by public and private schools. This curriculum has been guided by the National Curriculum Framework for School Education 2019 issued by the MoEST.

In India, the CBSE has adopted the stream-based curricula basically organized within Science, Commerce and Arts (Humanities and Social Sciences). However, the recent National Education Policy has provisioned subject-based flexibility in terms the choices of subjects that students can make in proceeding to Grades 11 from grade 10. English remains one of the core subjects of the curriculum. As motioned earlier, the current CBSE curriculum has been guided by the NEP 2020 of India.

In the sections that follow, we illustrate the ways the competencies, contents, pedagogy and assessment practices framed by these curricula of these two countries.

Competencies

The table below illustrates the competencies focused in English subject curriculum of Grades 11 and 12 of Nepal and India**.**

Table 4: Competencies of Grades 11 and 12 English Curriculum and CBSE English Curriculum

Aspects of the curriculum	**Grades 11 and 12 Nepal**	**Grades 11 and 12 India**
Competencies	• Use both spoken and written English for general and academic purposes in a variety of personal, social and academic contexts. • Read a wide variety of texts for	• listen and comprehend live as well as recorded oral presentations on a variety of topics • develop greater confidence and proficiency in the use of language skills necessary forsocial and academic

	information and understanding • Read a variety of literary texts for pleasure and appreciation • Read, reflect and interpret a wide range of texts • Critically analyze and evaluate ideas in a wide range of level appropriate texts • Search, select and manage information from various textual and online sources. • Create a variety of writing for different purposes and audiences with appropriate content, style and accuracy • Produce a variety of creative and critical writings • Appreciate diverse cultures • Listen and respond in English with accuracy and fluency • Communicate clearly and effectively in a range of situations using verbal and non-verbal communication strategies	purpose to participate in group discussions and interviews, by • making short oral presentation on given topics • perceive the overall meaning and organization of the text (i.e., correlation of the vital portions of the text) • identify the central/main point and supporting details, etc., to build communicative competence in various lexicons of English. • promote advanced language skills with an aim to develop the skills of reasoning, drawing • inferences, etc. through meaningful activities • translate texts from mother tongue(s) into English and vice versa • develop ability and acquire knowledge required in order to engage in independent • reflection and enquiry • read and comprehend extended texts (prescribed and non-prescribed) in the following • genres: science fiction, drama, poetry, biography, autobiography, travel and sports • literature, etc. • text-based writing (i.e., writing in response to questions or tasks based on prescribed or • unseen texts), understand and respond to lectures, speeches, etc.

		• write expository / argumentative essays, explaining or developing a topic, arguing a case, • etc, write formal/informal letters and applications for different purposes2 • make use of contextual clues to infer meanings of unfamiliar vocabulary • select, compile and collate information for an oral presentation • produce unified paragraphs with adequate details and support • use grammatical structures accurately and appropriately • write items related to the workplace (minutes, memoranda, notices, summaries, reports etc. • filling up of forms, preparing CV, e-mail messages., making notes from reference • materials, recorded talks etc.

Following the specification of the competencies, the English curriculum of India also outlines the detailed breakdown of each skills-based objectives. This is in a way similar to what has been found in Nepal's case that the curriculum is competency based and there are learning outcomes in each of the listening, speaking, reading and writing skills as well as language functions.

Content Specifications

The CBSE English curriculum and Nepal's Grades 11 and 12 curriculum are in several ways similar to each other. One of the major strengths of their similarity is the way the language curriculum has been organized, i.e., in more skills-based organization of the contents. The CBSE curriculum outlines specific objectives for reading, listening and speaking, creative writing, in which grammar and vocabulary elements are embedded. That means there is no grammar or vocabulary component separately presented in the curriculum.

For instance, the following is the list of objectives for reading as prescribed in the CBSE Compulsory English curricula for Grades 11 and 12 for the year 2025-26.

Table 5: Comparison of Specific Objectives for Reading between CBSE and Grades 11 and 12 Curriculum

Specific objectives for reading (CBSE Grades 11 and 12 curriculum)	**Specific objectives for reading (Grades 11 and 12 curriculum)**
• Skim for main ideas and scan for details • Refer to dictionaries, encyclopedia, thesaurus and academic reference materials in any format • Select and extract relevant information, using reading skills for skimming and scanning • Understand the writers' purpose and tone • Comprehend the difference between the literature and the figurative • Differentiate between claims and realities, fact sand options, form business options on the basis of latest trends available • Comprehend technical language as required in computer related fields, arrive at personal conclusion and logically comment on a given text • Specifically develop the ability to be original and creative in interpreting option, develop the ability to be logically persuasive in defending one's opinion and making notes basis on a text • Recognize multilingual nature of Indian society by reading different genres.	• Read the texts intensively for information and understanding • Read a variety of literary texts for pleasure, appreciation and interpretation, • Read the texts and critically analyze, interpret and evaluate the information • Read the texts loosely and understand the structure and organization of the text • Read the text and predict the content and make inferences • Read the texts and take notes • Read and interpret the para-orthographic texts • Read texts and deduce the meaning of unfamiliar lexical items from the context • Use an authentic English dictionary, thesaurus, encyclopedia and academic reference material • Read and identify the practices and values of national and target cultures

The organization of other contents are in the similar way as that of reading. The listening and speaking is given less space but these skills are focused more from practical perspectives. The list of the objectives for reading and the learning outcomes for readings

(stated as reading constructs in Nepal's Grades 11 and 12 curricula) shows that the latter is more generic compared to the former. In the CBSE curriculum, focus has been made to specific type of reading texts. For example, it mentioned "Comprehend technical language as required in computer related fields, arrive at personal conclusion and logically comment on a given text" in the reading category. This specification provides the teachers and textbook writers some guidelines to select types of texts that are related to the recent market needs of using computer language (technical language). But in Nepal's Grades 11 and 12 curriculum, this type of text specification is missing and also the outcomes are presented in generic ways. For example, it states "Read the texts and critically analyze, interpret and evaluate the information" as one of the objectives. However, in the CBSE curricula the similar task has been stated as "Understand the writers' purpose and tone" which is also a type of critical analysis. Hence, the analysis of the reading objectives (here presented as an example) and other skills-related learning objectives of Nepal and India's Grades 11 and 12 curricula shows that Nepal's curricula need to be made more specific to the micro skills (sub-skills in reading) and more specific requirements to be mentioned in the curricula.

Instructional Methods and Techniques

The compulsory English curriculum of CBSE Board of India emphasized that promotion of children's self-learning and reduction of dependence on teacher is the basis of specification of the methods and techniques. This curriculum also recommends a multi-skill, learner-centered, activity-based approach of which three can be many variations. The following methods and techniques for instructional purpose and students' self-learning initiatives.

- The core classroom activity is likely to be that of silent reading of prescribed/selected texts for comprehension, which can lead to other forms of language learning activities such as role-play, dramatization, group discussion, writing, etc., although many such activities could be carried out without the preliminary use of textual material.
- It is important that students be trained to read independently and intelligently, interacting actively with texts, with the use of reference materials (dictionary, thesaurus, etc.) where necessary.

- Some pre-reading activity will generally be required, and the course books should suggest suitable activities, leaving teachers free to devise other activities when desired. So also, the reading of texts should be followed by post reading activities.
- It is important to remember that students should be encouraged to interpret texts in different ways.
- Group and pair activities can be resorted to, when desired, although many useful language activities can be carried out individually. In general, teachers should encourage students to interact actively with texts and with each other.
- Oral activity (group discussion, etc.) should be encouraged.

In a different tone, the Nepal's Grades 11 and 12 curricula present the instructional methods and techniques as 'learning facilitation process' and mentioned that the process will be based on the following pedagogic principles.

- Content and language integrated learning
- Real world link
- Diversity as a resource
- Learning through information and communication technology
- Learner engagement

These learning facilitation processes have been further defined, but how these can be operationalized in the instructional activities while delivering the course contents is not clear. If more specific could be suggested as per the actual and potential context of teaching and learning of English, that would make more relevant and practical. The same curriculum also presents specific learning activities to be adopted based on these principles. They are:

- Reading and presentation
- Writing projects
- Dramatization, role play and simulation
- Inquiry-based writing
- Reading for comprehension
- Reading for critical assessment/analysis
- Discussion sessions
- Think-Pair-Share
- RDWS (Read, Discuss, Write and Say/share)
- Teacher-guided self-study

- Journal writing
- Library visits
- Listening to lyrical poems and songs
- Reciting lyrical poems and songs
- Watching movies (animated/unanimated, comic) and dramas
- Brainstorming and mind mapping
- Quick write/flash writing
- Book/Film reviews
- Paraphrasing

One of the strengths of the Nepal's Grades 11 and 12 curricula is that it suggests instructional materials for learning facilitation. This is not specifically mentioned in the CBSE curricula.

Student Assessment

The curricula of both countries use letter grading system for assessing students' performance. Formative and summative assessment practices have been suggested. For example, the curriculum for Grades 11 and 12 developed by CDC prescribes the following techniques/activities as tools for formative assessment.

- Observation of students' linguistic behaviour
- Anecdotal record
- Rating scale
- Check lists
- Work samples/written samples
- Interviews
- Home assignments
- Portfolio
- Tests (class, weekly, monthly, trimester)
- Project works
- Creative works
- Self-initiation in learning
- Classwork
- Games
- Debates
- Story telling/retelling
- Poetry recitation
- Dramatization/simulation
- Role play
- Group discussion
- Journal writing

The listening and speaking skills shall be tested as part of the internal assessment of 25 marks which is divided into four categories as: 1) participation (3 marks), 2) listening test (6 marks), 3) speaking test (10 marks), and 4) score from terminal exams (6 marks). Each of these categories has been elaborated in the curriculum. The external evaluation will be of 75 marks divided into four categories of language skills and aspects as:

- Reading 35%
- Writing 25%

- Grammar 10%
- Vocabulary 5%

Slightly different from Nepal's case, the CBSE has provisioned 80% written exam and 20% internal assessment. The internal assessment includes: Listening and Speaking Skills (10 marks) assessed on interactive competence, fluency, pronunciation, language (grammar, vocabulary) throughout the year. The other element will be Project Work (10 marks) that is assessed on content quality, accuracy, timeline adherence, language, clarity, creativity, and viva performance. This curriculum emphasizes continuous assessment of speaking skills over the academic year. The external assessment will be conducted to measure reading, writing, grammar, vocabulary and language functions that involve students in reading comprehension tasks (unseen passages, note-making, summarization); grammar & creative writing tasks (gap filling, re-ordering, advertisements, posters, speeches, debates, notices, invitations, letters, articles/reports) and literature (extracts, short/long answers from prescribed texts Hornbill, Snapshots, Flamingo, Vistas).

Chapter V: Harmonization between Grade 11 and 12 and Bachelor Level Mathematics Curriculum

This chapter analyses the vertical alignment of Grade 11 and 12 curricula on Mathematics with the bachelor's level curriculum at Tribhuvan University, Nepal. The bachelor's level mathematics curriculum of Science, Humanities and Education were taken for comparative analysis. The review of the curriculum of both levels and interaction with the stakeholders such as curriculum developers, subject experts, teachers, and educators showed that significant further work required for making the current curricula of school level and bachelor level aligned with each other. Here we report the findings in terms of the components of the curriculum such as competencies, contents, teaching methods, and assessment provisions and practices.

Curricular Competencies in Mathematics

Grades 11 and 12 curriculum of mathematics contains both course competencies and specific learning outcomes. But, in bachelor levels humanities and science streams courses do not mention clear competencies and learning outcomes. B.Ed. mathematics curriculum has mentioned general objectives and specific objectives. These two levels curricula have different philosophical foundations. The philosophical foundation of competencies-based curriculum is multifaceted, basically it aligns with progressivism, pragmatism, humanism and social constructivism whereas the goal focused curriculum is structured and focuses on standardized knowledge acquisition, this type of curriculum aligns with functionalism and idealism (Sah, 2019). So, analysis of the curricula based on competencies may not be meaningful. However, this section deals on to analyze the focus area of competencies or objectives of both levels. Table 6 presents the goal and competencies or objectives of the mathematics courses of Grades 11 and 12 and bachelor levels.

Table 6: Goal and Competencies of Grades 11 and 12 and Bachelor's Levels

Aspects/Area	Grades 11 and12	Bachelor Levels
Algebra	- Use basic properties of elementary functions and their inverse - Use principles of elementary logic to find the validity of	- Familiarize students with the understanding of basic algebraic structure. - Develop capabilities among the students in proving theorems and problem solving - Help students to develop positive attitude towards

	statement and also acquire knowledge of matrix, sequence and series, and combinatory - Solve the problems related to real and complex numbers.	algebra - Develop the knowledge of field extension. - Compare with graduates from various other universities in the field of algebra
Trigonometry	Competency missing	- No connected courses but the concept of trigonometry is used in different subjects' area.
Analytic Geometry	- Identify and derive equations for lines, circles, parabolas, ellipses, and hyperbolas.	- To familiarize students with different co-ordinate systems (2-3 dimensions). - To make the students able to understand different conic sections and describe their natures. - To acquaint students in describing analytically the structure of space, special relation with lines, planes and relations between them in 3-space. - To make students able to generalize the general equation of second degree and conditions to represent conics and conicoid with their properties. - To make a deep understanding of plane sections and generating lines of conicoid.
Vectors	Use vectors in day-to-day life.	-Build good knowledge in vector analysis.
Calculus	- apply derivatives to determine the nature of the function and determine the maxima and minima of a function in daily life context - explain anti-derivatives as an inverse process of derivative and use them in various situations.	- B. Sc: to acquaint students with the concept of calculus and differential equations and their applications. - B. Ed.: covered all the contents of calculus (differential and integral calculus) - Focused mostly on conceptual understanding.
Statistics and Probability	Articulate personal values of statistics and probability in everyday life.	- Impart practical knowledge and skills in deriving properties of correlation and regression - Make familiar with discrete and continuous probability distribution

		- Use sampling distribution and estimation and use test of hypothesis in research work. - Impart knowledge on statistical modeling through regression methods. - Impart substantial knowledge on demography, demographic measures, population models… - Develop awareness of official statistics, survey and census…
Computational methods and Mechanics	- use mechanics in day-to-day life. - apply numerical methods to solve algebraic equation and calculate definite integrals and use simplex method to solve linear programming problems (LPP) - use relative motion, Newton's laws of motion in solving related problems.	- Build foundation of Numerical methods. - Enable the students in solving problems on linear programming - To acquaint students with the concept of mechanics like coplanar forces, virtual work, catenary, center of gravity, kinematics in two dimensions, rectilinear motion, moments and product of inertia.
Level of taxonomy	Competencies focus on comprehension and application. Most used action verbs are use, identify, apply and explain. The learning outcomes concerned with knowledge and comprehension mostly.	- Mostly the theoretical papers focus on knowledge and comprehension (lower order thinking skills). - The applied papers like mathematical modeling, statistics, etc. focus on application skills (HoTs)

The curricular competencies of Grades 11 and 12 mathematics provide foundation for more abstract and advanced concepts introduced at the bachelor levels of different streams. The competencies of major content areas such as algebra, calculus, geometry, and probability and statistics are presented with an emphasis on conceptual clarity and practical applications; however, the learning outcomes of specific contents are not aligned with competencies. To study the more theoretical and analytical domains at the bachelor levels the competencies attained by the students on understanding functions, solve equations, calculate and apply derivative and integration, and interpret data. For example, the concept of logic and function

in Grades 11and12 transitions into formal theorem proving and to understand algebraic structures in university.

Competencies at the bachelor levels are shifted from procedural to conceptual learning, with strong focus on higher order thinking skills such as analysis, synthesis and evaluation. The applied mathematics subjects like statistics, mechanics and computational methods are supportive to deepening understanding through rigorous theoretical frameworks and real-world applications. Vertical alignment is seen regarding the competencies but there are notable gaps in competencies and learning outcomes with in Grades 11 and 12 curricula and that of objectives of bachelor levels different courses of mathematics.

Firstly, most of the competencies in Grades 11 and 12 are vague particularly in algebra and statistics. For instance, the algebra competency "use basic properties of elementary functions" lacks context and scope of application, making it difficult to assess or connect with real-world situations. Conversely, the bachelor level emphasizes deeper theoretical understanding and proof-based skills but does not clearly build on the foundational skills from school levels.

Secondly, there is no stated competency for trigonometry at either level, even though its concepts appear in multiple subjects. This omission creates a conceptual and curricular gap, as students may not have formal learning outcomes to guide their understanding and application of trigonometric ideas. Thirdly, inconsistency exists between competencies and learning outcomes, particularly in statistics and probability. While the competency focuses on articulating values in daily life, the learning outcomes emphasize calculation and interpretation, with no real-life application included. This misalignment undermines the purpose of competency-based education, where outcomes should reflect the stated competencies. Furthermore, there is a lack of clear progression and taxonomy alignment. While competencies aim at application, learning outcomes mostly target comprehension and basic knowledge, limiting opportunities to develop higher-order thinking skills (HOTs). The bachelor level introduces HOTs in applied papers, but there is no gradual build-up from school level.

Finally, skill-wise and level-wise alignment is insufficient. Grades11 and 12 competencies are shared across both Grades without distinct developmental goals, and the link between school and bachelor-level expectations remains weak. A clearer, skill-based

trajectory from understanding to application and analysis should be embedded across both levels for coherence and progression in mathematics education.

Content Alignment

Content alignment between Grades 11 and 12 and Bachelor's level mathematics curriculum is analyzed based on the major content areas. Table 7 below presents the synopsis of the contents at 11 and 12 Grades and bachelor's level, particularly in Education, Science and Technology and Humanities streams.

Table 7: Contents Comparison between Grades 11 and 12 and Bachelors Levels Mathematics

Aspects/area	Grade 11	Grade 12	Bachelor (BA, BSC, and B.Ed.)
Algebra	Logic and set, real number, function, curve sketching, curve sketching, sequence and series, matrix and determinants, quadratic equation and complex number	Permutation and combination, binomial theorem, complex numbers, sequence and series, matrix-based system of linear equation.	Sequence and series of functions, complex numbers and functions, elementary logic, sets and functions, real number system, matrix and determinants.
Trigonometry	- Inverse circular functions, trigonometric equations and general values	Properties of triangle and solution of triangle	- Does not have any directly linked concept
Analytic Geometry	- Straight line and pair of straight lines. - Coordinate in space	- Conic section (circle, parabola, ellipse and hyperbola)	- Analytical geometry as single subject
Vectors	- Fundamental concepts of vectors	- Product of vectors	- Product of three or more vectors, - Differentiation of vectors - Gradient, divergence and curl and expression formula
Statistics and Probability	- Measure of dispersion - Concept of probability,	- Correlation and regression.	- Correlation and regression, estimation,

	basic laws of probability	-Probability: dependent cases, conditional probability	hypothesis testing, -Probability distribution
Calculus	-Limit and continuity -Derivatives and applications -Antiderivatives with application	- Derivatives and application - Antiderivatives - Differential equations.	-Calculus (Differential and Integral) -Analysis including properties and theorems of derivatives and integration.
Computational Methods	-Numerical computation -Numerical integration	- System of linear equations - Linear programming problems (Simplex methods only)	-Numerical methods (B. Sc. elective) -Linear Programming (B. Ed. and B. Sc.)
Mechanics	-Statics: Forces -Dynamics: Motion	- Statics: triangle law of forces and Lami's theorem - Dynamics: newton's laws of motion and projectile	-Mechanics (B.Sc.)

Table 8 shows that the Grades 11 and 12 mathematics curricula exhibit vertical alignment with that of the Bachelor levels, particularly BA, BSc. and B.Ed. mathematics curricula in some contents area, however there are also significant gaps in the content coverage. In particular, the contents of algebra, vector geometry, calculus, and statistics and probability have strong continuity and progress depth across levels. The concept of real number system, functions and graphs, sequence and series, complex numbers, matrices and determinants introduced in Grade 11 and expanded further in Grade 12 under the algebra content area. These concepts could provide firm foundation to study algebra, complex functions, and analysis as well. Similarly, calculus concepts introduced in Grade 11 started from limits and further expanded to continuity, derivatives, and integration with some parts of application could provide support to study the similar contents in Grades 12 and well align with bachelor level courses focuses on differential and integral calculus, analysis, and advanced calculus. Probability and statistics concepts of Grades 11 and 12 are also vertically aligned with the

bachelor levels contents like probability distribution, abstract contents of probability, estimation, hypothesis, descriptive and inferential statistics.

Despite few strengths, several gaps and misalignment are noticed during the analysis of the courses. In Algebra, while most topics are conceptually aligned across levels, the distribution of contents is fragmented. For instance, complex numbers, matrices, and sequences are repeated across Grades 11 and 12 without clear progression. These could be better consolidated within a single grade to avoid redundancy. Also, the bachelor-level curriculum omits topics like permutation and combination, despite their relevance in fields like computer science. The school-level content emphasizes theory, with minimal focus on application or visualization, whereas bachelor-level expectations require applied understanding. Incorporating graphing technologies and real-world modeling in school content would bridge this gap.

For Trigonometry, although the content is presented in Grades 11 and 12, it lacks a direct counterpart at the bachelor level. However, its utility is evident in calculus and other advanced topics. Thus, merging trigonometry into a single grade (preferably Grade 11) with emphasis on application would streamline the content and improve relevance. Similarly, in Analytic Geometry, content aligns well across levels, but the school curriculum remains limited to basic conics and lines. Including foundational elements of higher-level geometry (e.g., graph theory or topology) could provide better continuity. Moreover, in Vectors, current school content lacks depth and application. These topics should be introduced earlier (in Grade 11) with real-life applications and connections to physics to better support higher education needs. Statistics and Probability are included at all levels, but the school curriculum misses real-world application. Introducing data analysis tools like MS Excel and emphasizing inferential statistics can better prepare students for bachelor-level studies. In Calculus, while sequencing is appropriate, there is a strong focus on mechanical procedures rather than meaningful understanding. Enhancing visualization, interpretation, and real-life modeling would address this. Lastly, Computational Methods and Mechanics show strong alignment in content across levels, but there is still room to integrate application-based learning and problem-solving to strengthen conceptual grip.

The analysis reveals that the Grades 11 and 12 mathematics curricula demonstrate strong vertical alignment with bachelor-level programs in key areas like algebra, calculus, statistics and probability. Core concepts such as functions, limit and continuity, probability and

statistics can provide a solid foundation for advanced study. However, there some redundancies and fragmented content distribution in Grades 11 and 12, particularly in algebra and calculus. To bridge these gaps, consolidation of redundant topics, integration of technology for visualization and focus should be on applied forms of mathematics.

Alignment in Instructional Strategies

The teaching-learning component is one of the important concerns of curriculum analysis. The present study analyzed these elements and found that Grades 11 and 12 curriculum provide a detailed breakdown of the activities to be conducted in the classroom to guide teachers to design their instructional activities. However, the bachelors level curricula particularly BSc and BA do not mention clear instructional strategies. The Table 8 presents the comparison of teaching and learning strategies in Grades 11 and 12 and Bachelor levels curricula.

Table 8: Teaching and Learning Strategies in Grades 11 and 12 and Bachelors Levels

Aspects	Grades 11 and 12	Bachelor Levels
Prescribed strategies	- Inductive and deductive method - Problem solving method - Case study - Project work method - Question answer and discussion method - Discovery method/use of ICT Co-operative learning	- Teacher-centered instructional techniques (lecture and illustration, discussion and demonstration) - Some specific instructional techniques (inquiry and question answer, individual and group work and project work, report writing and classroom presentation) - No strategies are mentioned in BA/ B. Sc. courses
Relevancy and practicality of strategies	- Teaching and learning activities are mostly determined from the expected competencies and learning outcomes. The prescribed strategies are aligned with the expected competencies but the learning outcomes of on each content area focuses on conceptual understanding only and these outcomes are directed towards lecture methods. The prescribed strategies are student-centered but in practice these strategies are rarely used (project work to some extent). So, learning outcomes of the contents should be changed first.	
Potential teaching and	- Most of the concepts of Grades 11 and 12 can be visualized by using technologies (such as students couldn't visualize the derivative of the function	

learning strategies	but GeoGebra or Mathematica/MATLAB can visualize the concept graphically). Interactive applets can be made using these tools and students can conceptualize and visualize the concept easily.
Linkage of the strategies with competencies	- Strategies are linked with the competencies but not with learning outcomes. So, the practical implementation of these strategies is questionable.

There are notable instructional gaps between the teaching and learning strategies of Grades 11 and 12 and those at the bachelor level. In Grades 11 and 12, the prescribed strategies are diverse and largely student-centered, including inductive and deductive methods, problem-solving, case studies, project work, discussions, and ICT integration. These approaches align well with the intended competencies. However, in practice, instruction remains heavily teacher-centered, relying mostly on lectures and demonstrations. Despite the inclusion of modern methods such as ICT and discovery learning, these are rarely implemented effectively, often limited to occasional project work or group activities. This creates a disconnect between the curriculum design and classroom execution, which limits students' preparedness for independent and critical thinking required at the bachelor level. In contrast, bachelor-level curricula do not explicitly prescribe any instructional strategies, leaving a vacuum in guiding how advanced mathematical concepts should be delivered. This absence results in inconsistent teaching practices, often defaulting to traditional lecture methods without active engagement or application-based learning.

Moreover, the learning outcomes at the school level focus primarily on conceptual understanding, which tends to direct instruction toward rote learning and limits the development of higher-order thinking skills (HOTs). This is further compounded by the weak linkage between strategies and learning outcomes, despite the alignment with competencies. Consequently, the strategies lack practical impact on students' learning experiences. Technology-based tools like GeoGebra, Mathematica, and MATLAB, which can effectively aid visualization and deep understanding, are underutilized in Grades 11 and 12, even though they are well-suited to bridge the gap between abstract concepts and real-world applications.

To address these instructional gaps, it is essential to restructure learning outcomes to support applied, technology-integrated, and student-centered instruction, and ensure bachelor-level curricula explicitly guide effective teaching methodologies.

Alignment between Assessment and Evaluation Practices

Assessment is a crucial component of the curriculum which not only assess the student's performance but also evaluate the relevancy of the curriculum and provide important information for the improvement in teaching and learning activities. The assessment should not be focused only on assessment of learning but also on assessment for learning and as learning. So, the analysis of existing assessment procedures and their alignment with higher level mathematics curriculum is important to provide functionable recommendation for the curriculum improvement. Table 9 present the comparison of assessment provision of mathematics Grades 11 and 12 curricula with that of Bachelor levels mathematics curriculum of three streams.

Table 9: Comparison of Assessment and Evaluation Strategies

Aspects/area	**Grades 11 and 12**	**Bachelor's Level**
Mode of evaluation	Internal: 25% (Classroom participation (CP)-3, terminal examinations-6, project/practical work-16 External: 75%	External written examination 100%
Theoretical and Practical	Theoretical: 81% Practical/Project: 16% CP: 3%	Not mentioned except for fully practical courses of Statistics
Grading system	Letter grading (GPA based)	Traditional grading system (% based)
Specific assessment strategies	Terminal examinations and project/practical work	Not mentioned

There is a noticeable gap in assessment practices between Grades 11 and 12and the bachelor level, which particularly affects the evaluation of student performance and readiness for more advanced studies. In Grades 11–12, a mixed-mode evaluation system is implemented, with a significant proportion of the total marks (75%) from external examination and the remaining 25% from internal assessment that include classroom participation, terminal examinations, and project or practical work. This multi-faceted approach not only allows for continuous assessment and feedback through practical projects and class engagement, but it also encourages the development of applied skills alongside theoretical knowledge.

Conversely, the bachelor level relies solely on external written examinations, eliminating the opportunity for internal assessment components such as classroom participation or practical projects. Consequently, this creates a testing environment that emphasizes rote memorization and theoretical proficiency, with little to no consideration given to the development and evaluation of practical problem-solving skills or ongoing performance throughout the course.

Additionally, the grading systems differ markedly between the two levels. Grades 11 and 12 use a letter grading system based on a cumulative GPA, which aligns with the diverse forms of assessment employed, whereas the bachelor level adheres to a traditional percentage-based marking system. This divergence further highlights the limited scope at the bachelor level to capture a range of competencies through varied assessment methods. Furthermore, while practical work constitutes a meaningful part of the assessment in Grades 11 and 12 accounting for approximately 16% of the overall marks in bachelor-level courses practical components are rarely mentioned, save for a few fully practical modules such as in statistics. These assessment gaps indicate that while school-level evaluations are designed to foster a comprehensive learning experience that incorporates both theoretical understanding and practical application, the bachelor level's reliance on high-stakes, one-dimensional examinations may impede the holistic development of students' mathematical and applied problem-solving capabilities.

Analysis of the Feedback Received from Mathematics Curriculum Audit Workshop

Vertical Sequencing and Alignment

Vertical alignment remains a significant concern across educational levels in Nepal. While the Grades 11 and 12curriculum introduces key areas such as Algebra, Geometry, Calculus, and Statistics, respondents indicated that these foundations often do not adequately support the expectations at the bachelor level. As MT2 observed, "There is a lack of level-wise competencies, especially in 3D geometry. Students are not prepared for spatial reasoning needed at the undergraduate level." Similarly, MT3 noted, "In Algebra, linear algebra is introduced, but modern algebra like group theory is entirely missing, causing gaps when students reach B.Sc. level." Although Calculus shows some alignment, complexities such as hyperbolic functions create hurdles. As MT1 emphasized, "Some parts of Calculus in Grade 12 are unnecessarily complex for school students, and yet they lack sufficient grounding for deeper undergraduate topics." International curricula like A-level and IB

provide more coherent sequencing, with topics building progressively. “Compared to A-level, our curriculum lacks integration between Grades,” said MT4, reinforcing the need for better vertical coherence across stages. Similarly, GM3 reported that “Basic concept is common and vertically advanced course are given in bachelor level”.

The analysis of curriculum audits workshop reveals a clear linkage between the grade 11 and 12 curricula and bachelors level curricula. The concepts introduced at Grades 11 and 12 provide the firm foundation for the contents in bachelor levels. However, certain topics such as calculus receive early exposure, their complexity and disconnection from undergraduate course expectations create further challenges. In contrast, international curricula such as A-level and IB demonstrate more deliberate sequencing and integration across levels.

Teaching and Learning Methods

Teaching methods differ sharply between secondary and bachelor levels, leading to pedagogical inconsistencies. Teachers at the school level reported using student-centered approaches, such as collaborative learning and project-based activities. “We are encouraged to use group work, problem-solving tasks, and real-life applications,” MT1 explained. “These methods really help students engage with the content.” However, such approaches are not continued into bachelor programs. As MT2 pointed out, “In undergraduate classes, most teaching is lecture-based with minimal student interaction.” This shift often disorients students who thrive in more interactive environments. Moreover, integration of technology remains limited. “Use of tools like GeoGebra or MATLAB is rare, especially in government colleges,” said MT3. Respondents also highlighted the effectiveness of international practices. MT4 noted, “IB and A-level emphasize metacognition and active learning strategies. Our curriculum mentions them but doesn't ensure their implementation.” Therefore, the need for consistent, innovative, and ICT-supported pedagogy across levels is evident. As MT2 suggested, “We need training and policy support to adopt HOTS-based and critical pedagogy practices effectively.”

Regarding teaching learning methods MG1 reported that **“**No practical concepts or include in university level. Use of different innovative methods are tried to incorporated topic wise” whereas MG3 reported that “More advanced strategies in Grades 11 and 12 then bachelor level. Teachers identifies student’s competency levels in grade 11 and 12 but not in bachelor.” Finally, MG3 reported that “There is sallow linkage in other UG curricula except BED. B.Ed.

curricula better articulate that. Bachelor curriculum is more focus on content rather than connecting strategies with competency while grade 11 and 12 curricula have better linkage."

The opinions of the experts reveals that Grades 11 and 12 curriculum focus on student-centered pedagogy, including collaborative learning, real-world applications, and competency-based strategies, which enhance engagement and conceptual understanding. Whereas the teaching and learning strategies at bachelor levels focus on teacher centered lecture-based methods, this could create a confusion for students accustomed to interactive learning. To make the alignment with Grades 11 and 12 curriculum in terms of teaching and learning activities, bachelor's levels curriculum should introduce student-centered methods. While grade 11 and 12 curriculum shows progress in innovative teaching methods, limited technology integration and misalignment with university programs may create the confusion. Strengthening consistent, metacognitive, and technology-enhanced teaching practices across all levels would better prepare students for academic and professional career.

Student Evaluation and Assessment

Assessment practices across levels also reveal inconsistencies and limitations. Grades 11 and 12 follow a combination of internal and external assessments. MT1 described, "*We have 25% internal assessment which includes project work and participation, and 75% from NEB board exams."* However, at the bachelor level, internal evaluation is minimal or absent. MT3 noted, *"There is no structured internal evaluation in most campuses. It's all about the final exam, which limits continuous learning."* Respondents also pointed out that project work, while formally required in Grades 11 and 12, often lacks standard guidelines. MT2 stated, "We are told to conduct project work, but there are no clear rubrics or training for assessment." This undermines its educational value. In contrast, international curricula offer well-defined and practical assessment frameworks. "A-level has clear criteria for coursework and lab work, which are externally validated," explained MT4. There was a strong consensus among participants that internal assessment should be made more meaningful and extended to university level. *"We should include internally evaluated tasks at bachelor level, monitored externally for quality assurance,"* suggested MT1.

MTG1 reported that the formative and summative as internal (25%) and external (Theoretical-NEB-75%) are major techniques of evaluation in practices whereas MTG2 reported that the internal evaluations are techniques are (a) classroom participation-3 (b)

terminal exam-6, (c) project work -16. MTG3 further explored the criteria of internal evaluation are quiz, project works, class test, monthly test, terminal exam, presentation, MCQs.

The opinions of the participants in the workshop also indicate the inconsistencies in assessment practices between Grades 11 and 12 and bachelor levels curriculum in Nepal. The Grades 11 and 12 incorporate a mix of formative and summative assessments whereas bachelor-level assessments rely almost entirely on final exams, with less emphasis on internal evaluation. There should be more meaningful and structured internal assessment at both levels. Moreover, the internal evaluation techniques should be clearly defined, rigorously assessed and externally validated.

Content Relevancy

Concerns about content relevance and applicability were prominent among all respondents. While the curriculum touches on key topics, its alignment with real-world applications and further academic use is uneven. MT2 remarked, *"The Algebra section misses out on modern concepts. How can students transition to B.Sc. if they've never heard of group or ring theory?"* In Geometry, limitations were also noted. "Our students can calculate conic sections but struggle with visualizing 3D problems," MT1 commented. Calculus, although broadly aligned, includes overly complex topics. As MT3 explained, "Eliminating hyperbolic trigonometric functions would reduce confusion at school level without loss of depth." Probability and Statistics also require reform. "We teach formulae, but not how to interpret data using tools like Excel or software," said MT4. Respondents emphasized enhancing practicality. "Let's teach students how to use data, not just calculate it," MT2 proposed. A curriculum focused on competency, application, and vertical continuity was recommended across interviews. As MT1 concluded, "Content should be simplified where needed, enriched where useful, and always made relevant to life and future study."

Similarly, Math Group (MG)1 reported that "*Content of linear algebra is available however the content of modern algebra is missing" whereas MG2 showed that "content of school level enables students to use geometrical concepts in practical application. The competencies are not theoretically heavy.*" Additionally, MG4 reported that the *"Narrow average of content in grade 11 and 12 in comparison to A-level. Missing practical application part that explains real life situations. Though the grade 11 and 12 content sufficient the require competency for UG but lacks real practical day-to-day applications in Grades 11 and 12."*

Suggestions for Improvement

To improve the alignment and effectiveness of mathematics education across Grades 11 and 12 and the bachelor level, it is crucial to address gaps in goals and competencies, content, instructional practices, evaluation techniques, relevancy, and content organization. These elements must be cohesively structured to ensure a smooth academic transition and foster deep mathematical understanding and application.

Firstly, goals and competencies should be clearly defined with observable and measurable action verbs that align with both learning outcomes and real-life applications. Vague competencies such as "articulate personal values" need to be replaced or supplemented with specific, context-based outcomes, such as applying statistical reasoning in data interpretation or modeling real-world scenarios using algebra or calculus. Additionally, competencies must emphasize higher-order thinking skills and promote the ability to analyze, evaluate, and create rather than merely remember or understand.

In terms of content, it is essential to ensure proper alignment and avoid unnecessary duplication. For instance, complex numbers, matrices, and sequences are scattered across both Grades 11 and 12, which could be consolidated within a single grade to provide more depth and coherence. Moreover, bachelor-level topics should be reflected in foundational form at school level to establish continuity. Integrating emerging areas like mathematical modeling and computational thinking early on can improve relevance and prepare students for advanced studies.

Regarding instructional activities, there is a clear need to bridge the gap between prescribed strategies and classroom practices. Though the curriculum promotes student-centered methods, teacher-centered approaches still dominate. To rectify this, professional development for teachers on inquiry-based learning, technology integration (such as using GeoGebra, Desmos, or MATLAB), and interdisciplinary project work should be prioritized. At the bachelor level, guidelines for teaching strategies should be clearly outlined to ensure consistency and encourage active learning environments.

In the area of assessment, a shift toward continuous and formative evaluation is essential, especially at the bachelor level where assessment remains heavily reliant on final exams. Introducing internal assessments, practical work, and project-based evaluations can better reflect student learning and encourage the application of concepts. At the school level,

learning outcomes should be revised to align with competencies and promote practical, problem-solving skills.

Lastly, relevancy and content organization need improvement. Real-world application and interdisciplinary integration should be emphasized throughout. Topics must be logically sequenced to build upon each other, and technology should be used to visualize abstract concepts, making mathematics more engaging and meaningful. The recommendations of the four discussion groups are detailly presented as follows based on different themes:

In the content area, MG1 recommended the inclusion of data science and coding concepts within the topic of group structure in algebra. It also suggested that applications of theorem proving be integrated into the logic section**.** The group proposed restructuring the sequence of topics for instance, teaching sequences and series before binomial theorem, and introducing mathematical induction prior to binomial theorem. Additionally, it suggested including De Morgan's Theorem under complex numbers, incorporating level-wise competencies for 3D geometry, and promoting the use of analytic geometry through project work.

MG2 emphasized the lack of analytical proofs and transformation geometry in the existing curriculum, particularly in relation to coordinate geometry. The group recommended removing ellipse and hyperbola, suggesting these topics be covered at the bachelor level instead, and proposed introducing the basic concepts of coordinate geometry in Grade 11.

MG3 recommended eliminating complex topics such as the derivatives and integrals of hyperbolic trigonometric functions, and certain standard integration problems (e.g., $\int e^{ax} sinbx\ dx$), as well as techniques like trigonometric and algebraic substitutions. The group suggested introducing L'Hôpital's Rule in Grade 11 as an application of derivatives. It also advocated for ICT integration, shifting the topic of area between curves from Grade 11 to 12, and limiting Grade 11 applications of integration to areas bounded by straight lines, allowing students to connect these with mensuration concepts from graphs.

MG4 recommended adding foundational content on the procedures for data collection and interpretation, and integrating tools such as Excel and other mathematical software into the Grades 11 and 12curriculum.

The opinions and reflections of the participants in the workshop indicate that the grade 11 and 12 mathematics curriculum could provide a firm foundation for higher study. However, participants mentioned some key areas for further improvement. The curriculum must move

beyond rote learning to integrate practical tools, emerging fields like data science and computational thinking and restructured content sequencing to ensure vertical continuity, promote deeper understanding and make mathematics more relevant to students' academic and professional futures.

Teaching-Learning Strategies

In terms of teaching-learning strategies, MG1 recommended the integration of innovative pedagogical methods aimed at developing 21st-century skills. It proposed the use of ICT tools, particularly in teaching geometry, the inclusion of Higher Order Thinking Skills (HOTS) strategies, and the adoption of critical pedagogy in the Grades 11 and 12curriculum.

MG2 emphasized the need to incorporate learning objectives and content related to 3D geometry, proposed removing the topic of circles (as it is already covered in Grade 10), and suggested adding geometrical interpretation components to the higher secondary level.

MG3 recommended the integration of ICT, the establishment of mathematics laboratories in schools, and the allocation of at least one class period per week for project work. The group also advocated for the publication of a standardized textbook by CDC, similar to the A-level system, to minimize confusion arising from the availability of multiple reference books.

MG4 highlighted the importance of applying practical teaching strategies that build student competency and enhance real-life learning experiences. It encouraged the use of innovative pedagogies, such as flipped learning and ICT-based data calculation.

The focus group discussion with teachers, curriculum designers and experts collectively emphasized innovative teaching strategies, including ICT integration and promoting HoTs to enhance 21st-century skills in students. Particularly, participants recommended restructuring the geometry contents and introducing technology in the teaching and learning process.

Evaluation Practices

In the area of evaluation, MG3 recommended introducing internal evaluation methods at the bachelor level, having external evaluators assess project work, and adopting an examination model similar to NEB's Grade 12 structure. MG4 emphasized the continuation of the current continuous assessment approach and recommended incorporating field visits with corresponding report writing as part of the evaluation process. Regarding the evaluation process, participants suggested to incorporate formative assessment strategies in the bachelor level also.

Chapter Summary

The comparative and qualitative analysis of the Grades 11 and 12 mathematics curricula in Nepal, as aligned with both national bachelor-level curricula (B.Ed., B.Sc.) and international programs (A-level, IB), reveals critical insights into gaps and possibilities for reform. Across all domains vertical sequencing, pedagogy, assessment, and content relevance respondents consistently highlighted both structural misalignments and pedagogical inconsistencies.

Vertical alignment, in particular, suffers from disjointed transitions. There is a lack of level-wise competencies, particularly evident in areas like 3D geometry and modern algebra, which are essential for undergraduate studies but underrepresented in Grades 11 and12. Although Calculus shows a semblance of continuity, some advanced functions like hyperbolic trigonometry are overly complex at the school level, creating a mismatch with student readiness. International curricula, in contrast, showcase more coherent progression, scaffolding prior knowledge into advanced concepts.

In terms of teaching-learning methods, while school-level pedagogy increasingly incorporates student-centred and activity-based strategies, this does not continue at the university level. Use group work and real-life applications, since that university classrooms remain predominantly lecture-based with minimal interaction or technology integration. This pedagogical gap disrupts student engagement and skill development, especially in critical thinking and problem-solving skills highly emphasized in A-level and IB programs.

Assessment practices further compound the disconnect. Although Grades 11 and 12 include a 25% internal assessment component, the implementation lacks clarity and standardization. The absence of guidelines for evaluating project work, leading to tokenistic practices. At the bachelor level, internal assessments are nearly non-existent. International frameworks, by contrast, balance coursework and exams through clear rubrics and external moderation.

Lastly, curriculum content, though broad, lacks depth in essential areas and fails to connect mathematics to practical or interdisciplinary contexts. Students do not have practical knowledge on statistics and probability. Respondents recommended simplifying overly complex topics while enriching those with academic and real-world relevance.

In sum, Nepal’s mathematics curriculum stands at a crossroads. For meaningful improvement, reforms must ensure vertical coherence, student-focused pedagogy, robust and

continuous assessment, and content that prepares students not just for exams, but for academic and real-life problem-solving.

The Social studies curriculum for Grades 11 and 12 is evidently life skills based, hands-on learning and social-emotional development focused. It outlines the development of critical thinking, awareness about society, kindness and digital skills. Students seem to face a gap when they move from secondary level into Bachelor's degree programs, especially in teacher education. Secondary education definitely advocates student-centered approaches like project-based learning and role plays but Bachelor-level programs still mostly focus on lectures and theory, thus, they are short of the reflective and life-skills type of teaching that secondary students get used to. This lack of continuity hampers the capabilities of the future educators and those who have to show in class participatory and interesting practices are the main ones who will be affected.

Chapter VI: Alignment of Social Studies Curriculum

The Grades 11 and 12 Social Studies and Life Skills Curriculum is designed as an integrated concept. The curriculum serves to develop responsible, informed and engaged citizens who will understand, society and the world in which they live. The curriculum, based upon the National Curriculum Framework 2076, integrates knowledge, skills and attitudes to develop students as confident individuals who can act with clarity, purpose, and resolve, when confronted with challenges in life. In Grade 11, presented with the social studies and life skills purpose of the social studies and life skills curriculum, students are introduced to some important social studies and life skills questions: Why study society? What do we mean by a responsible citizen? As students engaged in this process, they come to understand that social studies and life skills is about understanding the world within which they exist and their role in shaping that world. Awareness of the self and an understanding of others - how societies operate, how communities develop, and how are we as individuals, agents of their option of change.

One of the exciting features of the curriculum is its focus on digital literacy and research skills. In a world driven by information, students learn how to navigate digital tools safely and effectively. They explore how to search for reliable information, analyze it, and present their findings. These are practical skills that students can carry with them into higher studies, careers, and daily life. Life skills are another key area. These are not just abstract ideas they are the tools we all need to handle emotions, make decisions, resolve conflicts, and build positive relationships. In class, students discuss real-life situations, reflect on personal experiences, and participate in group activities that help them develop empathy, communication, and self-awareness. These lessons help them not only understand others but also better understand themselves.

The curriculum expects students to investigate how society works by addressing topics related to social development, philosophy, and geography. They develop critical thinking skills regarding the nature of justice and social rules in society, as well as how space and physicality relate to human life. Studying Nepal's history and civic education allows children to make meaningful connections to their heritage and consider their rights and

responsibilities as citizens. By accentuating respect and equality, diversity, and inclusion, the curriculum supports participation and action to a democratic society.

The curriculum explores migration, urbanization and economics from a local and global focus, giving students the ability to make sense of the world through an empathetic lens and contextualize real world solutions. Education plays a vital role in social change through addressing poverty and opportunity for equity; it is crucial to acknowledge this. Within grade 12, students were able to explore their learning in a formalized manner through research skills, case studies and critical discussions. They contributed digital literacy, research skills, and life skills (such as leadership) and pathways to their career, etc. Community connections are once again established explicitly through social campaigns that focus on positive social change or potential volunteering affiliate. This establishes within the student that they have realistic power to engage in and create potential change in the world, through active participation, and or through the smallest of actions.

In conclusion, the Social Studies and Life Skills Curriculum for Grades 11 and 12 can best be summarized in a simple statement: it is about preparing for life. It creates human beings who can think critically, care for others, and work to improve society. It provides an intellectually and practically valuable education to the youth of Nepal, with an emphasis on conflating knowledge and taking action.

Table 10: Learning Competencies of Grades 11 and 12 Social Studies Curricula

Grade 11	Grade 12
1. Identify the concept and methods of Social Studies. 2. Analyze the development of human civilization and the diversity associated with it. 3. Analyze the interrelationship between various environmental regions and provinces of Nepal. 4. Present major historical events of Nepal and the world. 5. Recognize the ethnicities, castes,	1. Understanding, internalizing, and applying the significance of a meaningful human life 2. Developing perspectives on life and the universe, and critically evaluating them 3. Developing problem-solving, sound decision-making, and creative abilities in daily life 4. Perceiving and internalizing objects, events, and environments based on

classes, communities, and genders within Nepali society, and promote inclusivity and respect for diversity. 6. Conduct a comparative study of the preambles of various constitutions and analyze the major features of the current Constitution of Nepal. 7. Critically analyze the demographic structure, trends of migration, settlement diversity, and the causes and impacts of urbanization in Nepal. 8. Identify and evaluate the status of access, quality, and investment in the education and health sectors in Nepal. 9. Analyze the changing structure of Nepal's economy and explore the interrelation among economic growth, sustainable development, good governance, and inclusion. Identify the foundations of a prosperous and welfare-oriented society. 10. Identify and present the dimensions of foreign policy and Nepal's relations with neighboring countries. 11. Understand and analyze historical and contemporary changes at both national and international levels. 12. Foster good citizenship through	critical thinking 5. Applying social skills such as effective communication, interpersonal relationships, empathy, and self-awareness 6. Using information and communication technology (ICT) in daily life and learning 7. Fulfilling responsible roles as members of the family, community, nation, and global society 8. Understanding mutual respect and values in society and adopting a dignified way of life 9. Adopting a healthy lifestyle with physical and mental well-being 10. Being aware of substance abuse, harmful habits, and mental imbalance 11. Developing a positive attitude towards labor

internalizing identity, respect, harmony, coexistence, and integrity in Nepali society.	

Analysis of Vertical Organization with Fundamentals of Social Studies (416)

Many thematic and conceptual similarities between the Social Studies curriculum of Grades 11 and 12 and the Fundamentals of Social Studies course in the B.Ed. program (Course No. Ed. 416) point to a purposeful vertical alignment between teacher education and school-level instruction. A closer look reveals a pedagogical continuum in a number of overlapping units, but there are also significant gaps that demand careful consideration.

First, the B.Ed. syllabus's Unit II, "Relationships of Social Studies with Other Disciplines," reflects important topics covered in Grade 12. To illustrate how fundamental social science ideas function as building blocks for comprehending human behavior and society, Sub-units 2.2.3 (Anthropology) and 2.2.4 (Sociology) are examined at both levels. In the Grade 12 curriculum, interdisciplinary links between social studies and creative expression are introduced to improve student engagement, echoing Sub-unit 2.3 (Language and Art) is similar to this, there is a strong continuity between the higher secondary curriculum and Unit III of the B.Ed. course, Values of Social Studies Teaching. While democratic values (3.3) and political values (3.4) become more predominant in Grade 12, concepts such as social values (3.1) and moral values (3.2) are directly addressed in Grade 11. The development of socially conscious citizens depends on this shift from personal to civic awareness. Furthermore, the school curriculum and Unit IV of the B.Ed. syllabus, Basic Concepts in Social Studies Curriculum, have several points of similarity. Social studies generalizations (4.4), social inclusion and equality (4.5), power devolution and social empowerment (4.6), self-reliance (4.8), and society, culture, and diversity (4.2) are among the concepts that are prioritized in Grade 11. These resurface in Grade 12 in more reflective and applied forms, suggesting a logical progression from conceptual knowledge to critical thinking.

The fact that social problems (4.10) and peace and conflict resolution (4.9) are covered in both teacher preparation and Grades highlights their universal applicability in civic education. Unit VII (Social Environment) of the B.Ed. course exhibits one particularly

subtle overlap. Discussions in Grade 12 about how changing social norms interact with governance and democratic processes align nicely with the subtopic 7.3 (Social Changes and Democracy). This alignment is significant, as it prepares future educators to discuss dynamic societal issues through a balanced and informed lens. The influence of social change on adolescents and the needs and goals of the learner are also topics covered in Unit VIII (Learner's Psychology) of the B.Ed. program. These topics are crucial for teaching students in Grades 11 and 12, who are also navigating adolescence and developing their own personal ideologies. This unit encourages the growth of a student-centered teaching methodology, which is crucial in the modern environment. The comparison also shows some limitations. The curriculum of class 11 and 12 is not specifically about curriculum development (Unit IX) or implementation challenges (Unit X), highlighted in the course B. Ed.

This points to the need to give secondary students a better understanding of the reasons for the selection of courses and the structure of their curriculum. Introducing these ideas into the classroom could help to create a more thoughtful and self-oriented learning environment. Lastly, there is a deliberate and strategic educational overlap between the B. Ed. syllabus and the Social Studies curriculum for classes 11 and 12. It guarantees that aspiring educators are capable of teaching the material. Curriculum designers might, however, think about utilizing meta-curricular themes, like curriculum analysis and secondary-level civil pedagogy, to close the gap between the perspectives of the teacher and the students and create an even more cohesive educational experience.

Analysis of Vertical Organization with People and Society (417)

The Grades 11 and 12 Social Studies curriculum has been carefully designed to provide a fundamental comprehension and critical awareness of social concepts, cultural diversity, historical development, and civic engagement. There is a substantial overlap when compared to the B.Ed. "Fundamentals of Social Studies" course, suggesting a vertical curricular alignment that gives aspiring teachers the knowledge and instructional resources they need to teach secondary school. Starting with the school level curriculum's Unit I: Fundamental Concept of People and Society, introduces the course students the nature, scope and meaning of the concepts of people, community and society. The B. Ed. Unit I: Concept and Scope of Social Studies, in which students examine the meanings and connections between important social constructions such as society, culture and social institutions, is

highly compatible. The goal of both levels is to familiarize students with the basic terms and concepts needed to understand human interaction.

B.Ed. Unit VII: Social Environment and Unit IV: Fundamental Concepts in Social Studies both reflect the theme of historical and cultural evolution, which is carried over into Unit II: Evolution of Humankind and Their Activities. curriculum. In line with the B.Ed. course's focus on social change, human-environment interactions, and different types of society, secondary school students study human evolution and the transition from hunting-gathering to post-industrial societies. The layered approach strengthens the idea of societal change over time, providing a conceptual basis in the classroom that is expanded upon in the B.Ed. program. The school curriculum's Unit III: Formation of Social Institutions covers fundamental social structures like caste, ethnicity, religion, marriage, family, and kinship. This fits in nicely with B.Ed. Unit VI, which talks about Nepali society, its traits, and its issues, and Unit IV, which examines fundamental ideas like family, caste, class, and ethnicity. By involving students in the analysis and critique of social stratification and its implications for inclusive education, the B.Ed. program notably advances this understanding. The school curriculum examines change agents and processes, including Sanskritization, modernization, globalization, and westernization, as well as the impact of neighbouring nations like China and India on Nepalese culture, in Unit IV: Trend of Social and Cultural Change. These topics, especially the discussion of democratic values, social inclusion, and the role of education in transforming societies, are in line with B.Ed. Unit VII (Social Environment) and Unit V (Values of Social Studies Teaching). Unit V: Historical Development of Nepalese Society and Culture examinees the Pre-Lichhavi to Shah eras and addresses the historical dimension. Unit VI: Nepali Society provides contextual insights into the structure and issues of Nepalese society, giving future educators the socio-historical background they need for contextual teaching, even though the B.Ed. syllabus does not solely focus on historical chronology.

In line with B.Ed. Unit III, which stresses moral and social values, and Unit VI, which looks at diversity and social inclusion, the school curriculum's Unit VI: People, Culture, Social Unity and Diversity in Nepal focuses on festivals, sacraments, social harmony, and participation. Both curricula stress unity via respect for one another and foster an appreciation for Nepal's multicultural fabric. There is a lot of overlap between Unit VII: Development Process of Social Institutions in Nepal and B.Ed. Unit X: Issues and Difficulties in Social

Studies Education and Unit IX: Social Studies Curriculum. The emphasis on formal, informal, and customary educational institutions and governance in the curriculum reflects the structural knowledge required to interact with the systemic elements covered in B.Ed. coursework.

Finally, B.Ed. Unit XI: Instructional Materials in Social Studies directly relates to Unit VIII: Teaching Materials and Methods at the school level. Both levels place a strong emphasis on instructional strategies, the utilization of audiovisual materials, and the gathering of internet resources. This guarantees that the pedagogical techniques taught to them as learners are already known to students who go on to become teachers. This alignment shows a well-designed academic bridge between teacher preparation and school-level content, spanning from conceptual underpinnings to historical depth, social analysis, and pedagogy. Curriculum critique and development, which is covered in the B.Ed. program (Unit IX) but not specifically in the secondary school curriculum, is one area that might profit from closer integration. By implementing such metacognitive insights in the classroom, educators may encourage more thoughtful students who comprehend.

Analysis of Vertical Organization with Culture, Society, and Governance (434)

Students study the goals and tenets of nationalism, as well as its advantages and disadvantages, as well as the fundamental characteristics, forms, and ideas of citizenship in Group 11, Unit 7, "Nationalism and Citizenship." Along with learning the differences between nationality and citizenship, they also learn how to recognize barriers to good citizenship and comprehend Nepal's citizenship provisions as outlined in the constitution. This content aligns directly with Curriculum 434 Units 2.1, 2.2, and 2.3, which have as their goals understanding democratic engagement, encouraging corporate social responsibility, and encouraging active citizenship. This unit aids students in becoming knowledgeable and responsible citizens by emphasizing both theoretical topics (nationalism and citizenship types) and practical ones (constitutional provisions and remedies for weak citizenship). Unit 7 of the Grade 12 curriculum, "Good Governance and Nepalese Foreign Policy," introduces students into Nepal's foreign policy and emphases the concept, characteristics and players of good governance. The themes in Curriculum 434 Unit VII, which focus on accountability, transparency, the rule of law and citizen involvement as fundamental components of good governance, are reflected in the study on the role of government and

non-governmental actors (civil society, media, local governance, etc.) in promoting good governance. Moreover, understanding is of national importance, international relations and diplomatic strategies. All the key issues addressed in Unit VII of Section 434 are linked to the foreign policy section. The nature, development and impact of public opinion in democracies are discussed in detail in Grade 11, Unit 8 "Public opinion and Civil Society." Students study the characteristics and functions of civil society in democratic participation, as well as public opinion organizations, including the media, civil society organizations and educational institutions. The objectives of Curriculum 434 Unit 2.3 are reflected in this unit, in particular the focus on informed citizenship and participatory democracy. The more general civic objectives of the curriculum are strongly supported by the in-depth discussion on the role of civil society in strengthening democratic governance through awareness, advocacy and action. Students do practical exercises that develop civic and life skills in Grade 12 Unit 8, "Official Literature." They observe audience-level decision-making processes, speak to media outlets, visit municipal offices to learn about filing, registering and filling out forms procedures, and cover legal forums related to conflict resolution. These experiences, based on the application of knowledge in the real world, are closely in line with Curriculum 434 Unit 2.4, which focuses on social engagement, life skills training and local governance. In addition, this unit is closely related to Curriculum 434 Unit IV, which stimulates civic education through practical experience with real communication and governance systems. In addition, it is in line with Unit VII, which emphases civic duty and active involvement in democratic processes.

Overall, the curriculum social studies for Grades 11 and 12 are consistent with the objectives and framework of Curriculum Document 434. It includes basic civic knowledge (found in Grade 11 Unit 7), social engagement and communication skills (emphasized in Unit 8 of both Grades) and a concept of practical governance (found in Grade 12 Units 7 and 8). This alignment ensures that students are taught not only democratic values, but also equipped to contribute successfully to the changing political and social environment in Nepal.

Analysis of Vertical Organization with Geography (422)

Overall, the curriculum social studies for Grades 11 and 12 are consistent with the objectives and framework of Curriculum Document 434. It includes basic civic knowledge (found in Grade 11 Unit 7), social engagement and communication skills (emphasized in Unit

8 of both Grades) and a concept of practical governance (found in Grade 12 Units 7 and 8). This alignment ensures that students are taught not only democratic values, but also equipped to contribute successfully to the changing political and social environment in Nepal.
The curriculum combines expertly applied elements such as classification of rocks and identification of land forms with classical and contemporary geographical theories (such as the Big Bang, Kant-Laplace and plate tectonics). This develops the critical thinking skills of students in addition to their scientific literacy. Significantly, Unit X's hands-on activities support theoretical learning by enticing students to interact with time zones, maps, and graphs all essential resources for geographic research.

However, a stronger focus on the relationship between people and the environment and modern concerns such as sustainability and climate adjustment, especially in Nepal, would strengthen the curriculum. Unit VIII briefly discusses climate change, but little is known about its socio-economic impact and local significance. Moreover, although grade 11 places a strong emphasis on content knowledge, there are fewer opportunities for research-based learning or interdisciplinary connections (such as linking geography to economic development or civil life). Although there is vertical and horizontal alignment demonstrated by the integration of skills in social studies (e.g. 10 March 2013) and cross-reference to content of grade 12 and social studies 422, greater cohesion through integrated project-oriented learning would maximize the curriculum's transformation potential.

Analysis of Vertical Organization with History (423)

The first difference is in content and focal point. The 11th-grade social studies subject deals with the historical timeline of Nepal, from ancient to modern, and the advent of democracy and industrialization in the world at large. B.Ed., however, views research methodology and those major ancient civilizations of the world-Mesopotamia, Egypt, Greece, Rome, Renaissance-well with a civilizational tilt: how and why civilizations evolved from prehistoric times till Renaissance; while, for Grade 11, it is basically a chronological framework centered on modern history, especially after 2007 B.S. The first set of difference is with respect to the contents and focal point. The social studies subject of class XI consists of a historical timeline of Nepal, from the very ancient to modern, and of democratization and industrialization in the world at large. B.Ed., on the other hand, views research methodology with various major ancient civilizations of the world-Mesopotamia, Egypt, Greece, Rome,

Renaissance-with a civilizational tilt: that is, how and why civilizations evolved from prehistoric times till Renaissance; while, for Grade 11, it is basically a chronological framework centering on modern history, especially after 2007 B.S. This leads to the idea of conceptual growth: grade 11 will teach narrative history-Maine the notion of history is what happened in Nepal and in the world-while the very B.Ed. course demands more analytical skills to interpret, compare across civilizations, and conduct historiography. From this, it is evident that there is vertical growth moving away from simple knowledge acquisition toward critical thinking and research skills. But there is a mismatch of sequences whereby Grade 11 starts with modern Nepalese history and world events, while the B.Ed. course is directed backward towards ancient civilizations, which may seem disconnected from each other through students. Then, from a thematic point of view, Grade 11 will look at political and social development, whereas the B.Ed. program ventures into more profound civilizational studies, thereby creating thematic discontinuity. From the perspective of skill formation, Grade 11 focuses very little upon research or critical analysis apart from understanding political systems and timelines. The B.Ed. course refines these skills with separate units on research tools, data collection, analysis, and writing up of reports. This suggests a gap where Grade 11 is not seen as adequately preparing students in research work required at the B.Ed. level.

In conclusion, there are gaps in the vertical progression from Grade 11 to B.Ed., especially in sequencing, thematic continuity, and the early introduction of research skills, but there are also strengths in the expansion of scope, depth, and skills. It is recommended that historical thinking abilities and fundamental research techniques be incorporated into Grade 11, that B.Ed. content be rearranged for improved logical flow, and that bridge modules be developed that connect Nepal's history to global civilizations in order to improve this vertical alignment. Students would also be better prepared for more complex historical inquiry in the B.Ed. program if mini-research projects were introduced in Grade 11.

Analysis of Vertical Organization with Economics (443)

Bachelor of Education students is the B.Ed. 443 syllabus on Economic Development and Regional Diversity in Nepal. With a solid theoretical foundation supported by real-world examples, it methodically covers both general and in-depth subjects of Nepal's economic structure, development issues, sectoral analysis, and government functions. To gradually

increase students' understanding, the curriculum is structured vertically. It starts with the fundamentals of economic development, then moves on to particular economic resources and sectors, institutional roles (private sector, cooperative, banking, government finance), infrastructure, and, lastly, regional diversity and the crucial interdependence among various governmental levels. Applying theoretical knowledge is strengthened by the addition of a practical section centered on planning, data collection, and report writing. In comparison, secondary-level students have the opportunity to learn about economic concepts in an introductory and foundational way by having the Grade 11 Social Studies Unit 9 content. It focuses on recognising Nepal's economic processes and structures, which include formal and informal trade, Nepal's changing agricultural and industrial structures, job and labour opportunities, the government budget process, and the private and cooperative sectors. It considers significant socio-economic topics, and includes the remittance economy, poverty, inequality and government measures for empowerment and social inclusion. Overall, this unit can provide younger students with some understanding of Nepal's economy and social diversity as well as some foundational analytical skill.

In-depth discussions of specialized subjects like macroeconomic indicators, sustainable development, land reform laws, foreign direct investment, the complexities of government finance, and infrastructure development are covered in the B.Ed. curriculum. It requires synthesis and critical analysis, making it appropriate for aspiring teachers who plan to teach or study these subjects. On the other hand, the Grade 11 curriculum is more awareness-focused and descriptive, emphasizing the fundamental recognition and comprehension of economic phenomena suitable for teenage students.

B.Ed 443 reflects a comprehensive approach appropriate for teacher education by methodically integrating economic development with regional diversity and governance interdependence. It makes a clear connection between sociopolitical structures, development planning, and economic theories. Even though grade 11 content touches on a variety of social and economic topics, it is still more disjointed, emphasizing distinct topics such as labor, finance, and economic diversity without clearly integrating them into a broader systemic framework. The differences in academic applicable strategies and breadth of content between Grade 11 to B.Ed. 443 are noticeable. Content encountered in Grade 11 develops the basic knowledge and analytical skills, as well as concerns socialism and capitalism, for the B.Ed. course, based on more theoretical and applied research-oriented activities. There appears to

be a gap, which could be addressed by incorporating more economic governance-related fundamentals into the secondary Grade 11 curriculum because there are some concepts, like "interdependency between government levels" and "planning processes", that are only addressed almost in passing or peripherally in Grade 11, but engaged in a practical way in B.Ed. 443. A noteworthy practical component of the B.Ed. curriculum involves data collection, report writing, and involvement in local government planning. For teacher candidates to relate theory to practical economic development issues, experiential learning is crucial. The absence of a comparable focus on applied learning in the Grade 11 curriculum may restrict students' practical comprehension of economic processes.

In conclusion, the vertical organization of the Social Studies Grade 11 course and the B.Ed. 443 course is a logical, and necessary, progress from basics in economic literacy through specialized-based understanding through to an understanding of the relevant field for practical application. The Grade 11 curriculum lays social and economic awareness clearly. The B.Ed. curriculum extends this further through in-depth, analytical, and practical approaches, appropriate to prospective teachers.

Analysis of Vertical Organization with Global, Regional, Bi-Lateral Organization and Cooperation (442)

While both the Grade 11 Political Science syllabus and B.Ed. Year IV course titled, "Global, Regional, Bilateral Organization and Cooperation" cover international relations, foreign policy, and global cooperation, there are a number of different elements in the B.Ed. course - substantial differences in depth, breadth of material, and academic rigor.
The majority of the content at the Grade 11 level is preliminary and descriptive to create a level of knowledge. It primarily outlines the basic principles of Nepal's foreign policy - Panchsheel, peaceful coexistence, non-alignment, etc. It additionally records the historical, political, economic, and cultural features of Nepal's bilateral relations with China and India. The course's introduction of the idea of global governance provides students with background information about global governance's areas such as the WTO, BIMSTEC, and SAARC, and then concludes with a brief overview.

In contrast, the B.Ed. Year IV programme (Sost. Ed. 442) is more analytical and sophisticated and is directed to pre-service teachers and/or educators. It systematically examines the origin, evolution, structure, and functions of international, regional, and bilateral organizations. The course moves beyond knowledge, and develops critical thinking

and analysis. Students are expected to critique the success and failures of organizations such as the UN, SAARC, WTO, and BIMSTEC and understand theoretical models of cooperation. There is a unit on Nepal's bilateral treaties with India (1950) and China (1960) which allows students to understand the current legal and political complexities of foreign relations. In addition, an introductory module on life skills, stress management, conflict transformation, and the value of cooperation in development and peacebuilding is introduced, which usually not included as part of schooling experiences.

The movement within the curriculum from Grade 11 Political Science to B.Ed. Year IV (Sost. Ed. 442) has a vertical structure of some integrity, but this is not without its weaknesses. The majority of curriculum at the school level is introductory, descriptive and yet foundational, focused mainly on presenting descriptive and basic ideas. The B.Ed. course relates to this curriculum within an evaluative and analytical frame; students are expected to think critically, assess the success/failure of organizations, and examine international treaties. In this regard, it can be argued that there is a deliberate vertical progression in relation to the depth of the content and cognitive demand, which supports academic and professional capacity building. The progression, unlike the Level I-3 transition, has a large gap: the skills development connection between the two levels. The Grade 11 syllabus presents limited evaluative or interpretive task performances so students may seem unprepared for the cognitive engagement necessary in a B.Ed. course.

Teaching and Learning activities

The Grade 11 Social Studies and B.Ed. level syllabi differ in focus, depth, and degree of learner engagement. The Grade 11 syllabus focuses on collaborative, experience-based learning grounded in life skills education, while encouraging learners to think critically and creatively, reflect, engage with peers, socialize through role play and discussion, and practice useable life application of social studies knowledge. The B.Ed. syllabus is more academic and content heavy, utilizing many of the traditional direct instruction lectures, but incorporating a variety of presenter styles, group or team work, field visits, and theoretical analysis. Even though B.Ed. syllabi included collaborative and research-based learning activities as outlined in the curriculum outcomes, the format of the B.Ed. seats it in a more academic/knowledge based space and not in socio-emotional realms of teaching and learning, which leads to a gap in training future educators who may be experts in theory but lack the

experience of facilitating the learning environment that is necessary for student-centered, experiential learning in secondary level classrooms. In order to close this gap, future educators should train academically and experientially in B.Ed. programs in reflective, community connected, and life-skill type pedagogy that reflects the progressive learning themes developed through practice at the school level.

Table 11: Comparison of Grade 11 Life Skills Course with B.Ed. Social Studies Course

Aspect	Grade 11 (Life-Skills Focus)	B.Ed. Social Studies Courses
Philosophy & Aim	Holistic development with focus on emotional, behavioral, and social learning	Primarily content delivery and academic knowledge; limited behavioral focus
Teacher's Role	Facilitator, co-learner, guide in experiential & reflective learning	Knowledge transmitter; occasional facilitator but mostly lecture-driven
Instructional Techniques	Role-play, group work, project-based learning, storytelling, field visits, case studies, inquiry-based learning	Lecture, Q&A, discussion, assignments, occasional project work, field report (only in some units)
Student Engagement	High: participatory, reflective, exploratory	Moderate to low: passive listening dominates, few active/creative tasks
Learning Context	Rooted in students' real-life experiences, social context, and local knowledge	Often theoretical, textbook-based; practical activities not strongly connected to local or real-life issues
Use of Local Resources	Strong emphasis on local context, social observation, interviews, and community-based learning	Rarely emphasized except in field reports and some courses (e.g. Economic Development, Understanding Our Earth)
Creativity & Critical Thinking	Encouraged through debates, questioning, role-playing, critique, and reflection	Limited critical thinking development; mostly factual understanding and historical analysis
Evaluation	Continuous, formative, reflective; includes behavioral indicators	Mostly summative; internal marks often feedback-only with less impact on final grading
Sociocultural Sensitivity	High: engagement with diverse backgrounds, inclusion of marginalized voices	Inconsistent: sociocultural issues are content topics but not instructional priorities

Interdisciplinary Learning	Integrated naturally across disciplines and lived experiences	Disciplinary siloed; occasional integration (e.g., linking natural and social sciences) but not systematic

Identified Gaps in Instructional Strategies

There is a clear gap between the experiential and life-oriented pedagogy of Grade 11 Social Studies, where lived experiences are not connected, and the rather lecture-based structure of B.Ed. courses. Grade 11, for the most part, promotes active and engaging learning through lived experience, reflection, empathy and community. On the contrary, B.Ed. programs (despite their design as a teacher preparation program) do not have any design feature oriented to promote life in primarily lecture based courses. Overall, future teachers are prepared primarily through lectures, passive note-taking and summative assessment processes, which is in direct contradiction to the interactive and facilitative nature of pedagogy they are expected to engage in as classroom teachers. This “telling vs. doing” disconnect produces teachers who are unrehearsed in the practice they will enact.

Teaching strategies must integrate life-skill facilitation not just in theory but in practice. Lecture-heavy methods should be balanced with reflective fieldwork, participatory research, and contextualized teaching. Emotional and social competencies must be explicitly taught and assessed. Most critically, teacher educators must model the participatory, student-centered strategies they hope future teachers will use, ensuring alignment between pedagogy and purpose.

Overview of Student’s Evaluation Grade 11 and B.Ed.

At the school level, Grade 11, evaluation systems for Social Studies and evaluation systems for the various offerings in the Bachelor of Education (B.Ed.) program differ considerably with regard to forms, purposes, and procedures. For example, at the Grade 11 school level, the evaluation system is intended to evaluate both academic learning, as well as behavioural development, with 25% of the final mark from learning related to internal evaluation, which includes students' participation in the classroom, their positive behavioural changes, their involvement in 'hands-on' practical or project work, Trinidad and Tobago day assignment, as well as periodic evaluations with such work to determine students in classroom assessments in a series of periodic evaluations, e.g. trimester exams, etc. Because internal evaluation is formative and diagnostic, it allows the students to have a sense of how

they will learn sooner versus later by simply diagnosing their learning needs. The remaining 75% of on-going assessment is for external evaluation, which is done by written examination. Written examination assesses the students' knowledge, skills, and ability to apply or transfer knowledge and skills and educational purposes related to understanding have been required to answer a question, and written examination can have questions ranging from very short, to short answer to long answer type questions in terms of their structure. In considering written assessment, questions were aimed not just at theoretical understanding but the students' ability to identify and even solve real-life problems.

In contrast to the B.Ed. level evaluation and grading take place through the university-level evaluation system developed by the university around theoretical knowledge, and field work learning combined with practical activities. The B.Ed. level evaluation includes an internal practical evaluation that is one of the main components combined into 20% of the overall grading. The internal practical evaluation includes presentations, assignments based on practical activities, and reports on field work assigned by the subject teacher on evaluation day, and the report is reviewed and signed by the department head. In contrast to the school level assessment system, B.Ed. internal evaluation does not emphasize behaviors or participation, and place attention on the extent of field participation (field engagement and report), and some emphasis on team work, and values of education as long as the candidate provides evidence of their demonstrated values and classroom conduct. The university-system evaluation system, breaks down the evaluation into two categories - (1) internal evaluation and (2) external evaluations. Here after achieving a 20% combination of their Grades from an internal evaluation, the grading system remains basically based on 80% of their Grades to external evaluation. The external evaluation is a formal comprehensive annual written exam, planned by the Controller of Examinations; and focused solely on the candidates' academic performance through an institution recognized grading system. The external exam structure consisted of various questions of 80 marks, broken down into multiple choice questions 14 marks, short answer questions 42 marks, and long answer questions which are worth 24 marks respectively. In school-level evaluations, teacher based internal evaluations are used to help evaluate instructional or pedagogical support for the students, but this is not the case of B.Ed. level internal evaluations that will still become part of final overall grading, but are intended to be focused on behavior in a higher education context for education where the observational and grading consideration focuses only on the

combined academic, and field performance most of the process framed in pedagogical, professional and ethical standards surrounding education, rather than monitoring final Grades for instructional decision making purposes.

Table 12: Comparison of Evaluation Procedures with Grade 11 and 12 with B.Ed. Level

Criteria	Grades 11 and 12 (School)	B.Ed. Level (University)	Gap/Issue Identified
Internal vs External Weight	25% Internal, 75% External	20% Internal, 80% External	Minor difference, but XI emphasizes slightly more internal assessment
Purpose of Internal Evaluation	Diagnostic, feedback, and grade contribution	Mainly feedback and practical skills assessment	B.Ed. lacks diagnostic focus; feedback not always used for grade adjustment
Nature of Internal Evaluation	Continuous, holistic (behavior, participation, tests)	Structured, limited to fieldwork and assignments	B.Ed. internal evaluation is narrower, lacks holistic measures
External Evaluation Focus	Application-based, cognitive diversity	Predominantly theoretical with a structure	B.Ed. may underemphasize practical application, especially in some subjects
Assessment Tools Used	Diverse: exams, projects, observations, records	Standardized written exams and reports	XI has richer variety; B.Ed. leans on exams and written outputs
Behavioral Evaluation	Explicit focus (cooperation, empathy, leadership)	Not explicitly assessed or reflected in evaluation	Big gap: B.Ed. omits socio-emotional/behavioral metrics
Individual vs Group Work	Group and individual works are both assessed	Focus on individual presentations/reports	Lack of structured group evaluation at B.Ed. level

Frequency of Evaluation	Continuous (daily participation, periodic tests)	Final exam heavy; only three/four assignments annually	B.Ed. system lacks ongoing formative assessment
Practical Exposure	Includes community-based and contextual activities	Practical work often simulated or limited in scope	Field visits are structured but may lack diversity in methods
Flexibility/Remedial Action	Allows re-teaching and remedial action	Not clearly stated; re-evaluation/remedial unclear	B.Ed. lacks built-in remediation mechanisms

The evaluation systems of the Grade 11 and B.Ed. levels represent different philosophies and priorities that create a significant rift in both approach and success - especially because B.Ed. students are future teachers. In the case of Grade 11, the evaluation is structured broadly and does not view the child through an academic lens only, with attention paid to the child direction; the child's behavioural, emotional and social aspects are evaluated as students; is simply as going beyond public education as well as personal education. Traits such as empathy, cooperation, leadership, and participation are evaluated, all of which are characteristics or qualities necessary for well-rounded individuals and develop in particular through teacher education in preparing citizens. But really, what you are developing is sustainably responsible citizens. In contrast, the B.Ed. should be a more fragmented and narrow evaluation, whereby focus is placed inland mostly on academic output, field-based assignments and final written examinations. The other necessary or important behavioural aspects, consciousness of being a teacher, are more and more neglected within teacher education itself -- e.g., interpersonal skills and emotional intelligence. The diagnostic function of evaluation is another primary difference. School-level assessments aim to identify areas of weakness in knowledge and get students started on remediation and continued growth. But, as opposed to helping promote student growth while progressing through the course, evaluation in B.Ed. is largely summative in nature and used primarily for final Grades. This limits the likelihood of formative feedback that could benefit these future educators in developing the skills they required. Grade 11 puts a focus on a

multitude of ways to assess students weekly on many tasks with meaningful assessment embedded in continuous assessment at weekly class activities and periodic tests, which supports a reflective learning approach. B.Ed. primarily relies on final exams thus providing only limited to imitation opportunities for students to reflect on their learning.

Suggestion to Overcome Gap

- Add tools to assess soft skills, collaboration, classroom conduct, etc.
- Encourage weekly reflections, peer reviews, and in-class activities.
- Reduce reliance on one-time annual evaluations.
- Make internal practical work *count* toward the final grade to increase seriousness.
- Implement systems to help underperforming B.Ed. students based on internal assessments, like school-level intervention strategies.
- Implement systems to help underperforming B.Ed. students based on internal assessments, like school-level intervention strategies.

Vertical Alignment between Grades 11 and 12 and Bachelor Curriculum based on Stakeholder's View

Partial Vertical Alignment with Identified Gaps

Some participants shared conflicting views pertaining to how well Grades 11 and 12 curricula may vertically align with Bachelor curriculum. Certain subjects, i.e., Geography and Political Science, were commended for their aligned scenario of growth, while others, namely Sociology and Anthropology, were said to require substantial improvement to reach perfect alignment. A number of teachers and faculty members highlighted the strength of vertical alignment in Geography and Political Science. For example, SoStST1 stated: *"There is good presence of vertical organization on geography."* Similarly, UF1 echoed this sentiment, observing that, "*In Geography vertical balance has been found.*" Comments like these suggest that for subjects that are more obvious content structures or frameworks (like Geography), taking educational levels is easier. This may allow students to utilize the prior knowledge they acquired when starting their Bachelor-level courses. Political Science was also noted as an area of good alignment. SoStST4 commented: "*There is vertical alignment in political curriculum and 11 and 12 grade curriculums.*" These examples indicate that well-structured subjects with clearly defined knowledge progression exhibit stronger vertical coherence across the educational stages.

In conclusion, participants' views emphasize an inconsistent approach to vertical alignment. For instance, subjects such as Geography and Political Science exhibit greater consistency and coherence allowing students to clearly understand their trajectory of learning. In contrast, Sociology and Anthropology were repeatedly cited as lacking a clear connection between secondary and tertiary curricula. In addition, pedagogical dissimilarities such as real-life application in Grades 11 and 12 versus theoretical rigor in Bachelor degree studies further exacerbate gaps in the content and highlights the need for mindful curriculum development that supports coherence of content and pedagogy during transitions.

Strong Alignment, with Needed Content Elaboration

Overall, participants were in agreement that some areas demonstrate a clear vertical alignment between G11, 12 and Bachelor, particularly Constitution/Civics and Geography. However, larger/more broad areas, such as Sociology, Anthropology, and Social Work were anticipated as needing a higher level of alignment. Furthermore, participants believed the development of theory and practice at each level should have more balance.

Multiple respondents indicated Constitution and Civic education as areas in which vertical alignment is functioning well. SoStST2 stated: *"On Geography to Constitution and Civic sense and Bachelor contemporary issues similar."*

This suggests that students will be well served by civil concepts at the 11 and 12 level are then added in Bachelor-level courses that allows students to extend their learning while engaging with contemporary political issues. These statements imply that students have a considerable amount of prior knowledge in the field of Geography. They retain their foundational knowledge and build on it as they move through the curriculum; and this would have helped students with their transition into more advanced geographic studies at the university level. Because this content is clearly aligned across the domains, it likely gives students more confidence when moving into Bachelor level courses (i.e. makes it less anxiety producing).

Respondents identified Sociology, Anthropology, and Social Work as areas where vertical integration needs to be addressed significantly. This points to a content gap where students entering Bachelor programs may lack the necessary theoretical background or may not have been sufficiently introduced to key concepts at the secondary level. Several of the respondents pointed to a more general issue, beyond the particulars of specific subject areas, which was the disparity between theory in Grades 11 and 12 and the hands-on focus at the

Bachelor level. One respondent (UF1) summed this up nicely: "*11 and 12 curriculum emphasized should be given on theoretical aspects-content elaboration / Bachelor curriculum should emphasized practical aspects.*"

In conclusion, the analysis indicates two things: Civics and Geography demonstrate a successful vertical coherence enabling a seamless educational transition and, subjects like Sociology, Anthropology, and Social Work revealed substantial gaps. Moreover, there remains greater pedagogical alignment need where demonstrated emphasis is concerned in more than one domain: the curricular foundation at gr. 11 and 12 should include more theory while the Bachelor programs should ensure systematized practical application. Improving these areas will improve students' educational transition and allow students to participate with greater meaning at advanced levels.

All participant responses expressed the view that innovative teaching practices are included in the Grades 11 and 12 curriculum and are to be expected at the Bachelor level. Unfortunately, with appropriate curriculum in place, application is variable because facilitators are challenged by issues of training, resources, and time. As the gap between what faculty intend and what they are able to accomplish shrinks student-centered and interactive approaches cannot be realized in actuality.

Participants indicated a wide variety of both teacher-centered, student-centered strategies while still means the curriculum contains both. SoStTBW1 summed up both aspects very simply: "In Grades 11 and 12 Teacher-centered, student-centered interactive methods and critical thinking methods are widely recommended however in bachelor level such wide recommendation of teaching strategies are limited."

Furthermore, concrete active learning techniques were cited by several participants. SoStST1 provided a detailed list: “Teaching strategies like Think Pair Share (TPS), brain storming, gallery walk, pair learning, Discussion, question answer, project work, etc creates a huge opportunity for teachers to be creative and bring innovation in teaching-learning”.

This shows that the curriculum actively encourages the use of collaborative, inquiry-based, and experiential learning methods known to foster critical thinking, engagement, and deeper understanding among students. The presence of these approaches reflects progressive curriculum intent and alignment with global best practices in education. However, while the curriculum suggests effective strategies, their real-world application remains inconsistent.

Teachers cited significant barriers to consistent implementation. For example, SoStT3 explained, "*Prescribed methods are good but practically difficult to execute*."

This illustrates a fundamental tension: teachers perceive the benefits of the approaches but encounter systemic barriers preventing them from regularly and effectively implementing them. Likewise, *UF1* pointed out a disconnect between theory and practice at the Bachelor level, "*In bachelors there is more use of teacher-centered methods.*"
This suggests that even in higher education, theoretical commitment to student-centered learning is not fully reflected in classroom practices, potentially undermining the coherence of pedagogical experiences across levels.

Participants were honest about the structural barriers which limited good teaching method implementation. For example, SoStST1 added, *"Lack of teacher training and motivation, Lack of teaching materials and physical space."* Such limitations especially the limited professional development and access to resources means teachers often are unable to progress beyond traditional, lecturer approaches. The discrepancy between aspirations of pedagogy and everyday classroom contexts was evident across many participants' responses traditional, lecture-based approaches. The gap between pedagogical aspiration and classroom reality was a recurring theme across responses.

To sum up, the Grades 11 and 12 and Bachelor curricula advocate for innovative and effective teaching strategies, yet there is a disconnection between design and practice. The substantial barriers to student-centred and interactive approaches to learning stem from the insultingly low levels of training, motivation, resources, and time for teachers. If these barriers (accountable teacher education and training programs, provision of resources, and institutional support) are not addressed, the pedagogical expectations in curriculum cannot be addressed in the classroom, and vertical continuity and learning narrowing will ensue.

Increased emphasis on Practical Evaluation

As participants reported, evaluation and assessment practices at the Grades 11 and 12 and Bachelor levels are increasing more toward practical components. As positive as this has been, we can see these practitioners are making attempts to adjust their weighting of LOTS and HOTS but the overall balance is inconsistent and often leaning toward theoretical; rote-based evaluation. This imbalance won't achieve the goal of students adequately prepared for higher order academic work and practical application as suggested at the Bachelor level.

A mix of formative and summative assessment methods is employed across educational levels, indicating growing recognition of diverse evaluation strategies. For instance, SoStST2 highlighted the variety of current practices, "*Evaluation should be based on homework, project work, and students' moral behavior.*" The incorporation of project work and behavioral assessment signals an emerging trend towards holistic assessment, which is moving away from a sole emphasis on exams. They want to create opportunities for students to engage with learning, take responsibility, and act ethically.

Nevertheless, though improvements have been made regarding HOTS assessment, it continues to be largely inadequate, with a distinct tilt being evident toward LOTS. Participants also pointed out that current evaluation approaches often remain overly theoretical and grade-focused, rather than genuinely fostering learning and application. SoStT3 observed, "*Present evaluation not suitable. Students focus on marks rather than actual learning.*"

This indicates that assessment culture still emphasizes Grades rather than actual learning, which discourages any meaningful engagement with content and diminishes the skills needed in higher education and life. Many participants called for a rebalancing of theoretical and practical components within assessment systems. For example, SoStTBW1 recommended, *"At both Grades 11 and 12 and Bachelor levels, evaluation should be balanced equally with 50% of the assessment focused on theoretical knowledge and 50% on practical application. This approach would ensure that students develop both strong conceptual understanding and the ability to apply their learning in real-world contexts."*

Such a change would optimize congruence between Intended Learning Outcomes and assessment strategies while also supporting both content mastery and applied competencies. This recommendation would also reflect the compression of content to deepen exploration and evaluation of meaning.

In conclusion, while assessment practice at both Grades 11 and 12 and Bachelor level is beginning to move toward more practical and formative approaches, we still have an uneven approach to LOTS and HOTS, and there is still a lot of theoretical assessment. In addition, there is still a learning culture that surrounds the mark. Having a more balanced and skills-based approach to assessment as well as a practical approach with teacher education

and the removal of content would create a level of vertical coherence and prepare students for the rigors of Bachelor Level education and further.

Curriculum Relevance and Interdisciplinary Integration

The current curriculum for Grades 11 and 12 has been taking some initial steps forward to be more relevant for student futures, but still has many concerns related to outdatedness, lack of interdisciplinary connectivity, and too little stress on 21st century skills. Although there is an awareness of increasing relevance, the curriculum is still considered too theory-oriented and not enough on skills. As SoStTBW2 expressed, *"A bit theoretical than practical so, skills-oriented curriculum is needed."*

Clearly, there is urgent work to be done with critical skills development in areas such as digital literacy and global citizenship, which was highlighted by SoStST1 with *"Lack in preparing global citizenship skills."* A number of participants indicated that certain content no longer reflects the current reality of the global world. For instance, SoStTBW1 recommended to refresh, *"World history, population content need a lot of improvement and update."* Several others shared similar observations, indicating it is important to refresh curriculum focusing on more current issues. In order to increase relevance, the stakeholders suggested to include more up-to-date and real-world knowledge. One stakeholder SoStST1 said, *"Information technology related content".* Other suggestions were human values and moral education, so that students could better prepare for the real world.

In conclusion, even though the curriculum has improved somewhat in relevance, it will require great effort to update obsolete content, add relevant 21st-century skills, and create meaningful connections between disciplines. Filling in these gaps will ensure that students are better prepared for both post-secondary education and the requirements of contemporary society.

Structural Barriers Hinderance Effective Implementation

Although there is an increasing awareness of modern pedagogical requirements, the structural barriers are hindering effective teaching and learning at the Grades level of 11 and 12 and Bachelor level, i.e., loaded content, inconsistent teacher preparation, and unequal availability of resources still exist. The teachers often indicated content overload, insufficient training, and no access to relevant technology. SoStST1 noted, *"They can do nothing, there is limited access to the right technology, the curriculum is overly full of content, and teachers do not have any sufficient professional development to deliver it."*

There was a large variety of responses related to availability of resources. Some of the responses acknowledged that there were digital platforms in specific contexts. For instance, SoStTBW1 stated, *"there are some digital learning platforms [in use] where possible."* Others noted uneven regional distribution, with SoStT3 indicating "Such resources are not available in all areas of the country." Without equitable access to, or availability of, teaching resources and tools, it is challenging to implement other modern teaching practices consistently. While teacher training can be helpful, it remains inconsistent and not always based on the actual needs of the classroom. UF2 noted the importance of demand driven approaches, stating that, "*Training should be based on demand, while also being based on the real need for teachers.*"

Additionally, detractors highlighted a lack of practical training that included classroom-based (SoStTBW1, 2020) "*There is a need for classroom-based training with model demonstration lessons, to show teachers how to apply new methodology*."

In conclusion, addressing structural barriers such as overloaded curricula, inconsistent teacher training, inadequate resource distribution, and professional insecurity is essential to improving teaching and learning outcomes. Systemic investments in professional development, resource provision, and curriculum streamlining are urgently needed to support educators in delivering high-quality, student-centered instruction.

Inclusive Collaboration for Stronger Curriculum Coherence

Participants consistently highlighted the need for greater curriculum coherence, reduced content overload, and inclusive stakeholder collaboration to better align Grades 11 and 12 with Bachelor-level programs.

There is a clear thematic request for the balance of practical and theoretical learning, too, to reduce curricular content, and improve vertical alignment across levels. SoStTBW1 suggested that, *"The gaps that currently exist need addressing by properly unpacking and aligning the curriculum at the school and Bachelor levels."*

Inclusive and participatory processes of curriculum-development were often suggested. Workshops and collaborative forums were seen as the primary methods to create shared ownership of curriculum decisions. SoStST1 stated, *"All relevant stakeholders should convene in workshops, and that the curriculum should be restructured from their collective perspectives."*

Specific recommendations were made, including decreasing the amount of content, changing assessment and evaluation methods in order to provide balance, and developing more effective pedagogical approaches to facilitate engagement and promote higher order thinking. Finally, SoStTBW1 recommended, *"Curriculum is made more manageable by reducing content, improving assessment frameworks, and strengthening pedagogy so that it better meets students' needs."*

Participants continuously indicated there should be greater collaboration between curriculum developers at the secondary level and Bachelor level. As SoStT4 stressed, *"In the curriculum development process, there must be proper collaboration between the agencies developing the Grades 11 and 12 curriculum and Tribhuvan University."* Otherwise, there will be gaps and overlaps in learning outcomes.

To sum up, continued stakeholder engagement, collaborative curriculum development, and responsive, practice-focused teacher education will promote easier transitions from secondary to tertiary education. It takes continuous collaborative engagement from all individuals involved in the educative process - policy, process and practitioners.

In conclusion, in terms of content, subjects like Geography and Civics tend to maintain vertical coherence quite well. However, in area like Sociology, Anthropology, and History there are some gaps. Secondary curricula often start with the modern or localized level of content, whereas Bachelor-level curricula tackle ancient or theoretical issues, not providing the necessary scaffolding in-between-the two tend to cause cognitive and conceptual confusion in a student's understanding, thus inhibiting the student from building on prior knowledge. Also, assessment procedures vary considerably. Secondary education includes formative, behavioural, and participatory appraisal, whereas evaluation for Bachelor's is still dominated by summative exams, mainly theoretical. For this reason, more balanced assessment approaches that merge theory with practice are needed for both levels, along with more assessment tools that test soft skills, critical thinking, and reflective learning. The adoption of student-centered teaching methods faces challenges due to unequal resources, insufficient teacher training, and restricted access to ICT tools.

To make the Social Studies curriculum more consistent throughout the educational stages, it is necessary to have inclusive collaboration among the developers of school and university-level curriculums. Implementing joint review mechanisms, feedback loops, regular content updates, and demand-driven teacher training should be institutionalized for the

sustainability of teacher training programmes. It is only through such systemic efforts that the curriculum in Nepal can become more relevant, aligned, and empowering for both learners and future educators.

The vertical alignment between the Bachelor-level curriculum in Social Studies and Grades 11–12 is inconsistently implemented across subjects, as evidenced by stakeholders' perspectives. Geography and Political Science exhibit relatively strong continuity, while Sociology, Anthropology, and Social Work exhibit significant content and pedagogical gaps. This discrepancy implies that subjects with structured frameworks and explicitly sequenced concepts are more likely to maintain alignment, thereby facilitating the progression of students' knowledge. Nevertheless, students encounter difficulties in connecting their learning across stages when the theoretical foundations are either inadequately developed at the elementary level or disconnected from practical application at the university level. A pedagogical mismatch results from the lack of theoretical depth in secondary curricula and the heavy emphasis on abstract academic learning at the Bachelor level, rendering prospective educators and students ill-prepared to make meaningful transitions across the educational continuum.

Furthermore, the implementation of student-centered, interactive teaching strategies is impeded by structural constraints, including inadequate teacher preparation, overloaded content, insufficient access to resources, and a lack of classroom-based training, despite the fact that both secondary and tertiary curricula emphasise this approach. The potential for vertical coherence is undermined by the discrepancy between curricular aspiration and classroom reality. Additionally, the prevalence of summative, grade-focused evaluations, particularly at the university level continues to restrict the development of higher-order thinking and authentic learning, despite the gradual transition to the integration of formative and practical assessments in evaluation policies. In order to guarantee that students undergo a cohesive and supportive transition throughout their academic career, it is imperative to implement a more equitable approach to theoretical and practical assessment, updated content relevance, interdisciplinary integration, and collaborative curriculum development across educational levels.

Chapter VII: Alignment of English Language Curriculum with Bachelor's Level

This study analyzed the alignment between school education curriculum (Grades 11 and 12 and the Bachelor level curriculum of compulsory English taught in Faculty of Education, Faculty of Humanities and Social Sciences and Faculty of Management under Tribhuvan University. The findings of the study have been reported here categorically faculty-wise. After reporting the findings separately in terms of the disciplinary categories and the themes within each category, an overall comparison has been presented. The review of the curriculum of both levels and interaction with the stakeholders such as teachers, educators, curriculum developers and experts showed that significant further work required for making the current curricula of school level and bachelor level aligned with each other. Here we report the findings in terms of the components of the curriculum such as competencies, contents, teaching methods, and assessment provisions and practices.

Curricular Competencies in English

While the fundamental goal of teaching English was to develop competencies in areas of language skills and aspects, the analysis of the curricula showed that the school level English curriculum expects some competencies which the bachelor level does not address. The overall conclusive idea is that the school level curriculum was developed from competency development perspective whereas the Bachelor level curriculum was developed from a content-based perspective. This shows a difference in the approach used in the curriculum design and this has ultimately impacted the implementation of it.

The competencies for Grades 11 and 12 are as follows.

- Use both spoken and written English for general and academic purposes in a variety of personal, social and academic contexts.
- Read a wide variety of texts for information and understanding
- Read a variety of literary texts for pleasure and appreciation
- Read, reflect and interpret a wide range of texts
- Critically analyze and evaluate ideas in a wide range of level appropriate texts
- Search, select and manage information from various textual and online sources.
- Create a variety of writing for different purposes and audiences with appropriate content, style and accuracy
- Produce a variety of creative and critical writings

- Appreciate diverse cultures
- Listen and respond in English with accuracy and fluency
- Communicate clearly and effectively in a range of situations using verbal and non-verbal communication strategies

The 11 defined competencies for Grades 11 and 12 have been prepared for development of students' language skills that help students to communicate orally and in written form for general and academic purpose in their personal, social and academic contexts. These competencies also expect students to read several general and literary texts for information, comprehension and for pleasure and appreciation. Among the 11 competencies, seven are on reading and writing, two on speaking and two on listening. This means that the Grades 11 and 12 curricula focus on all language skills giving emphasis on the reading and writing over listening and speaking. At the same time, the analysis of the curriculum showed that the learning outcomes have been organized around the language skills, i.e., listening, speaking, reading and writing. These learning outcomes have been organized in incremental manner. For example, in the listening construct "Identify and discriminate stress and intonation patterns" the grade 11 learning outcomes and grade 12 learning outcomes have been placed separately and the latter is slightly extended from the former as illustrated below.

Table 13: Curricular Learning Outcomes in Grades 11 and 12

Grade 11: Learning outcomes	**Grade 12: Learning outcomes**
- Identify the speaker's attitudes and feelings through their use of stress and intonation. - Show an understanding of differentiating tones (warnings, advice, suggestion, etc.) - Identify the effects of supra-segmental features in a connected speech.	- Identify the speaker's attitudes and feelings through their use of stress and intonation. - Identify the speaker's purpose by distinguishing tone and intonation patterns. - Identify the effects of supra-segmental features and phonological processes in a connected speech. - Identify the key words and phrases in the given text - Identify the differences between formal and informal English.

The participants during the curriculum audit workshop conducted at the Curriculum Development Center also concluded that the 11 competencies defined for Grades 11 and 12

have focused on reading and writing more than other skills and they provide extensive opportunities for students to read intensively and extensively. As this is a language competency-focused curriculum, it puts emphasis on skills and the aspects of the language that are expected to be taught more implicitly during the listening, speaking, reading and writing tasks. There is no problem in having these two skills, however, at the same time, development of other skills such as speaking and listening would be desirable for enhancing the communicative competence of the students.

Competencies in Bachelor of Education (B.Ed. Curriculum)

It was found that the B.Ed. compulsory curriculum has been thematically organized. Compared to the curriculum of Grades 11 and 12, this curriculum focuses on development of reading, writing and academic skills in using English accurately and fluently in reading and writing. This being a more thematically organized curriculum does not provide specific focus to the language skills such as listening and speaking. The following course objectives, similar to the competencies defined in Grades 11 and 12, illustrate this concern.

- Help students use grammatically correct English.
- Expand students' repertoire of general and academic vocabulary.
- Develop students' ability to comprehend and interpret different kinds of written texts.
- Enable students to compose different kinds of writings for effective communication on matters of general and academic interests.

Comparison of the Competencies and Gaps. The analysis of the two curricula shows that the Grades 11 and 12 curriculum is more detailed and provides a detailed description of the learning outcomes organized around competencies required for language development in students. Although the goal of the English curriculum in Bachelor and in Grades 11 and 12 is the development of English language proficiency of the students to enable them to make effective and efficient communication in English, the Bachelor level curriculum seems that it develops more linguistic competence than the communicative competence, as the curricular focus is on grammar, reading, writing and academic skills. This curriculum is more objective-focused and lacks clearly defined learning outcomes.

The curriculum audit workshop conducted with major stakeholders of the curriculum ended with the following observations about the gaps in curriculum agreed among the participants.

- Oral skills are not explicitly mentioned in B.Ed. first-year Compulsory English, which is not the case of the curriculum in Grades 11 and 12.
- Academic and creative writing are less emphasized in Grades 11 and 12 curricula but that has been the core part of the curriculum although the implementation and outcomes of this curriculum is still not as expected.
- The Grades 11 and 12 curriculum include the literary texts such as poems, stories and essays, they are used for language development and language practice purpose compared to the Bachelor level curriculum that excessively emphasized on the reading and writing based on reading of multidisciplinary textual items.
- The bachelor level curriculum is less aligned with Grades 11 and 12 curriculum so that it is a likely case that the students entering the bachelor level will feel difficulty in coping with the curriculum of the bachelor level. In this sense, the ccompulsory English curriculum of Bachelor of Education degree should be made compatible with the English Curriculum of Grades 11 and 12.
- There is a lack of alignment between the curriculum in terms of competence and prescribed reading-texts in the Bachelor level. While the curriculum seems focusing on the language skills and aspects, the prescribed texts did not directly relate to the curricular focus. For example, the B.Ed. curriculum has been organized in four units- Grammar, Readings, Writing and Academic Writing, but the curricular learning materials are in the form of the recommended books. The core reading and writing book has been prescribed by the curriculum but it does not specify what texts are included for the students if they do not consult the textbook.
- The bachelor level curriculum imagines the teaching and learning of grammar takes place differently not accompanied with the language skills. However, Grades 11 and 12 curriculum integrate grammar and vocabulary learning elements in the listening, reading and writing tasks outlined by the curriculum.

Hence, the analysis of the data shows that the Grades 11 and 12 curriculum has been developed as a competency-based curriculum, whereas B.Ed. first-year ccompulsory English curriculum is based on objectives, with limited breakdown of the learning objectives in each unit. The bachelor level curriculum outlines the contents as- Grammar 20%, Vocabulary 15%, Reading 30%, General Writing 15%, Academic Writing 20%. This shows that the reading element in Bachelor covers 45% of the course (including vocabulary), writing

component covers 35% and grammar 20%, whereas the skills and aspect are included in Grades 11 and 12 in an integrative way. Further to this, the analysis showed that there is gap in terms of the contents specified and language competency expected in compulsory English of Grades 11 and 12 and Bachelor.

Alignment in Curricular Contents in Grades 11 and 12 and Bachelor in Education

The following table illustrates the detailed contents of the curriculum of Grades 11 and 12 and Bachelor of Education. The analysis of the contents of Grades 11 and 12 and bachelor of education curricula showed that there was a mismatch between language learning competencies and contents prescribed in the curricula. For example, the bachelor level curriculum was more content-based but the curricular learning contents were specified as grammar, vocabulary, reading and writing. Similarly, the Grades 11 and 12 curricula specifically presented the learning contents from diverse disciplinary areas aiming to provide students with knowledge from areas covered widely. In practice, the bachelor level curriculum was implemented through a prescribed textbook that included contents around the thematic categories from diverse areas. The review of the textbook showed the following categories for content organization.

Table 14: Contents in Grades 11 and 12 and Contents in Bachelor of Education

Contents in Grades 11 and 12	Language contents in B.Ed.
Education and humanities	***Grammar***
- Ethics, human values, moral values, education, spirituality, animal rights, patriotism, responsibility of citizens	- Tenses and models - Questions, multi-words, verbs and structures
Health, sports and adventure	- Determiners and prepositions
- Yoga, travelogue, illness, disease, diet, nutrition, epidemics, hygiene, mental health, physical exercise, traditional and alternative medicine, meditation	- Adjectives and adverbs - Passive and conditionals - Word formation and sentences
Media and society	***Reading***
- Change in communication and peace of life, advertising, bias in media, the internet, radio and television, telephone, press	- Determining co-references - Matching things
History and culture	- Understanding instructions
- Identity, language, ethnicity, ethnic groups in Nepal, folk literature, folk songs, folk culture/children's literature, diaspora, ethics, cultural diversity, beliefs, values and norms, etiquette, historical events, national customs	- Scanning: locating and extracting information - Skimming: finding out main point and the central idea
Ecology and development	- Drawing inferences and implications
- Global warming, deforestation, diversity, sustainable development, population, agronomy, forestry, wildlife, weather, ecosystem, food and water, the effect of man on nature, the environment, natural disaster	- Assessing opinions and attitudes - Solving problems and puzzles
Science and technology	***Writing***
- Ethics and science, impact of ICT on society, entertainment, renewal energy	- Rewriting: rephrasing, paraphrasing, - Parallel writing
Globalization and economy	- Completing a text
- International economy, migration, poverty and famine, global citizenship	- Organizing a text: sequencing instructions, ordering information, connecting ideas
Humour and satire	- Writing summaries
- Humour and satire	- Writing personal and official letters
Democracy and human rights	- Writing curriculum vitae (resume) and job application
- Democracy, human rights, gender, law and justice, legal awareness, children's rights, women rights, rights of senior citizens, non-violence, charity	- Writing reports: events and news
Home life, family, and social relationships	
- Celebrations and social events, friendship, work, family, social acceptance, sex education	
Arts, music and creation	
- Painting, arts, music, creation	
Fantasy	
- Fantasy, imagination	
Career and entrepreneurship	
- Jobs, career, entrepreneurship, problems of unemployment	
Power and Politics	
- Power, politics, struggle, conflict	
War and peace	
- War, peace	
Critical thinking	
- Critical thinking, divergent thinking, logical thinking	

A curriculum audit workshop was conducted with the major stakeholders. The participants suggested that the texts included in the current curriculum in both levels need to be updated by addition of contents related to digital communication, the reading texts should be short and relatively simple so that the students get time to think and discuss on the contents rather than teachers and students getting worried in focusing on completing the course. The participants also mentioned that some texts in Grades 11 and 12 are inappropriate learning materials, there are longer and complex reading texts. The following are the recommendations made during the workshop.

- The complexity of reading text should be reduced in order to maintain the readability of the texts for the target age group.
- The writing tasks should be more oriented towards developing students' academic writing.
- Grammar components should be explicitly prioritized in Grades 11 and 12.
- Critical reading and writing should be more focused in a Bachelor's curriculum.
- General texts related to disciplinary ideas were included but it was unclear what specific language skills and aspects were targeted.
- Grammar for reading and writing should be integrated in a Bachelor's degree and should be taught in more integrated manner.

Alignment in Instructional Strategies

The teaching-learning component is one of the important concerns of curriculum analysis. The present study analyzed these elements and found that Grades 11 and 12 curriculum provide a detailed breakdown of the activities to be conducted in the classroom to guide teachers to design their instructional activities.

Table 15: Comparison of Teaching and Learning Strategies

Grades 11 and 12 teaching and learning strategies of Compulsory English	**Teaching and learning strategies specified in Bachelor of Education curriculum of Compulsory English**
• Reading and presentation • Writing projects • Dramatization, role-play and simulation • Inquiry-based writing • Reading for comprehension • Reading for critical assessment/analysis • Discussion sessions • Think - Pair- Share • RDWS (Read, Discuss, Write and Say/Share) • Teacher-guided self-study • Journal writing • Library visits • Listening to lyrical poems and songs • Reciting lyrical poems and songs • Watching movies (animated/unanimated, comic) and dramas • Brainstorming and mind mapping • Quick write/flash writing • Book/film reviews • Paraphrasing	• Lecture • Discussion • Explanation • Illustration • Demonstration • Quizzes • Presentation • Small group • Pair work • Mini projects • Group work • Individual study • Presentation • More lecture based • Less project based • Classroom discussion lack

The analysis of the instructional strategies suggested in the curriculum as indicated in the above table shows that the bachelor level curricula still prioritize lecture method which is not the case in the curriculum of Grades 11 and 12.

Alignment between Grades 11 and 12 and Bachelor of Education Assessment Practices

In terms of the assessment processes intended by the curricula of Grades 11 and 12 with that of B.Ed., it was found that the former was more flexible and adopted internal and

external evaluation system. The latter adopted only the final written examination. This shows that Grades 11 and 12 was realized better for the students. In this, the internal evaluation was 25% and the external evaluation was 75%. The curriculum of B.Ed. compulsory English includes no internal evaluation system and overall, the course is more theoretical, not making students involve in the interactive activities.

Recommended Improvement in the Curriculum

The curriculum audit workshop attended by major stakeholders concluded with the following suggestions for improvement.

- Increasement of project-based learning opportunities
- Formative internal evaluation to be introduced in compulsory English course
- Focus to be provided on development of skills of students, through skill-focused tasks
- Introducing activities that involve students in critical engagement in reading.

Inclusion of relevant and more updated texts was desirable. For example, 'Dickinson's poem' in grade 12 was noted as outdated and needed to be removed. It was suggested that instead of such contents, contexts that relate to 'politics, technology, environment, sociology and humanity should be included in the curriculum so that such texts would increase students' interest and motivation in reading and writing. Students may be engaged in small-scale projects that require them practice English language skills.

Alignment between Grades 11 and 12 and Bachelor of Humanities English Curriculum

Alignment in Curricular Competencies

The study explored alignment in curricular competencies between Grades 11 and 12 and Bachelor level compulsory English in Humanities. The BA English explicitly emphasized on developing students' ability in writing through practices of different patterns of writing. The course objectives mentioned are:

- Help them learn writing through others' writing as given under patterns (narration, description, comparison and contrast) and practice them.
- Learn the techniques of critical reading through reading texts

These competencies are aimed to be developed through recognition and practice of reading and writing through four levels of interacting with the texts. Analysis of the curriculum showed that the BA course did not have a specific breakdown of competencies, and explicit emphasis is given to reading and writing skills and the course does not have

anything about listening and speaking. In this case the students enrolled to BA program will not have opportunities to engage in planned and patterned speaking activities.

Contents and their Alignment

The contents in the present BA curriculum have been organized in five units. Each unit contain reading texts from diverse disciplinary areas and include cross-cutting issues which the students will be going through the four levels of appreciation. The table below illustrates the contents included.

Table 16: BA Level Content Coverage in English

Unit	**Contents**
1. Summaries and critiques (Behrens & Rosen)	2. Summary, Paraphrase and Quotations 3. Critical reading and critique
2. syntheses and analysis (Behrens & Rosen)	- Explanatory synthesis - Argument synthesis - Analysis
3. Arts and humanities (Comley, et al.)	- Maya Angelou, 'Graduation' - Amy Tan, 'Mother tongue' - Ernest Hemingway, 'A new kind of war' - James Alan McPherson, 'Problems of arts' - Susan Choi, 'Memory work' - Plato 'The Cave' - John Berger, 'Hiroshima' - George Orwell, 'Politics and the English Language'
4. Social Science and Public Affairs (Comley, et al.)	

The stakeholders during the curriculum audit workshop conducted at CDC expressed the following observation about the alignment.

- There is no or very little alignment in terms of grammar and writing contents between Grades 11 and 12 and BA English.
- The academic writing component was not equally emphasized in Grades 11 and 12.
- Some areas that have strong alignment in vertical sequencing, as reported by the stakeholders, are:
    - Genre-wise division
    - Free-writing in essay writing

- Theme-wise alignment
- Theme-based literary text division

Teaching and Learning Methods and their Alignment

The study analyzed the teaching and learning methods/techniques prescribed in the curriculum. It was found that the BA curriculum did not prescribe any instructional methods. This showed that the Grades 11 and 12 curricula is much more elaborated and detailed in terms of the methods of instruction. The BA curricula just listed the contents and did not elaborate what would be done in each unit. In most cases, it seemed that lecture, note-taking and analysis of the literary contents would be the most preferred instructional methods. These methods have not been explicitly presented in the curriculum. This might also misguide the students while dealing with the curricular issues.

The educators perceived that it is quite difficult to implement the methods and techniques suggested in the curricula. Despite the methods being effective if implemented properly, the context of the teaching and learning is not favorable to implement these methods. For example, good listening activities have been suggested in the curriculum, project works are also there, but considering the context of instruction in most of the schools, it is hard to expect whether and how they will be implemented in low resource contexts. The educators and teachers suggested the following innovation in the methods.

- Introduction of technology-integrated techniques of teaching
- Introduction of listening and speaking exercises
- Establishment of language lab (for practicing listening, speaking and writing)
- The course contents should aim to promote 21st century language skills.

Way Forward for Improvement

In terms of the improvement needed in the areas of the curriculum, the following were suggested.

- Literary texts matching the level and interest of the students to be selected for the curriculum. For example, the texts that were selected for the BA compulsory English are relatively difficult for the average students. So, simplification of the texts is required for the students to cope with the transition of learning.

- There is a need for inclusion of texts and activities that develop critical thinking skills on students. The curriculum of Grades 11 and 12 does not promote this as expected. And the texts in the BA are too difficult so that students do not get chance to think critically.
- Some bridge contents to be introduced to support smooth transition from Grades 11 and 12 to the Bachelor level.
- Text selection was more western centric. Students will be happier to see the texts that are from the local contexts and giving a message that relates to the social and cultural issues.
- The texts and activities to be designed should be simplified and to the level of students.
- The coverage of the contents is too loaded and the language development components such as teaching and learning of the skills such as listening and speaking is missing.

One teacher during a Focus Group Discussion followed by curriculum audit workshop mentioned,

> *'There is little alignment between the Grades 11 and 12 curriculum and Compulsory English in Bachelor level because there is very little coverage given to grammar, listening and speaking in BA. There must be an inclusion of advanced grammar for students to develop their English grammar accuracy'* (B.A. English Educator)

Another teacher during the FGD mentioned,

> '*The Grades 11 and 12 curricula are too long and include a lot of contents so that the teachers have to focus on finishing the given course rather than engaging students in learning English skills. Also, the listening and speaking skills are included in the curriculum, but they are rarely practiced in the classroom. We emphasize more on reading and writing because the students need to sit for written examination which has more weightage than the listening and speaking skills.* (Grades 11 and 12 English teacher)

Alignment between Grades 11 and 12 Curricula with Bachelor of Management English Curriculum

The Faculty of Management in Tribhuvan University offers English as a one of the core courses in the first year and second year of the 4-year BBS program. In that, the first-year course is 'Business Communication (MGT. 201) that carries 100 full marks and the second-year course is MGT 205 that is 'Business Communication'. Although these courses are to some extent connected with the English curriculum of Grades 11 and 12, it still lacks

specific coherence. This creates some transitional difficulties for the students to deal with the course. In this section, we present an analysis of this vertical relationship in terms of the competencies specified by the curricula, content coverage, instructional methods suggested, and assessment patterns prescribed in the curricula.

Alignment in Curricular Competencies

Unlike the detailed breakdown of the competencies in Grades 11 and 12 curricula that specifies the competencies clearly, the Business English curriculum specifies the competencies in generic ways stated as course outcomes as follows.

Table 17: Comparison of Competencies of Grade 12 English Curriculum with Business English Curriculum

Grade 12 Learning outcomes	**Business English Learning outcomes**
- Identify the speaker's attitudes and feelings through their use of stress and intonation. - Identify the speaker's purpose by distinguishing tone and intonation patterns. - Identify the effects of supra-segmental features and phonological processes in a connected speech. - Identify the key words and phrases in the given text - Identify the differences between formal and informal English.	- Improve linguistic competences at lexical, structural, grammatical levels - Comprehend literacy texts and writing modes - Produce correct sentences, cohesive paragraphs and organized texts. - Respond the literacy and business readings critically and analytically. - Boost competence towards global understanding thereby strengthening their confidence in using English in professional and social scenarios.

Here also, the grade 12 outcomes are more focused on developing English language skills especially listening, speaking, reading and writing whereas the Business English taught at the BBS first year focuses more on comprehension and expressions, especially based on contents. Meaning that while the bachelor level English is more content-based and emphasizes on grammar development and comprehension of literary texts, the grade 12 is more skills-based. It shows that the modality and course focus is to be reconsidered from the language-focus perspectives.

Alignment in Contents

The following table summarizes the contents included in the Bachelor level courses, i.e., Business English taught at BBS first year.

Table 18: Contents Included in the Bachelor Level Courses and Grades 11 and 12 English Course

Grades 11 and 12 contents	**Business English (MGT. 201) Contents**
Education and humanities - Ethics, human values, moral values, education, spirituality, animal rights, patriotism, responsibility of citizens ***Health, sports and adventure*** - Yoga, travelogue, illness, disease, diet, nutrition, epidemics, hygiene, mental health, physical exercise, traditional and alternative medicine, meditation ***Media and society*** - Change in communication and peace of life, advertising, bias in media, the internet, radio and television, telephone, press ***History and culture*** - Identity, language, ethnicity, ethnic groups in Nepal, folk literature, folk songs, folk culture/children's literature, diaspora, ethics, cultural diversity, beliefs, values and norms, etiquette, historical events, national customs ***Ecology and development*** - Global warming, deforestation, diversity, sustainable development, population, agronomy, forestry, wildlife, weather, ecosystem, food and water, the effect of man on nature, the environment, natural disaster **Science and technology** - Ethics and science, impact of ICT on society, entertainment, renewal energy	**Grammar and writing mechanics** - Sentences: Elements, varieties, patterns, types, faults; Nouns, pronouns and antecedents, verbs - Tenses, subject-verb agreement; Modifier and connector: Modifiers, prepositions, conjunctions, - Mechanics: Punctuation, capitalization, numbers **Using the business language** - Fundamentals of language, language and meaning, language, society and culture, stylistic features, functions of language, using language effectively; strong words, coherent paragraphs, commonly confused words. **Business vocabulary** - Importance of business vocabulary, vocabulary in use, business specific terminologies, idioms and expressions, vocabulary in communication situations, vocabulary in writing situations, vocabulary in speaking situations, ways to improve business vocabulary **Business communication strategies** - Written, oral, visual messages, electronic messages, non-verbal

Globalization and economy - International economy, migration, poverty and famine, global citizenship ***Humour and satire*** - Humour and satire ***Democracy and human rights*** - Democracy, human rights, gender, law and justice, legal awareness, children's rights, women rights, rights of senior citizens, non-violence, charity ***Home life, family, and social relationships*** - Celebrations and social events, friendship, work, family, social acceptance, sex education ***Arts, music and creation*** - Painting, arts, music, creation ***Fantasy*** - Fantasy, imagination ***Career and entrepreneurship*** - Jobs, career, entrepreneurship, problems of unemployment ***Power and Politics*** - Power, politics, struggle, conflict ***War and peace*** - War, peace ***Critical thinking*** Critical thinking, divergent thinking, logical thinking	messages, **Business writing** - Brochures: guidelines and instructions; media stories, news reports, articles and stories, broadcasting stories, press releases, effective media relations, advertisements **Reading strategies and writing process** - Reading to write, becoming a critical reader, brent staples, "cutting and pasting: a senior thesis'; note-making, summarizing, invention, arrangement, drafting and revising, editing and proof reading, paragraph writing, etc.

The contents included in this course showed that the Business English is more focused on grammatical accuracy, reading and writing skills whereas the Grades 11 and 12 English is focused more on competency in language skills and aspects, including the functional use of language. Interesting, the Business English course does not elaborate any specific strategies for instruction and assessment. The assessment is done in terms of written examination that carries 100 full marks and the pass marks is 35.

The 2nd year BBS program also includes an English course.

Curriculum and Implementation Challenges

The English curriculum of the BBS first and second year included interdisciplinary reading texts that aim to promote critical thinking and analytical skills. However, the educators realized that the texts are overloaded with rich contents and that makes students feel difficulty in dealing with. This also made them perceive that the alignment between Grades 11 and 12 curriculum is weak with that of BBS. The challenges for effective and successful implementation of the curriculum emerge there due to the weak vertical coherence across curricula at different levels of education, especially while transitioning from the Grades 11 and 12 to the Bachelor level. Also, while in the school level there is an internal assessment that provides students with opportunities to get feedback on a continuous basis, the final written assessment system introduce in the bachelor levels do not provide such opportunities so that assessment of learning is more like one-off type. Although there are some provisions of internal assessment in semester-based programs in higher education, the bachelor degrees in education, management and humanities are generally in annual system that demands a full written examination at the end of the year.

The analysis of the harmonization between the English curricula for Grades 11 and 12 and the Bachelor's level English curricula at Tribhuvan University showed that common curricular goals were formed for both levels, i.e., development of communicative competence on students. However, differences existed in terms of the curricular design, content coverage, instructional strategies, and assessment practices. The Bachelor curricula in the Education, Humanities, and Management faculties are content-based and primarily focused on reading and writing, while the school-level curriculum is competency-based and places a clear emphasis on all four language skills (listening, speaking, reading, and writing), organized progressively and with student-centered pedagogical approaches. In particular, the Bachelor's-level programs fail to explicitly address listening and speaking skills. The dominant instructional strategy suggested was lecture. The discrepancy is also apparent in assessment systems: school-level curricula include both internal and external assessments, which creates sufficient space for teachers to provide formative feedback, whereas Bachelor courses concentrate almost exclusively on summative written examinations. In terms of content, the Bachelor's level materials are overly complex as perceived by students, which

results in a cognitive load for students transitioning from Grades 11 and 12 to bachelor's level. This indicates that further work on curriculum harmonization is required across these levels. This can be achieved by ensuring that competencies are clearly articulated, skills are more effectively integrated, content is localised, texts are made user-friendly and simplified, and instructional and assessment practices are designed as per the need of the students and their levels.

खण्ड आठ: कक्षा ११ र १२ र स्नातक तहका नेपाली पाठ्यक्रममा तालमेल

विद्यालय तह कक्षा ११, १२ र स्नातक तह, नेपाली विषयका शिक्षाशास्त्र सङ्काय र मानविकी तथा सामाजिक शास्त्र सङ्कायका पाठ्यक्रमहरू बिचको तालमेल पहिल्याउने उद्देश्यमा केन्द्रित यस अध्ययनमा विद्यालय शिक्षा पाठ्यक्रम (कक्षा ११, १२) तथा मानविकी तथा सामाजिक शास्त्र सङ्काय तथा शिक्षाशास्त्र सङ्काय, त्रि. वि.का अनिवार्य नेपाली विषयका भाषा पाठ्यक्रमहरूका बिचमा तालमेल पहिल्याउने प्रयास गरिएको छ। पाठ्यक्रमको विश्लेषणपछि शिक्षक तथा पाठ्यक्रम विज्ञहरूका बिचमा कार्यशाला सञ्चालन, पाठ्यक्रम विज्ञ, पाठ्यपुस्तक निर्माता, प्राध्यापक, शिक्षक, पाठ्यक्रम विकास केन्द्र, भक्तपुरका विषय विज्ञहरू बिच गहन छलफलबाट तथ्य सङ्कलन र विश्लेषण गरिएको छ।

यस अध्ययनमा कक्षा ११, १२ र स्नातक तहका नेपाली भाषा पाठ्यक्रमहरूको अन्तरसम्बन्ध, तिनका बिचको पूर्वापर क्रम तथा अन्तराल पहिल्याउने काम भएको छ। यस क्रममा कक्षा ११ र १२ का अनिवार्य नेपाली विषयका पाठ्यक्रम र शिक्षाशास्त्र सङ्काय र मानविकी तथा सामाजिक शास्त्र सङ्कायमा प्रचलित अनिवार्य नेपाली विषयका नेपाली भाषा पाठ्यक्रमहरूको सिकाइ तहगत सक्षमता, कक्षागत सिकाइ उपलब्धि, तिनमा रहेका विषयवस्तु, शिक्षण सिकाइ प्रक्रिया, मूल्याङ्कन प्रक्रिया आदिका आधारमा तुलनीय रूपमा विश्लेषण गरिएको छ। अध्ययन गरिएका पाठ्यक्रमका बिचको तालमेल र तिनका बिचको अन्तराल पहिचान गर्ने काम भएको छ।

सक्षमता/साधारण उद्देश्य

कक्षा ११, १२ का तहगत सक्षमता	स्नातक तह (बिए र बिएड) का साधारण उद्देश्य
• विविध विषयक्षेत्रका मौखिक सामग्रीको बोध र अभिव्यक्ति • विविध विषयक्षेत्रका लिखित सामग्रीको सुरुचिपूर्ण पठन र बोध • पाठगत सन्दर्भको अनुमान, घटना, चरित्र र परिवेशको पहिचान, बोध र प्रस्तुति • देखेसुनेका, पढेका र अनुभव गरेका विषयवस्तुको मौखिक र लिखित अभिव्यक्ति • सामाजिक, सांस्कृतिक, राष्ट्रिय एवम् मानवीय मूल्यअनुकूलको लेख्य अभिव्यक्ति • दैनिक व्यावहारिक लेखनमा दक्षता प्रदर्शन • सिर्जनात्मक र प्रतिक्रियापरक अभिव्यक्ति कौशल	• कथ्य र लेख्य नेपालीको भिन्नता पहिल्याई मानक रूपको प्रयोग गर्न • नेपाली वाङ्मयका विविध क्षेत्रमा प्रयुक्त शब्दहरुको स्रोत, वर्ग, बनोट र अर्थ बोध गरी वाक्यमा सन्दर्भपूर्ण प्रयोग गर्न • तालिका, चित्राकृति (डायग्राम) रेखाचित्र (ग्राफ) र आरेखका सूचनालाई अनुच्छेदमा तथा अनुच्छेदमा रहेका सूचनालाई तालिका, चित्राकृति, आलेख र आरेखमा रूपान्तर गर्न • नेपाली वाक्यतत्त्वको पहिचान गरी वाक्यतत्त्वपरक रचना गर्न • पाठ वा पाठ्यांशका सङ्कथनको संरचना पहिल्याउन • नेपाली वाङ्मयका विविध क्षेत्रका गद्यांशहरू पढी तिनमा

• अन्तरसांस्कृतिक एवम् भाषिक मूल्यप्रतिको सचेतता र सम्मानजनक भाषिक व्यवहार • तार्किक, अन्तरक्रियात्मक एवम् समस्या समाधानमूलक अभिव्यक्ति कौशल • खोज तथा परियोजनामा आधारित लेख र रचनाको सिर्जना • समालोचनात्मक चिन्तन सहितको मौखिक र लिखित अभिव्यक्ति	आधारित बोधप्रश्नहरूको उत्तर दिन • सम्बद्ध गद्यांशको बुँदा टिपोट र संक्षेपीकरण गर्न • पाठ वा पाठ्यांशका विषयवस्तुमा आधारित भई स्वतन्त्र अभिव्यक्ति प्रकट गर्न • निर्धारित ढाँचामा आधारित भई विविध व्यावहारिक लेखन र प्रतिवेदन तयार गर्न • विभिन्न विषयमा आत्मपरक तथा वस्तुपरक निबन्ध लेख्न • निर्धारित कविता, गीत/गजल, निबन्ध, कथा, उपन्यास र नाटकको सरसर्ती अध्ययन वा आस्वादन गरी प्रतिक्रिया दिन

कक्षा ११, १२ को अनिवार्य नेपाली विषयको भाषा पाठ्यक्रम नेपाल सरकार, पाठ्यक्रम विकास केन्द्रबाट तयार पारिएको हो । कक्षा ११ र १२ का तहगत सक्षमताहरू उक्त दुवै कक्षामा समावेश गरिएका विषयवस्तुको समुच्चयबाट हासिल हुने खालका छन् । स्नातक तहका अनिवार्य नेपाली भाषा पाठ्यक्रमहरू त्रिभुवन विश्वविद्यालय, पाठ्यक्रम विकास केन्द्र, कीर्तिपुरद्वारा तयार पारिएको हो । कक्षा ११ र १२ मा तहगत सिकाइ सक्षमता र कक्षागत सिकाइ उपलब्धिका रूपमा उल्लेख गरिएको छ भने स्नातक तहमा साधारण र विशिष्ट उद्देश्य गरी प्रस्तुत गरिएको छ । स्नातक तहका शिक्षाशास्त्र सङ्काय र मानविकी तथा सामाजिक शास्त्र सङ्कायका अनिवार्य नेपाली विषय पाठ्यक्रमका साधारण उद्देश्यहरू समान छन् । कक्षा ११ र १२ का सक्षमताहरू सिपगत (सुनाइ, बोलाइ, पढाइ र लेखाइ) अनि स्नातक तहका सक्षमताहरू विषय क्षेत्रगत (व्याकरण, बोध तथा अभिव्यक्ति, साहित्यिक विधा) आधारमा प्रस्तुत गरिएकाले विश्लेषण कम तुलनीय देखिन्छन् । त्यस्तै कक्षा ११ र १२ का तहगत सक्षमताहरू भाषिक सिपगत रूपमा व्यवस्थित पारिएका छन् भने स्नातक तहका साधारण उद्देश्यहरू विषयवस्तु केन्द्रित रूपमा निर्धारण गरिएका छन् । दुवै तहका सक्षमताहरूमा एकरूपता हुनु अपेक्षित छ ।

विषयवस्तुका क्षेत्रका आधारमा विश्लेषण

कक्षा ११/१२ र स्नातक तहका नेपाली भाषा पाठ्यक्रममा समावेश गरिएका विषयवस्तुहरूलाई व्याकरण खण्ड, बोध र अभिव्यक्ति खण्ड तथा साहित्य खण्ड गरी तीन उपशीर्षकमा व्यवस्थित गरी तुलनात्मक विश्लेषण गरिएको छ :

(क) व्याकरण खण्ड

विषयवस्तुको क्षेत्र	**कक्षा ११**	**कक्षा १२**	**स्नातक तह (बिए, बिएड)**

भाषातत्त्व र वर्णविन्यास	● (अ) नेपाली कथ्य र लेख्य वर्ण (स्वर र व्यञ्जन) को पहिचान ● (आ) उच्चार्य व्यञ्जन वर्णको पहिचान र प्रयोग (स्थान, प्रयत्न, घोषत्व र प्राणत्व) ● (अ) मूल र व्युत्पन्न शब्दको पहिचान ● (आ) शब्द स्रोत : तत्सम, तद्भव र आगन्तुक शब्द ● (इ) शब्दकोशीय प्रयोग ● (अ) पदवर्ग (नाम, सर्वनाम, विशेषण र क्रियापद, नामयोगी, क्रियायोगी, संयोजक, विस्मयादिबोधक र निपात)को प्रयोगात्मक पहिचान ● (आ) शब्द रूपायन ● लेख्य चिह्न र तिनको प्रयोग (पूर्णविराम, अर्धविराम, अल्पविराम, कोष्ठक, विकल्पबोधक/तिर्यक्, प्रश्नवाचक, उद्धरण, विस्मयसूचक/उद्गार, निर्देशक, योजक, छुट चिह्न/कागपादे चिह्न ● (अ) वर्णविन्यासको पहिचान र प्रयोग ● (आ) भाषिक प्रयोगमा पदयोग र पदवियोगको पहिचान र प्रयोग ● उपसर्गद्वारा शब्दनिर्माण (अ) अ, अन, कु, बि, बे, बद, गैर, ना (आ) अति, अधि, अनु, अप, अभि, अव, आ, उत्, उप, दुर्, दुस्, नि, निर्, निस्, परा, परि, प्र, प्रति, वि, सम्, सु ● प्रत्ययद्वारा शब्द निर्माण: (क) अक्कड,	● नेपाली अक्षरको पहिचान र उच्चारण अभ्यास ● पदवर्ग (नाम, सर्वनाम, विशेषण र अव्यय) को पहिचान र प्रयोग ● (अ) पदसङ्गति : (क) लिङ्ग (ख) वचन (ग) पुरुष (घ) आदर (सामान्य, मध्यम, उच्च) ● (आ) शब्द रूपायन, उपसर्ग र प्रत्ययद्वारा शब्द निर्माणसम्बन्धी अभ्यास समास प्रक्रियाद्वारा शब्द निर्माणसम्बन्धी अभ्यास द्वित्व प्रक्रियाद्वारा शब्द निर्माणसम्बन्धी अभ्यास वाक्यको पहिचान र प्रयोग ● (क) सरल, संयुक्त र मिश्र वाक्यको पहिचान र प्रयोग ● (ख) निर्धारित कथाबाट सरल, मिश्र र संयुक्त वाक्यको पहिचान र वाक्यान्तरण ● (अ) क्रियाका काल (भूत, अभूत) पक्ष : अपूर्ण, पूर्ण, अज्ञात, अभ्यस्त ● (आ) नेपाली वर्णविन्यासको प्रयोगात्मक अभ्यास ● (आ) क्रियाका भाव :	● शब्दहरूको अक्षरीकरण ● शब्दस्रोत ● शब्द बनोट ● शब्दवर्ग ● (क) लिङ्ग, वचन, पुरुष, आदर, काल, पक्ष, भाव, वाच्य, करण अकरणका आधारमा स्वतन्त्र लेखन ● निर्देशित रचना (वाक्यान्तरण) ● नेपाली वर्णविन्यास ● शब्दार्थ र प्रयोजनपरक शब्दहरुको प्रयोग ● (ख) निर्देशित रचना (वाक्यान्तरण) ● (ग) वाक्य संश्लेषण

	अत, अन्त, आइ, आइँ/याइँ, आउ, आली, आलु, आवट, आहा/याहा, इया, (ख) इयार, इलो, ई, उवा, ए, एली, ओ, ओट, औली/यौली, पन/पना, ली, ले प्रत्ययद्वारा शब्द निर्माणः अक, अन, अनीय, इक, इत, ई, ईन/ईण, ईय, क, तर, तम, तव्य, ता, ति, त्व, मय, मान्, वान्, य ● समास प्रक्रियाद्वारा शब्द निर्माण (अव्ययीभाव, कर्मधारय, तत्पुरुष, द्वन्द्व, द्विगु, बहुब्रीहि (समास र विग्रहसमेत) ● (अ) द्वित्व प्रक्रियाद्वारा शब्द निर्माण (पूर्ण, आंशिक र आपरिवर्तित द्वित्व) ● (आ) सन्धि र सन्धि भएका शब्दको पहिचान ● (अ) उद्देश्य र उद्देश्य विस्तार तथा विधेय र विधेय विस्तार, पहिचान र प्रयोग ● (आ) व्याकरणात्मक कोटिका आधारमा वाक्य परिवर्तन (लिङ्ग, वचन, पुरुष, आदर) ● (इ) कथन (प्रत्यक्ष, अप्रत्यक्ष) ● (ई) ध्रुवीयता (करण, अकरण)	सामान्य, आज्ञा, इच्छा, सम्भावना, सङ्केत कारक र विभक्तिको पहिचान र प्रयोग ● (अ) कारकका सरल र तिर्यक् रूप ● (आ) कारकका प्रकार : कर्ता, कर्म, करण, सम्प्रदान, अपादान, अधिकरण ● (इ) विभक्तिको प्रयोग ● (क) वाक्य संश्लेषण र विश्लेषण ● (ख) वाच्य (कर्तृ, कर्म, भाव) को पहिचान र प्रयोग ● (अ) पदक्रम (क) सामान्य पदक्रम ● (ख) विशिष्ट पदक्रम ● (आ) लेख्य चिह्न र तिनको प्रयोग ● (अ) उक्ति परिवर्तन ● (आ) उद्देश्य र विधेय विस्तार ● (इ) शब्दकोशीय प्रयोग	

भाषातत्त्व (व्याकरण) का पाठ्यवस्तुहरू छनोटलाई आधारमा मान्दा कक्षा ११ र कक्षा १२ व्याकरणका विषयवस्तुलाई बाँडेर राखेको देखिन्छ। कक्षा ११ का तुलनामा कक्षा १२ मा केही जटिल खालका वाक्यान्तरण, कारक विभक्ति आदि विषयवस्तु समावेश गरिएका छन् । स्नातक तहमा चाहिँ व्याकरणका विषयवस्तुहरूलाई अभ्यासमा जोड दिन खोजिएको छ। कक्षा ११ र १२ मा पदवर्ग, शब्द रूपायन र व्युत्पादन, शब्दकोशको प्रयोग, लेख्यचिह्नको प्रयोग, वाक्यको उद्देश्य र विधेय, कथन परिवर्तन जस्ता व्याकरणका विषयवस्तु दुबै कक्षामा समावेश गरिएका छन्

भने वर्ण र व्यञ्जन वर्णको वर्गीकरण, मूल र व्युत्पन्न शब्द, शब्दस्रोत, पदयोग वियोग आदि विषयवस्तु कक्षा ११ मा समावेश गरिएको छ । कक्षा १२ मा नेपाली अक्षरको पहिचान, पदसङ्गति, क्रियाको भाव, वाक्य संरचना र वाक्यान्तरण, वाक्य संश्लेषण विश्लेषण, कारक र विभक्ति, पदक्रम, वाच्य, आदि विषयवस्तुहरू समावेश गरिएको छ । यसरी हेर्दा कक्षा ११ र १२ दुवै कक्षामा समान विषयवस्तु राख्नेभन्दा सरल केही दुबै कक्षामा समावेश गरिएको छ । यसलाई हेर्दा सरल प्रकृतिका विषयवस्तु कक्षा ११ मा समावेश गरिएको छ अनि अलि जटिल प्रकृतिका विषयवस्तु कक्षा १२ मा समावेश भएका देखिन्छन् । स्नातक तहमा चाहिँ अक्षरीकरण, शब्दवर्ग, शब्द स्रोत र बनोट, वाक्यान्तरण, रूपायन, वर्णविन्यास, प्रयोजनपरक अर्थ र प्रयोग, वाक्यान्तरण, निर्देशित रचना, वाक्यान्तरण आदि विषयवस्तुहरू समावेश गरिएका छन् । उक्त दुबै तहका विषयवस्तुहरूको प्रस्तुतिमा तहगत अन्तरसम्बन्ध पाइन्छ । स्नातक तहको पाठ्यक्रममा व्याकरणका विषयवस्तुलाई निर्देशित र स्वतन्त्र रचना तथा वाक्यान्तरण, प्रयोजनपरक अर्थ र प्रयोग सन्दर्भ मिल्ने गरी प्रयोगमा जोड दिइएको छ । यस आधारमा हेर्दा कक्षा ११, १२ को ढाँचाभन्दा स्नातक तहको ढाँचा उपयुक्त र भाषा सिकाइका दृष्टिले प्रभावकारी हुने देखिन्छ ।

(ख) बोध र अभिव्यक्ति खण्ड

विषयवस्तुको क्षेत्र	**कक्षा ११**	**कक्षा १२**	**स्नातक (बिए)**
बोध तथा अभिव्यक्ति	दृष्टांश र अदृष्टांश बोध, बुँदा टिपोट र सारांश, निबन्ध लेखन, प्रतिक्रिया लेखन, घटना वर्णन, विभिन्न प्रकारका पत्र लेखन, प्रतिवेदन र टिप्पणी लेखन, वक्तृता, संवाद आदि लेखन, सिर्जनात्मक लेखन	दृष्टांश र अदृष्टांश बोध, बुँदा टिपोट र सारांश, निबन्ध लेखन, तार्किक र अन्तरक्रियात्मक अनि प्रतिक्रिया लेखन, घटना वर्णन, विभिन्न प्रकारका पत्र लेखन, कानुनी तथा प्रशासनिक लेखन, जीवनी लेखन, वक्तव्य, समाचार, बैठकको निर्णय, व्यक्तिगत विवरण आदि लेखन, सिर्जनात्मक लेखन	(क) पठनबोध : नेपाली वाङ्मयका शिक्षा, अर्थ व्यवस्था, भूगोल, ऊर्जा, वातावरण, जैविक विविधता, विज्ञान, प्रविधि, स्वास्थ्य, खेलकुद, भाषा साहित्य, सूचना, सञ्चार, समाज, संस्कृति, दर्शन, मनोविज्ञान, कानुन, कृषि, वन, जीवजन्तु र वनस्पति आदि क्षेत्रसँग सम्बन्धित सामान्य तथा विशिष्ट दृष्टांश र अदृष्टांश पाठ वा पाठ्यांशमा आधारित बुँदा टिपोट र सारांश, व्यावहारिक लेखन, निबन्ध लेखन, प्रतिवेदन लेखन, सूचनाको रूपान्तरण र अनुच्छेद लेखन (क) तालिका, चित्राकृति (वृत्तारेख र स्तम्भ), रेखाचित्र तथा आरेखका सूचनाको अनुच्छेदमा रूपान्तर र अनुच्छेदका सूचनाको तालिका, चित्राकृति (वृत्ताकार र स्तम्भ), रेखाचित्र तथा आरेखमा रूपान्तर (ख) स्वतन्त्र र निर्देशित अनुच्छेद लेखन, सङ्कथन/पाठ संरचना (क) व्याकरणिक संसक्ति तथा कोशीय संसक्ति

			(ख) अन्तर्वाक्यात्मक अर्थान्विति

बोध र अभिव्यक्तिका विषयवस्तुहरूमध्ये कक्षा ११ मा दिइएका विषयवस्तुका साथै कक्षा १२ मा केही विषयवस्तु थप गरिएको देखिन्छ । बोध, बुँदा टिपोट, सारांश लेखन, निबन्ध लेखन, प्रतिक्रिया लेखन, घटना वर्णन, पत्र लेखन, सिर्जनात्मक लेखन जस्ता विषयवस्तुहरू कक्षा ११ र १२ दुवैमा समावेश गरिएको छ । कक्षा ११ मा प्रतिवेदन र टिप्पणी लेखन, वक्तृता, संवाद आदि लेखन राखिएकोमा कक्षा १२ मा तार्किक र अन्तरक्रियात्मक लेखन, कानुनी तथा प्रशासनिक लेखन, बैठकको निर्णय लेखन, व्यक्तिगत विवरण जस्ता विषयवस्तुहरू समावेश गरिएका छन् । यसलाई आधार मान्दा कक्षा ११ मा भन्दा कक्षा १२ का विषयवस्तुहरू जटिल र तहगत रूपमा स्तरीय रहेको देखिन्छ । स्नातक तहमा बोध र अभिव्यक्तिका विषयवस्तु सबै समेट्ने भन्दा पनि प्रयोजनपरक अनुच्छेदहरू दिई तिनबाट पठनबोध अभ्यास गराउन खोजेको देखिन्छ । स्नातक तहमा विविध प्रयोजनपरक क्षेत्रसँग सम्बन्धित सामग्रीबाट पठनबोध अभ्यास गराउन जोड दिइएको छ । त्यस्तै बुँदा टिपोट र सारांश, व्यावहारिक लेखन, निबन्ध तथा प्रतिवेदन लेखन आदि पाठ्यवस्तु ११ र १२ दुवै कक्षामा समावेश भएका विषयवस्तुका साथै सूचनाको रूपान्तरण, तालिका, रेखाचित्र तथा आरेख आदि, स्वतन्त्र र निर्देशित लेखन, सङ्कथन, संसक्ति, पाठ संरचना, अन्तरवाक्यात्मक अर्थान्विति आदि विषयवस्तुहरू समावेश गरिएका छन् । यस आधारमा हेर्दा बोध र अभिव्यक्ति खण्ड सबल देखिन्छ । कक्षा ११/१२ मा स्नातक तहको तयारी हुने खालका विषयवस्तुहरू समावेश गरिनुपर्ने देखिन्छ ।

(ग) साहित्य खण्ड

विधागत पाठ क्षेत्र	**कक्षा ११**	**कक्षा १२**	**स्नातक (बिए, बिएड)**
कविता	१. देशभक्ति (पद्य) (पाठ १)	१. सामाजिक (गद्य) (पाठ १) २. गीति (पाठ ७)	१. माधव घिमिरे - तिम्रो र हाम्रो मन एक होओस् २. भूपि शेरचन - मेरो चोक ३. हरिभक्त कटुवाल - भोलिको नेपाल ४. दुर्गालाल श्रेष्ठ - मनको दैलो ५. अमर गिरी - चराका गीतहरू ६. धीरेन्द्र प्रेमर्षि - आँसु लुकाइ परेलीमा
कथा	१. सामाजिक (पाठ २) २. मनोवैज्ञानिक (पाठ ६)	१.ऐतिहासिक/ पौराणिक/ सांस्कृतिक (पाठ २) २. समाज मनोवैज्ञानिक (पाठ ८)	१. विश्वेश्वर प्रसाद कोइराला - एक रात २. राजेन्द्र विमल - लङ्काकाण्ड ३. पद्मावती सिंह - आरुको बोट ४. ऋषिराज बराल - पछबरिया टोल

			५. महेश विक्रम शाह - गाउँमा गीतहरू गन्जिँदैनन्
आख्यानात्मक रचना	-	सञ्चार, विज्ञान तथा प्रविधि (पाठ ९)	-
निबन्ध	१. सांस्कृतिक (आत्मपरक) (पाठ ३) २. प्राकृतिक (वस्तुपरक) (पाठ ७)	१. नियात्रा (पाठ ३)	१. लक्ष्मीप्रसाद देवकोटा - के नेपाल सानो छ ? २. शङ्कर लामिछाने - गोधूली संसार ३. भैरव अर्याल - टाउको ४. शारदा शर्मा - सुखसत्ता
प्रबन्धात्मक रचना	-	१. कानुन, प्रशासन र व्यवस्थापन (पाठ ११)	-
जीवनी	१. राष्ट्रिय (पाठ ४)	१. अन्तर्राष्ट्रिय (पाठ ६)	-
पत्र लेखन	१. घरायसी (पाठ ५)	१. व्यावसायिक (पाठ ४)	-
लघु नाटक	१. सामाजिक/ मनोवैज्ञानिक (पाठ ८)	-	१. विजय मल्ल - सत्ताको खोजमा नाटक २. कृष्ण शाह यात्री - पीडा आरोहण नाटक
रिपोर्ताजमूलक रचना	१. स्वास्थ्य, योग तथा चिकित्सा (पाठ ९)	१. अर्थ, उद्योग र वाणिज्य (पाठ १२)	-
संवादात्मक रचना	१. कृषि, वन तथा वातावरण (पाठ १०)	समाज, संस्कृति र शिक्षा (पाठ १०)	-
दैनिकी रचना	१. पर्यटन (पाठ ११)	-	-
वक्तृतात्मक रचना	१. जलस्रोत र ऊर्जा (पाठ १२)	-	-
उपन्यास	-	१. सामाजिक (पाठ ५)	१. सरुभक्त - चुली
जम्मा	१२	१२	

साहित्यिक विधाका पाठहरूको संयोजनका दृष्टिले कक्षा ११/१२ का पाठ्यक्रम बढी व्यापक देखिन्छन् । यी दुवै कक्षामा कथा, कविता, निबन्ध, आख्यानात्मक रचना, जीवनी, पत्र लेखन, रिपोर्ताजमूलक रचना, संवादात्मक रचना जस्ता विधा क्षेत्रका विषयवस्तुहरू दुवै कक्षामा समावेश गरिएका छन् । कक्षा ११ मा लघु नाटक, दैनिकी,

वक्तृता आदि विधाका विषयवस्तुहरू समावेश गरिएको छ । तिनको सट्टा कक्षा १२ मा आख्यानात्मक रचना, प्रबन्धात्मक रचना र उपन्यास विधा समावेश गरिएको छ । जीवनीका सन्दर्भमा कक्षा ११ मा राष्ट्रिय जीवनी राखिएकोमा कक्षा १२ मा अन्तरराष्ट्रिय जीवनी समावेश गरिनु स्तरणका दृष्टिले पनि सरल जटिल क्रम मिलेको देखिन्छ । स्नातक तहको पाठ्यक्रममा चाहिँ कविता, कथा, निबन्ध, नाटक र उपन्यास विधालाई मात्र समावेश गरिएको छ । यसले विद्यालय तहमा विधागत विविधताको पर्याप्तता अनि स्नातक तहमा पनि तिनको उपस्थिति हुँदा अनिवार्य नेपाली विषयको तहगत क्रमिक विकास कायम हुने देखिन्छ ।

साहित्य खण्डअन्तर्गत कक्षा ११/१२ मा कवितामा देशभक्ति, समाज, गीति, मनोवैज्ञानिक विषयवस्तु, कथा विधामा सामाजिक, मनोवैज्ञानिक, ऐतिहासिक, पौराणिक विषयवस्तु, निबन्ध सांस्कृतिक, प्राकृतिक र नियात्रा विषयवस्तुमा आधारित आत्मपरक र वस्तुपरक निबन्ध रहेका, पत्र लेखनमा घरायसी र व्यावसायिक चिठी, जीवनी राष्ट्रिय र अन्तर्राष्ट्रिय विषयवस्तु रहेका, रिपोर्ताजमूलक रचनामा स्वास्थ्य, योग तथा चिकित्सा, अर्थ उद्योगको विषयवस्तु, दैनिकी रचनामा पर्यटन विषयवस्तु, जलस्रोत र ऊर्जा विषयवस्तुमा आधारित वक्तृता पाठ, सामाजिक उपन्यास, कानुन, प्रशसन र व्यवस्थापन सम्बद्ध आख्यानात्मक रचना आदि पाठहरू समावेश गरिएका छन् । स्नातक तहमा कवितामा राष्ट्रियता, समस्यामूलक, स्वैरकल्पनात्मक, मानवतावादी, द्वन्द्व र हिंसासँग सम्बन्धित सामाजिक विषयवस्तु, निबन्धमा राष्ट्रियता, निराशावादी जीवन चिन्तन, हास्यव्यङ्ग्यात्मक/विसङ्गतिवादी, मानवीय निराशा, कथा विधामा राजनैतिक, मनोवैज्ञानिक, समसामयिक समाज आदि विषयवस्तु, उपन्यासमा पर्यायवरणीय विषयवस्तु, नाटक विधामा सामाजिक, द्वन्द्व/विसङ्गतिसम्बन्धी विषयवस्तुहरू संयोजन गरिएको छ ।

विषयवस्तु स्तरणको विश्लेषण

कक्षा ११ र १२ को पाठ्यक्रममा साहित्यिक विधाका पाठ दिएपछि बोध र अभिव्यक्तिका पाठ्यवस्तु दिई अन्त्यमा व्याकरणात्मक अभ्यास समावेश गरिएको छ भने स्नातक तहमा चाहिँ साहित्यिक पाठ मात्र अलग राखिएको छ । पाठ्यक्रममा सबैभन्दा पहिले व्याकरण, त्यसपछि बोध र अभिव्यक्ति दिई अन्त्यमा साहित्यिक रचना राखिएको छ । यस दृष्टिले हेर्दा कक्षा ११, १२ मा चक्रीय प्रकृतिको स्तरण पाइन्छ भने स्नातक तहमा रेखीय प्रकृतिले विषयवस्तु स्तरण गरिएको छ । दुवै तरिका उपयुक्त रहे पनि विद्यालय तहका पाठ्यक्रममा व्याकरणका विषयवस्तु चाहिँ रेखीय रूपमा स्तरण हुन सक्दा विषयवस्तुको गहन रूपमा शिक्षण गर्न सकिने देखिन्छ । उदाहरणका रूपमा वर्तमान पाठ्यक्रम अनुरूप तयार भएको पाठ्यपुस्तकका हरेक पाठको व्याकरण अभ्यासको अन्त्यमा वर्णविन्यासको अभ्यासलाई लिन सकिन्छ । हरेक पाठमा वर्णविन्याससँग सम्बन्धित एक वा दुई प्रश्न राखिएको छ । यसको सट्टा वर्णविन्यासका सबै पक्ष समेटिने गरी कुनै एउटा पाठमा गहन अभ्यास राख्दा सिक्नु सिकाउनुपर्ने सबै विषयवस्तु एकसाथ उपलब्ध हुने देखिन्छ ।

शिक्षण सिकाइ सहजीकरण प्रकियाको विश्लेषण

विधा शिक्षण प्रकिया	कक्षा ११, १२	स्नातक तह मानविकी

कविता	कविता विधामा लयबोध, शब्दार्थ र वाक्यमा प्रयोग, संरचना (आदि, मध्य र अन्त्य) बोध, भावबोध, व्याख्या आदि कार्यकलापका साथै अनुकरणात्मक लेखन, सिर्जनात्मक अभ्यास आदि कार्यको अपेक्षा राखिएको छ ।	१. यस पाठ्यक्रममा कक्षागत र प्रयोगात्मक गरी दुई खण्डमा छुट्याई अभ्यास गराउने अपेक्षा राखेको छ ।
कथा	कथा विधामा उच्चारण, गति, यतिसहित हाउभाउपूर्ण पठन, कथाकथन, घटना वर्णन, घटना टिपोट, बोध, प्रश्नोत्तर, भाव वर्णन र अनुकरणात्मक तथा स्वतन्त्र सिर्जनात्मक अभ्यासका साथै सहकार्यात्मक पठन, छलफल, प्रस्तुतीकरण, प्रश्न निर्माण जस्ता कार्यकलाप समावेश गरिएका छन् ।	२. यसमा कक्षागत व्याख्यान, प्रश्नोत्तर, छलफल, कक्षाकार्य, गृहकार्य आदि गराउने उल्लेख छ । अन्य विशिष्टीकृत तरिका उल्लेख गरिएको छैन ।
निबन्ध	निबन्ध विधाका सन्दर्भमा शब्दार्थ र वाक्यमा प्रयोग, पठनबोध, विषयबोध, बुँदाटिपोट, व्याख्या, सारांश, प्रश्नोत्तर, अनुच्छेद लेखन र स्वतन्त्र लेखन जस्ता क्रियाकलापका साथै परियोजना कार्य, घटना अध्ययन, कक्षा छलफल र प्रस्तुतीकरण जस्ता कार्यकलाप गराउन खोजिएको छ ।	३. सम्बन्धित शिक्षकको निर्देशनमा विद्यार्थी आफैंले ३० अङ्कको अध्ययन पूरा गर्नुपर्ने उल्लेख छ ।
जीवनी	जीवनी विधाका लागि घटना वर्णन, घटना लेखन, बुँदाटिपोट, प्रश्नोत्तर, सारांश लेखन र जीवनी लेखनका साथै अन्तर्वार्ता, परियोजना कार्य, घटना अध्ययन जस्ता कार्यकलापहरू गराउन खोजिएको देखिन्छ ।	
रूपक	रूपक विधाअन्तर्गत संवाद, वादविवाद, मनोवाद, वक्तृताका माध्यमबाट हाउभाउसहित प्रदर्शन, अभिनयात्मक प्रस्तुति जस्ता कार्यकलापहरू गराउने कुरा उल्लेख गरिएको छ ।	
प्रयोजनपरक पाठहरू	प्रयोजनपरक शीर्षकमा अनुकरणात्मक, निर्देशनात्मक र स्वतन्त्र लेखन अभ्यास, छलफल र प्रस्तुतीकरण, परियोजना र खोजमूलक कार्य, विद्युतीय सामग्रीको अध्ययन जस्ता कार्यहरू गराउने कुरा उल्लेख भएको छ ।	

कक्षा ११ र १२ मा साहित्यिक विधा सापेक्ष बोध, व्यावहारिक लेखन र व्याकरणका अभ्यासहरू रहेका छन् भने स्नातक तहको पाठ्यक्रमको सुरुमा व्याकरण, त्यसपछि बोध र अन्त्यमा साहित्यका पाठ अलग अलग रूपमा राखिएको हुँदा निरपेक्ष रूपमा शिक्षणको अपेक्षा राखेको देखिन्छ । कक्षा ११-१२ सम्म भाषाका बोध र अभिव्यक्ति सिप विकासमा बढी जोड दिने खालको शिक्षण प्रक्रियाको अपेक्षा राखेको पाइन्छ भने स्नातक तहमा भाषिक सिपका साथै साहित्यिक आस्वादनलाई समेत महत्त्वका साथ शिक्षण गर्ने कुरालाई जोड दिइएको छ । कक्षा ११ र १२ मा कार्यकलापमुखी शिक्षण सिकाइ रणनीतिको अपेक्षा पाइन्छ भने स्नातक तहमा चाहिँ सैद्धान्तिक शिक्षणको अपेक्षा देखिन्छ । स्नातक तहमा विशिष्ट कार्यकलापहरु निर्देश गरिएका छैनन् भने कक्षा ११ र १२ मा हरेक साहित्यिक विधा शिक्षणका फरक फरक कार्यकलापहरू सुझाइएको छ । कक्षा ११, १२ को पाठ्यक्रमले सिपपरक कार्यकलापमा आधारित शिक्षण सिकाइ प्रक्रियाको अपेक्षा गरेको छ । यसमा विधा शिक्षणका सामान्य प्रयोजनमा आधारित कार्यकलापहरूले बढी स्थान पाएका छन् भने स्नातक तहमा कक्षागत व्याख्यान, प्रश्नोत्तर, छलफल, कक्षा कार्य र प्रयोगात्मक कार्यमा आधारित शिक्षण प्रक्रिया अपनाइएको देखिन्छ । समग्रमा अझ पनि दुवै तहको शिक्षण प्रक्रिया परम्परागत मान्यताको प्रभावबाट मुक्त हुन सकेको देखिँदैन । दुवै तहका नेपाली भाषा पाठ्यक्रमका शिक्षण सिकाइ प्रक्रियाहरू विद्यार्थीको स्वसिकाइ, स्वतन्त्र खोज, परियोजनामूलक कार्य, उत्प्रेरणामा आधारित सिकाइतर्फ अग्रसर हुने कार्यकलापमा जोड दिनुपर्ने देखिन्छ । त्यस्तै समूहगत र व्यक्तिगत प्रस्तुतीकरण, परियोजना र खोजमूलक कार्य, सान्दर्भिक विद्युतीय सञ्चारको उपयोग, सिपहरूको एकीकृत शिक्षण आदिमा जोड दिनुपर्ने देखिन्छ ।

मूल्याङ्कन प्रक्रिया

मूल्याङ्कन प्रक्रिया	**कक्षा ११, १२**	**स्नातक तह मानविकी र शिक्षा**
आन्तरिक तथा प्रयोगात्मक (२५ अङ्क)	आन्तरिक मूल्याङ्कनका लागि कार्यसञ्चयिका बनाई त्यसका आधारमा कार्य, व्यवहार र तिनमा आएको परिवर्तनको आधारमा मूल्याङ्कन, गृहकार्य, कक्षाकार्य, परियोजना कार्य, सामुदायिक कार्य, सह/अतिरिक्त क्रियाकलाप, एकाइ परीक्षा, मासिक परीक्षा जस्ता मूल्याङ्कन साधनहरूको प्रयोग, आवश्यकताअनुसार सुधारात्मक र उपचारात्मक शिक्षण, समग्रमा कक्षा सहभागिता, कक्षाकार्य/परियोजना कार्य, विषयवस्तुको मूल्याङ्कन तथाा आन्तरिक परीक्षाको आधार लिइने व्यवस्था गरिएको छ ।	मानविकी तथा सामाजिक शास्त्र सङ्कायमा आन्तरिक र बाह्य मूल्याङ्कन प्रणाली कायम गरिएको छ भने शिक्षाशास्त्र सङ्कायमा बाह्य मूल्याङ्कन प्रणाली कायम गरिएको छ । आन्तरिक परीक्षा : उपस्थिति (५ अङ्क), कक्षा सहभागिता र प्रस्तुति (५ अङ्क), आन्तरिक परीक्षा (१० अङ्क), परियोजना कार्य (१० अङ्क) गरी ३० अङ्कको आन्तरिक मूल्याङ्कनको व्यवस्था मिलाएको छ । यस पाठ्यक्रममा प्रयोगात्मक कार्यकलापका लागि पाठ्यांश र कियाकलापसमेत निर्देश गरेको छ ।
बाह्य परीक्षा	बाह्य मूल्याङ्कनका सन्दर्भमा वर्ण पहिचान (३	शिक्षाशास्त्र सङ्कायमा ९० पूर्णाङ्कका

(७५ अङ्क)	अङ्क), वर्णविन्यास (३ अङ्क), पदवर्ग पहिचान (२ अङ्क), शब्द निर्माण (४ अङ्क), रूपायन र पदसङ्गति (३ अङ्क), काल, पक्ष, भाव र वाच्य (५ अङ्क), शब्दस्रोत र शब्दकोशीय प्रयोग (२ अङ्क), वाक्यान्तरण (३ अङ्क), पठनबोध (८ अङ्क), बुँदा टिपोट र सारांश (५ अङ्क), पाठगत बोध (छोटो उत्तरात्मक ८ अङ्क र समीक्षात्मक ८ अङ्क), निबन्ध लेखन (८ अङ्क), प्रतिक्रिया लेखन (४ अङ्क), व्यावहारिक लेखन (४ अङ्क), प्रतिवेदन तथा टिप्पणी लेखन (५ अङ्क) निर्धारण गरिएको छ ।	विषयगत प्रश्नहरू र १० पूर्णाङ्ककको वस्तुगत सोधिने व्यवस्था मिलाइएको छ ।

मूल्याङ्कनका सन्दर्भमा कक्षा ११ र १२ मा प्रयोगात्मक मूल्याङ्कनका स्पष्ट आधारहरू उल्लेख भएका छन् भने स्नातक तहमा अङ्क मात्र विभाजन गरिएको छ । स्नातक तहको भन्दा कक्षा ११, १२ को मूल्याङ्कन पद्धतिमा सबै पाठ्यांश समेटिने गरी मूल्याङ्कनका आधारहरू उल्लेख भएका छन् । स्नातक तह (बिए)को पाठ्यक्रममा पाठ्यपुस्तक र सहायक सामग्रीसमेत उल्लेख गरिएको छ । दुवै पाठ्यक्रमका मूल्याङ्कन प्रक्रियामा परम्परागत पद्धतिको प्रभाव भने कायमै रहेको देखिन्छ । तिनमा विद्यार्थीका विविध प्रकारका मूल्याङ्कनीय तथा समीक्षात्मक तथा समालोचनात्मक तथा व्यावहारिक क्षमता परीक्षण हुने खालको मूल्याङ्कन प्रक्रियातर्फ अझ बढी अग्रसर हुनुपर्ने देखिन्छ ।

मानविकी सङ्कायको पाठ्यक्रममा कक्षागत शिक्षणका लागि व्याख्यान, प्रश्नोत्तर, छलफल, कक्षाकार्य र गृहकार्य आदि गरी आन्तरिक मूल्याङ्कनलाई ३० प्रतिशत अनि बाह्य मूल्याङ्कनलाई ७० प्रतिशत अङ्क छुट्याइएको छ । तर शिक्षाशास्त्र सङ्कायको पाठ्यक्रममा आन्तरिक मूल्याङ्कनका लागि अङ्क छुट्याइएको छैन । मानविकी पाठ्यक्रममा व्याख्यान, प्रश्नोत्तर, छलफल, कक्षाकार्य, समूहकार्य, गृहकार्य, परियोजनाकार्य मानविकीभन्दा भिन्न शिक्षामा थप परियोजना कार्य र समूहकार्य उल्लेख गरिएको छ । स्नातक तहको शिक्षण विधि शिक्षक केन्द्रित रहेको देखिएकाले यसमा विद्यार्थीलाई सक्रिय बनाउने विधि आवश्यक रहेको, कक्षा ११, १२ मा आन्तरिक मूल्याङ्कन २५ प्रतिशत (कक्षा सहभागिता ३, कक्षाकार्य/परियोजना कार्य ६, विषयवस्तु मूल्याङ्कन १० (सुनाइ ३ अनि बोलाइ ७ अङ्क), त्रैमासिक परीक्षा ६, बाह्य मूल्याङ्कन ७५ अङ्क निर्धारण गरिएको छ । कक्षा ११, १२ मा व्याकरणलाई २५ अङ्क, बोध र अभिव्यक्ति ३० अङ्क, साहित्यिक रचनाका लागि २० अङ्क निर्धारण गरिएको देखिन्छ ।

शिक्षक तथा विज्ञहरूसँगको छलफलका आधारमा पनि प्रचलित मूल्याङ्कन प्रक्रिया केही केही हदसम्म निष्पक्ष रहेका अनि हाल प्रचलित मूल्याङ्कन प्रक्रियाले विद्यार्थीको बोध, अवधारणा र प्रयोग क्षमता मापनका राम्रोसँग

मापन गरेको प्रतिक्रिया प्राप्त भएको छ । हालको मूल्याङ्कन प्रणालीका सबल पक्षहरूमा आन्तरिक र बाह्य मूल्याङ्कनलाई समेट्नु, प्रयोगात्मक परीक्षा (११ र १२) मा व्यवस्था हुनु, मूल्याङ्कन प्रणालीलाई व्यावहारिक र कार्यमूलक बनाउन प्रयास गरिनु आदि रहेको पाइन्छ । हालको मूल्याङ्कन प्रक्रियामा सुधारका लागि स्नातक तहका बिएड र बिए तहको मूल्याङ्कन प्रणालीमा एकरूपता ल्याउनुपर्ने, कक्षा ११, १२ को मूल्याङ्कन अन्तर्गत कक्षाकार्य र परियोजना कार्य भनिएको ठाउँमा परियोजना कार्यलाई अनिवार्य गर्नुपर्ने महसुस हुन्छ ।

प्रस्तुत पाठ्यक्रममा आलोचनात्मक सोच, समस्या समाधान र अनुसन्धान सिपहरू केही मात्रामा समेटिएको देखिन्छ । सहभागीहरूबाट समस्या समाधान र अनुसन्धान सिपहरूमा बढी जोड दिनुपर्ने प्रतिक्रिया प्राप्त भएको छ । अपनाइएका मूल्याङ्कनका तरिकाले आलोचनात्मक सिप र समस्या समाधान सिपको प्रवर्द्धनका सन्दर्भमा सहभागीहरूबाट मिश्रित प्रतिक्रिया प्राप्त भएको छ । हालको पाठ्यक्रम विद्यार्थीहरूको भविष्य निर्माण र व्यावहारिक जीवनसँग मध्यम रूपमा सान्दर्भिक रहेको देख्न सकिन्छ । प्रतिक्रियाका आधारमा पाठ्यक्रममा विज्ञान कथा, समसामयिक जीवन भोगाइ बालमनोविज्ञान आदिका विषयवस्तुहरू थप गर्नुपर्ने देखिन्छ । त्यस्तै वर्तमान पाठ्यक्रमलाई अझ सान्दर्भिक बनाउन शिक्षक सेवा आयोग तथा लोक सेवा आयोगको पाठ्यक्रमसँग जोड्ने, व्यावहारिक लेखन र कक्षा ११/१२ मा सूचनाको रूपान्तरण सम्बन्धी विषयवस्तुहरू थप गर्नुपर्ने देखिन्छ । पाठ्यक्रम अन्तर्विषयगत सिकाइ र अन्तरविषय एकीकृतताका दृष्टिले कमजोर रहेको प्रतिक्रिया प्राप्त भएकाले यसतर्फ ध्यान दिनुपर्ने देखिन्छ ।

नीतिगत र कार्यान्वयनका चुनौती र तिनको सम्बोधनको तरिका

विद्यमान नेपाली भाषा पाठ्यक्रम प्रभावकारी रूपमा कार्यान्वयन गर्न शिक्षकहरूबाट शैक्षिक सामग्री व्यवस्थापन, तालिम र प्रबोधीकरण तालिम आवश्यक रहेको, मूल्याङ्कन र विषयवस्तुमा अन्योलता जस्ता चुनौतीहरू सामना गर्नुपरेको जस्ता प्रतिक्रिया आएको छ । उनीहरूबाट पाठ्यक्रम कार्यान्वयनका लागि पाठ्यपुस्तकहरू, डिजिटल उपकरणहरू, तालिम आदि आवश्यक स्रोतहरू मध्यम रूपमा मात्र पर्याप्त रहेको प्रतिक्रिया प्राप्त भएको छ । साथै शिक्षकहरूलाई विद्युतीय उपकरणको प्रयोगमा शिक्षण/प्रशिक्षण/सेवाकालीन तालिम उपलब्ध नहुनु, वर्तमान शिक्षण सिकाइ प्रविधिमा समावेश नहुनु, आवश्यक शैक्षिक सामग्री र तिनको उपयोगबारे तालिमको व्यवस्था नहुनु, प्रविधिको ज्ञान नभएको र सोको तालिमको अभावले गर्दा चुनौती थपिएका छन् ।

विद्यालय तहमा पाठ्यक्रम प्रारूप तयार भएको हुँदा अलि स्पष्ट रहेको तर विश्वविद्यालयमा त्यो नहुँदा केही अस्पष्टता रहेको छ । तल्ला तह र माथिल्ला तहका पाठ्यक्रममा धेरै अन्तर हुनुहुँदैन । मानविकीमा विषयवस्तुलाई प्रधानता अनि शिक्षामा विषयवस्तु र शिक्षण प्रविधि दुबैलाई समेटिने हुँदा यी दुबै भिन्न हुन्छन् । कक्षा ११, १२ मा व्याकरणमा बढी जोड दिइएको त्यस्तै कक्षा ११, १२ मा जस्तो स्पष्टता स्नातक तहमा देख्न नसकिएको हुँदा पाठ्यक्रममा अलमल देखिन्छ । यी दुवै तहका पाठ्यक्रममा सूचना प्रविधिसम्बन्धी विषयवस्तुलाई प्राथमिकताका साथ जोड्नुपर्ने देखिन्छ ।

विषयवस्तुका सम्बन्धमा विज्ञहरूबाट कक्षा ११, १२ मा पाठ सङ्ख्या अझै धेरै रहेकाले घटाउनुपर्ने, व्याकरणको पाठ्यांश भारी भएको, आवृत्त पाठ्यवस्तु हटाउनुपर्ने वा शिक्षण सिकाइ सहजीकरणमा मात्र जोड्नुपर्ने प्रतिक्रिया प्राप्त भएको छ । त्यस्तै, प्रयोगात्मक मूल्याङ्कन प्रविधिहरू थप गर्नुपर्ने अनि प्रयोगात्मक मूल्याङ्कनका प्यारामिटरहरू अझ स्पष्ट पार्नुपर्ने देखिन्छ । पाठ्यक्रममा रिपोर्ताजमूलक रचना, सञ्चारका विभिन्न माध्यमहरू शिक्षण सिकाइमा जोड्नुपर्ने अनि व्याकरण शिक्षणलाई अझ बढी सन्दर्भपरक र कार्यपरक बनाउनुपर्ने देखिन्छ ।

हालको स्नातक तहको नेपाली भाषा पाठ्यक्रममा पठनबोध खण्ड छुट्टै राखिएको छ । यसमा विधाको उपयोग गरिएको छैन भने ११, १२ मा पाठअनुसारका बोध अभिव्यक्ति अभ्यासहरू रहेका छन् । स्नातक तहमा विधालाई आस्वादन गर्ने प्रयोजन केन्द्रित रहेको छ भने ११, १२ मा बोध र सिपपरक विषयवस्तुमा केन्द्रित गरिएको छ । कक्षा ११, १२ मा विधागत संरचनाका आधारमा तत्तत् पाठहरूमा नै सिर्जनात्मक तथा निर्देशनात्मक रचना अभिव्यक्ति गर्ने कुरामा केन्द्रित रहेको छ भने स्नातक तहमा अनुच्छेद रचना, व्यावहारिक लेखन, निबन्ध लेखन र प्रतिवेदन लेखनलाई विधागत निरपेक्षताका आधारमा प्रस्तुत गरिएको छ । कक्षा ११, १२ मा बोध खण्ड रहे तापनि स्नातक तहमा बोधमा जोड्न सकिएको भए राम्रो हुने देखिन्छ । कक्षा ११, १२ देखि नै भाषा पाठ्यक्रममा विद्यार्थीलाई रोजगारीसँग जोड्ने विषयवस्तुहरू समावेश गर्ने अनि शिक्षणमा आस्वादनीय पक्ष थप गरी स्नातक तहसँग शिक्षणीय रूपमा तालमेल मिलाउन सकिने देखिन्छ । साथै कक्षा ११, १२ मा सूचनाको रूपान्तरण अवधारणा र प्रयोग, सङ्कथन संसक्ति जस्ता विषयवस्तु समावेश गर्दा अन्तराल कम गर्न सकिन्छ ।

प्राप्त प्रतिक्रियाका आधारमा पनि कक्षा ११, १२ र स्नातक तहका विषयवस्तुबिच आंशिक रूपमा तालमेल रहेको देखिन्छ । उक्त तहहरूका बिचमा व्याकरण र बोध तथा अभिव्यक्तिका विषयवस्तुहरूमा तालमेल मिलाउने प्रयास गरिएको अनि साहित्यतर्फ कथा र उपन्यास दुई विधाका पाठहरूमा तहगत क्रमबद्धता उचित रहेको भए पनि विधागत रूपमा विविधताको भने कमी रहेको, कक्षा ११, १२ मा रहेका विषयवस्तुलाई स्नातक तहमा पनि निरन्तरता दिएर विस्तृत गर्ने काम गरिएको देखिन्छ । वर्तमान पाठ्यक्रममा रहेका विषयवस्तुगत कमीकमजोरी हटाउनका लागि कक्षा ११, १२ र स्नातक तहबिच व्याकरण, बोध तथा अभिव्यक्ति र साहित्य खण्डको अङ्कभारमा तालमेल मिलाउनुपर्ने देखिन्छ । त्यस्तै कक्षा ११, १२ मा विधागत प्रयोग, सिपगत शिक्षण तथा स्नातक तहमा आस्वादनीय पक्षबाट विधाको प्रयोग पाइनु विषयवस्तुको क्रमबद्ध विकासका दृष्टिले उपयुक्त देखिन्छ । यी दुई तहबिच सैद्धान्तिक रूपमा तालमेल वा उस्तै देखिए पनि व्यावहारिक रूपमा अलि कम तालमेल पाइन्छ । कक्षा ११, १२ र स्नातक तहका व्याकरण, बोध तथा अभिव्यक्ति र साहित्य खण्डको अङ्कभार र विषयवस्तुबिच तालमेल मिलाउनु पर्ने देखिन्छ । त्यस्तै गरी सैद्धान्तिक, व्यावहारिक र प्रयोगात्मक रूपमा समान महत्त्वका साथ समान स्थान दिँदा प्रभावकारी हुने देखिन्छ ।

शिक्षण सिकाइका वर्तमान विधि पद्धतिहरूको प्रभावकारिता सम्बन्धमा शिक्षकहरूबाट कम प्रभावकारी रहेको प्रतिक्रिया प्राप्त भएको छ । साथै शिक्षकहरूबाट स्नातक तहमा विद्युतीय सामग्रीको उपयोग गर्ने अवस्था सिर्जना गर्नुपर्ने, विद्यार्थी केन्द्रित विधि उपयोगमा ध्यान दिनुपर्ने, विद्यार्थीले गरेर सिक्ने वातावरण तयार हुनुपर्ने, कार्यमूलक व्याकरणलाई थप प्रभावकारी बनाउनुपर्ने, शिक्षण सिकाइ प्रक्रिया तथा सिकाइ सहजीकरण साङ्केतिक

रूपमा मात्रै रहेकाले त्यसलाई बृहत् स्वरूपमा प्रस्तुत गर्नुपर्ने जस्ता कुराको आवश्यकता देखिन्छ। त्यस्तै अनुसन्धान र खोज, अवलोकन, क्षेत्रीय भ्रमण, प्रविधिमैत्री शिक्षण विधि अपनाउनु प्रभावकारी हुने प्रतिक्रिया पनि प्राप्त भएको छ। शिक्षण सिकाइमा सूचना प्रविधि र डिजिटल सिकाइ उपकरणको समेत उपयोग हुनुपर्ने देखिन्छ।

कक्षा ११, १२ मा सुनाइ/बोलाइअन्तर्गत ५/६ ओटा अनुच्छेद, पढाइमा ४/४ ओटा र लेखाइमा ८/९ ओटा उद्देश्य समावेश गरिएको छ भने स्नातकमा साधारण उद्देश्यतर्फ ६ ओटा र विशिष्ट उद्देश्य तर्फ ७ ओटा बोध तथा अभिव्यक्तिसम्बन्धी उद्देश्य समावेश गरिएका छन्। कक्षा ११, १२ मा कार्यमूलक व्याकरणलाई प्राथमिकताका साथ राखिएको छ भने स्नातक तहमा त्यसो गरिएको छैन। कक्षा ११, १२ मा व्याकरणलाई भाषा प्रयोगका आधारका रूपमा सैद्धान्तिकभन्दा रचनात्मक बनाउने प्रयत्न गरिएको छ भने स्नातक तहमा सैद्धान्तिक पक्षलाई बढी प्राथमिकताका साथ राखिएको छ।

सरोकारवालाहरूबाट विद्यालय तहको नेपाली भाषा पाठ्यक्रममा समावेशिताको पक्ष कम भएको भन्ने प्रतिक्रियालाई समेत आधार मान्दा पाठ्यक्रममा अझ ध्यान जानु पर्ने देखिन्छ। रोजगारी र व्यावसायसँग जोड्ने पाठ्यक्रम आवश्यक रहेको छ। कक्षा १२ पास गरेर के बन्ने, कसो गर्ने भन्ने कुरा पाठ्यक्रममा आउनुपर्ने देखिन्छ। ज्ञानका लागि पढ्ने भन्दा पनि कमाउनका लागि पढ्ने प्रचलन समाजमा बढ्को अवस्थामा रहेको छ। लोक सेवा आयोग, शिक्षक सेवा आयोग, त्रि.वि. सेवा आयोग आदि जागिर दिने संस्थाका बारेमा जानकारी दिने विषयवस्तु थप्नुपर्ने देखिन्छ। कक्षा ११, १२ मा विधालाई भाषिक सिपसँग जोडिएको हुँदा स्नातक तहमा जस्तै सिप र आस्वादन दुबैलाई जोडेर शिक्षण गर्नु प्रभावकारी हुने देखिन्छ।

हालको विद्यालय तह र उच्च शिक्षाका पाठ्यक्रमका विषयवस्तुमा बढी अन्तराल रहेको हुँदा त्यसलाई कम गर्नेतर्फ ध्यान जानुपर्ने देखिन्छ। उच्च शिक्षाभित्र पनि मानविकी र शिक्षाका पाठ्यक्रममा भिन्नता देखिएको, खास गरी शिक्षण विधि र मूल्याङ्कन प्रकिया फरक रहेको अवस्था छ। तत्कालीन राजनीतिक परिवेश अर्थात् द्वन्द्वबाट प्रभावित भएको पृष्ठभूमिमा निर्माण गरिएको हुँदा राजनैतिक पृष्ठभूमिका पाठहरूको बाहुल्य रहेको देखिन्छ। विश्वविद्यालयका पाठ्यक्रमहरू प्रयोगात्मक प्रकृतिका भए पनि तिनको प्रयोजन चाहिँ सैद्धान्तिक जस्तो देखिएको छ। स्नातक तहमा मानविकीकै ढाँचा अवलम्बन गर्ने कि शिक्षाको फरक गर्ने भन्ने चाहिँ छलफलकै विषय रहेको, त्यस्तै स्नातक तहलाई पनि वार्षिक वा सेमेस्टर प्रणालीमा गर्ने भन्ने स्वरूप नै छलफलमा रहेकाले पनि तालमेल मिल्न सकेको देखिँदैन।

निष्कर्ष

विद्यालय तहको नेपाली भाषा पाठ्यक्रम नै स्नातक तहको नेपाली पाठ्यक्रमको आधार स्तम्भ हुने भएकाले कक्षा ११, १२ को पाठ्यक्रम उच्च शिक्षामा सहयोग गर्ने खालको हुनुपर्छ। यस अध्ययनबाट कक्षा ११, १२ का भाषा पाठ्यक्रमका उद्देश्यहरू तहगत सक्षमता र सिकाइ उपलब्धिमा आधारित रहेका अनि स्नातक तहमा साधारण र विशिष्ट उद्देश्यका रूपमा रहेको हुँदा तिनमा एकरूपता आवश्यक रहेको, विद्यालय तहका नेपाली भाषा पाठ्यक्रम भाषिक सिप केन्द्रित रहेको अनि स्नातक तहको भाषा पाठ्यक्रम भाषिक सिप र साहित्यिक आस्वादन दुवै पक्षमा

केन्द्रित रहेको हुँदा कक्षा ११, १२ को भाषा पाठ्यक्रममा साहित्यिक आस्वादन पक्षको सन्तुलन आवश्यक रहेको निष्कर्ष प्राप्त भएको छ । तथापि समग्रमा स्नातक तहको तुलनामा कक्षा ११, १२ को पाठ्यक्रम अद्यावधिक रहेको देखिन्छ ।

व्याकरणका विषयवस्तुहरू समावेश गर्दा कुनै विषयवस्तु कक्षा ११ र कुनै कक्षा १२ अनि कुनै दुवै कक्षामा वितरित गरिएको छ भने स्नातक तहमा उक्त सबै विषयवस्तुहरू समावेश छन् । कक्षा ११, १२ मा भन्दा भिन्न रूपमा स्नातक तहमा निर्देशित र स्वतन्त्र लेखनका रूपमा व्याकरणका विषयवस्तुलाई अभ्यास गराउन खोजिएको छ । उक्त दुवै तहका विषयवस्तुमा तहगत अन्तरसम्बन्ध र सरलजटिल क्रम मिलेको देखिन्छ । बोध अभिव्यक्तिमा कक्षा ११ का तुलनामा कक्षा १२ मा विषयवस्तुको क्षेत्र विस्तारित छन् । बोध अभिव्यक्तिका विषयवस्तुलाई स्नातक तहमा आइपुग्दा व्यावहारिक लेखनलाई अझ व्यापक पारिएको छ । तसर्थ, स्नातक तहलाई आधार मानी कक्षा ११, १२ का विषयवस्तुलाई विस्तार गर्नु उपयुक्त देखिन्छ ।

कक्षा ११, १२ को पाठ निर्माणमा पर्याप्त विधागत विविधता पाइन्छ भने स्नातक तहमा सीमित विधाका पाठहरू समावेश गरिएका छन् । त्यस्तै पाठ स्तरणलाई आधार मान्दा कक्षा ११/१२ मा चक्रीय र स्नातक तहमा रेखीय स्तरणका तरिकाहरू अपनाइएको देखिन्छ । दुवै तहमा अनिवार्य विषयका रूपमा नेपालीलाई समावेश गरिएको हुँदा स्तरणको एउटै तरिका अवलम्बन गर्नु उपयुक्त हुने देखिन्छ ।

कक्षा ११, १२ मा कार्यकलापमुखी शिक्षण सिकाइ रणनीति अपनाइएकोमा स्नातक तहमा चाहिँ सैद्धान्तिक प्रकृतिको शिक्षण सिकाइ रणनीतिकै बाहुल्य देखिन्छ । कक्षा ११, १२ को पाठ्यक्रमले सिपपरक कार्यकलापमा आधारित शिक्षण सिकाइ प्रक्रिया र प्रयोगात्मक कार्यको अपेक्षा गरेको छ तर स्नातक तहको शिक्षण सिकाइ सहजीकरण प्रक्रियालाई परम्पराभिन्न बनाई कार्यकलाप, परियोजना, स्वसिकाइ आदिमा जोड दिनुपर्ने देखिन्छ । कक्षा ११, १२ र मानविकी स्नातक तहमा विद्यमान आन्तरिक र बाह्य मूल्याङ्कनको व्यवस्था मिलाइएको छ शिक्षाशास्त्रतर्फ स्नातक तहमा चाहिँ आन्तरिक मूल्याङ्कनको छुट्टै व्यवस्था गरिरएको पाइँदैन ।

सुझाब तथा उन्नयनको आधार

कक्षा ११, १२ का नेपाली भाषा पाठ्यक्रम र स्नातक तहका नेपाली भाषा पाठ्यक्रमको अध्ययनबाट प्राप्त निष्कर्षका आधारमा उक्त तहका नेपाली भाषा पाठ्यक्रमका उद्देश्यहरूको प्रस्तुतिमा एकरूपता ल्याउनुपर्ने देखिन्छ । भाषा शिक्षणमा भाषिक सिपका साथसाथै साहित्यिक आस्वादनलाई पनि ध्यान दिइनुपर्ने हुँदा कक्षा ११, १२ मा साहित्यिक आस्वादनलाई ख्याल गर्नु अझ प्रभावकारी हुने देखिन्छ । स्नातक तहको पाठ्यक्रमलाई आधार मानी कक्षा ११, १२ का बोध र अभिव्यक्ति खण्डका विषयवस्तुलाई थप विस्तार गर्नु उपयुक्त देखिन्छ । कक्षा ११, १२ को पाठ छनोटमा विविधताको उपयोग गरे जस्तै स्नातक तहमा पनि अनिवार्य विषयका रूपमा नेपाली शिक्षण गरिने हुनाले सकेसम्म विधागत विविधताका आधारमा पाठ छनोट गर्नु उपयुक्त देखिन्छ । कक्षा ११, १२ र स्नातक तहमा सम्भव भएसम्म एकै प्रकृतिको विषयवस्तु स्तरण ढाँचा अवलम्बन गर्ने व्यवस्था मिलाउँदा अन्तरसम्बन्ध अझ निकट बन्ने देखिन्छ । त्यस्तै पाठ निर्माण गर्दा समसामयिक विषयवस्तुमा जोड दिनुका साथै व्यावहारिक सिप र नवप्रवर्तनमा

समेत जोड दिनुपर्ने देखिएको छ । उक्त दुवै तहका पाठ्यक्रममा व्यावहारिक तथा रोजगारीमूलक विषयवस्तुहरू समावेश गर्दा अझ प्रभावकारी हुने देखिन्छ ।

कक्षा ११, १२ को ढाँचा अपनाई स्नातक तहमा पनि विशिष्ट कार्यकलापहरू निर्देश गर्ने अनि परियोजना, स्वसिकाइ आदिमा जोड दिनुका साथै साहित्यिक विधा शिक्षणका फरक फरक कार्यकलापहरू उल्लेख गर्नु उपयुक्त हुने देखिन्छ । कक्षा ११, १२ र मानविकी स्नातक तहमा विद्यमान आन्तरिक र बाह्य मूल्याङ्कन प्रक्रियालाई अझ स्पष्ट रूपमा मापनका एकाइहरू उल्लेख गर्नुपर्ने देखिन्छ भने शिक्षातर्फ स्नातक तहमा चाहिँ आन्तरिक मूल्याङ्कनकै व्यवस्था मिलाउनुपर्ने देखिन्छ । शिक्षक प्रतिक्रियाका आधारमा पनि दुवै तहमा आन्तरिक मूल्याङ्कन कार्यलाई प्रभावकारी बनाउनेतर्फ परियोजना कार्यलाई अनिवार्य गरिनुपर्ने अनि बाह्य मूल्याङ्कनमा व्यावहारिक लेखनका विषयवस्तु बढी र तिनको अङ्कभार कम भएको देखिन्छ । जस्तै, कक्षा १२ मा व्यावहारिक लेखनका लागि १२ ओटा विषयवस्तु निर्धारण गरी जम्मा ४ अङ्कको प्रश्न मात्र सोधिने गरेको पाइन्छ । वर्तमान पाठ्यक्रममा व्याकरण, बोध र साहित्यमा अङ्कभारमा भिन्नता रहेको हुँदा एकरूपता मिलाउनुपर्ने देखिन्छ । स्नातक तहमा भिन्न भिन्न सङ्कायमा अनिवार्य नेपाली विषय शिक्षण गर्नुपर्ने भए पनि एकै किसिमले मूल्याङ्कन गर्ने परिपाटी निर्माण गर्नुपर्ने देखिन्छ ।

पाठ्यक्रम कार्यान्वयन गर्न शिक्षकहरूलाई तालिम कार्यक्रमहरूले राम्रो प्रभाव पार्ने हुँदा तालिम तथा प्रशिक्षण कार्यक्रमलाई अझ बढी प्रभावकारी बनाउनुपर्ने देखिन्छ । त्यस्तै शिक्षकको पेसागत विकासमा शिक्षकलाई तालिम दिएर त्यसको कार्यान्वयनको अवस्थाको निरीक्षण र मूल्याङ्कन गर्नु आवश्यक छ ।

नेपालको भाषा पाठ्यक्रमलाई भारत वा अन्य देशको तुलनामा प्रतिक्रिया लिँदा ८० प्रतिशत सहभागी अनविज्ञ रहेको भए पनि उनीहरूबाट प्राप्त प्रतिक्रियालाई आधार मान्दा विदेशी पाठ्यक्रम श्रम तथा रोजगारीका साथै स्थानीयतामा जोड दिने खालको रहेको हुँदा नेपालले पनि त्यसतर्फ ध्यान दिनुपर्ने देखिन्छ । त्यस्तै सिप र खोज अनुसन्धानमूलक कार्यतर्फ पाठ्यक्रम निर्माताको ध्यान जानु जरुरी देखिएको छ ।

Chapter IX: University Faculties and Students' Perspectives on Curriculum Alignment and Development

The study also explored the perspectives of university faculties from Kathmandu University, Nepal Open University, Mid-West University, and Tribhuvan university of Nepal on curriculum development process, process of harmonization with school level, pedagogies and other issues related to curriculum. Besides that, students' view regarding the alignment of 11 and 12 curriculum with their bachelor's level curriculum represented from different subjects and streams (mathematics, Nepali, English and Social Studies) is analyzed.

Curriculum Development Process at Bachelor Level

Described as "lengthy," the process of curriculum development for Kathmandu University consists, Needs Assessment, Stakeholder Consultation, Expert Consultation, Subject Mapping, Comparative Study with other Universities, Subject Council discussion, and Academic Council approval. Experts are assigned to draft and present the curriculum to the subject committee, which subsequently recommends it for academic council final approval. The respondent of NOU claims that the subject committee assigns experts to create the curriculum, which is subsequently presented for recommendation to the Academic Council and finally approved for use.

Under direction of university guidelines, academic trends, and stakeholder comments, Mid-Western University forms a subject committee comprising faculty members and experts. At Tribhuvan University, a system exists whereby a subject committee chooses professionals to create the curriculum. The subject committee is shown the draft, where external experts offer comments. Following changes, the subject committee approves and distributes it to the Dean's Secretariat, then to the Faculty Board, and lastly to the Academic Council at TU for application.

Universities follows a process of curriculum development and finalization in which subject committees, expert advice, and several levels of approval needed from Subject Council/Committee, Academic Council/Faculty Board. The frequency and depth of revision, however, seem to vary; some propose infrequent updates (MWU) while others stress a more rigorous process (TU, KU).

Students are unaware of the curriculum development process in both 11 and 12 and university levels. Students are not involved in the process of curriculum development and refinement process. Since, curriculum should be edited based on the student's levels, needs,

motivation and performance but in the existing curriculum development procedures students are not involved directly or indirectly.

Perspectives on Vertical Alignment between Grade 11 and 12 and Bachelor-level Curricula

The opinion of the faculty members f on vertical alignment between curriculum of Grades 11 and 12and Bachelor level found to be mixed, even though faculty at Kathmandu University (KU) specifically attempt for both "horizontal and vertical alignment" when creating curricula, and Nepal Open University (NOU) examines curricula for "vertical alignment" prior to development. Opinions among MW University faculty members vary; some point out that efforts have been inconsistent despite declared intentions, while others assert outright that there is "no vertical alignment" because of a "lack of coordination between CDC and University." Faculty member of TU claims that "to some extent" vertical alignment is established in subjects like B.Ed. in Science Education but it is not always as expected for new curriculum.

Regarding alignment of the curriculum students expressed different opinions. One student from science stream viewed, “The mathematics curriculum of grade 11 and 12 is useful to study mathematics contents like calculus, analysis and geometry but the content of algebra in B.Sc. is vast different from the curriculum of grade 11 and 12, so I have faced difficulties to study algebra at bachelor level.” Other student from BSc CSIT expressed, “the mathematics contents of grade 11 and 12 were more theoretical but here I need applied concept of mathematics, so, I am feeling difficulties. However, the concept learnt from grade 11 and 12 is useful for Bachelor’s level study”. These two views of students from general science and technical streams indicate that grade 11 and 12 mathematics curriculum is helpful to study theoretical concepts in Bachelor’s level but applied concept is limited in the Grades 11 and 12 curriculum.

The students from Bachelor level English subject expressed quite opposite views than science stream’s students. One student said, “The English curriculum of grades 11 and 12 was very much practical and skills based but the bachelor’s level curriculum of English is more literature based and is not useful in our daily life communication”. Similar, views were expressed from the students from Nepali subject. Regarding social studies subjects one students from BA sociology expressed that, “the social studies curriculum of grades 11 and 12 is very limited to address the needs of bachelor’s level curriculum. The BA sociology

curriculum is very vast and more theoretical and philosophical and the curriculum of grades 11 and 12 was very superficial and fragmented". These two kinds of verbatims indicate that the curriculum of grades 11 and 12 is aligned with bachelor's levels but the focus and scope of curriculum is different with bachelor's level.

Impressions of Current Curricula (Grades 11, 12, Bachelor)

Faculty at Kathmandu University express that there is too much of the content in the both bachelor and Grades 11 and 12. According to NOU faculty "some gaps," noting a single-track system with numerous subjects in Grades 11 and 12, contrasting with the more specialized courses at the Bachelor level was found. Mid-Western University faculty members show a strong sentiment that curricula should be "tailored to the needs of individual, society, and the nation. They also noted that Grades 11 and 12 is seen as "exam-focused and content-oriented," while Bachelor's emphasizes "theoretical depth." The other member believed the curricula were designed to incorporate each other or that more content was related than not. Overall, the university faculty felt there was "a good theoretical foundation, but often lacks practical application and critical thinking elements," and a clear "need to linkage between 11, 12 curricula and bachelor level."

Tribhuvan University faculty stated that the selection of subject areas for Grades 11 and 12 and B.Ed. in Science is "good," but courses are perceived as being in a "traditional format, overloaded with content and less emphasis on skill development." They concluded that new courses are required for both levels.

Alignment of Grade 11 and 12 with Bachelor-level Expectations and Content

Regarding the alignment of Grades 11 and 12 curriculum with bachelor's level curriculum the faculties from different universities had different opinion. The faculty from KU expressed *"From my perspective, the Grades 11 and 12curriculum aligns with the expectations and content of Bachelor-level courses in my subject. However, I do find it little vague, and there's too much of the content in Grades 11 and 12."* The faculty member from Nepal Open University (NOU) opined differently as *"In my understanding, the courses/curriculum of Grades 11 and 12 are developed at considerable level. However, I've observed that experts and the system are different; they do in their own way."* Faculty from Mid-Western University (MWU) expressed as,

> One of my colleagues argue that the curriculum 'must be aligned... but it is not so,' or there is only 'partial alignment' with a noticeable 'gap in complexity and terminology.' Yet, another respondent points out that the 'basic components introduced at the secondary level are also at Bachelor level.

In contrast with MWU faculty the faculty member from TU expressed, "We generally see a clear progression and advancement of content from lower to higher Grades, with foundational concepts being built upon. However, some subjects lack coherence and vertical and horizontal alignment." There is a "gap in complexity and terminology" and a lack of complete coherence, according to some university curricula of bachelor with Grades 11 and 12 curriculum, while others see some alignment or integration. The idea that systems and experts function independently (NOU) raises the possibility of difficulties in attaining seamless alignment.

The expectation of the students who are studying at bachelor's levels on different streams were also taken. The students from general science, humanities and mathematics education were satisfied with the contents provided in the grade 11 and 12 but the students from technical areas expected that the grade 11 and 12 curriculum should also include practical knowledge. One student viewed, *"The concept of computer programming and mathematics should be integrated to some extent. So that we can realize the application of mathematics in real world situation."* Students from social studies expected that, *"the curriculum should focus on specific concept on grade 11 and 12 that are useful in bachelor's level study."* And the students of Nepali and English literature were satisfied from Grades 11 and 12 curriculum but expect the changes in bachelor's level curriculum based on the practicability of the contents.

Clarity of Subject-Specific Competencies and Learning Goals

Regarding the clarity of subject-specific competencies of Grades 11 and 12 curriculum the faculties from different universities expressed different opinions. The faculty from KU expressed, *"Subject-specific competencies and learning goals articulated and reflected in the curriculum at both secondary and tertiary levels are very clear."* Similarly, NOU faculty member expressed, *"It is more or less clear and specific."* But the faculties form MWU and TU expressed quite opposite opinion. According to MW University faculty

members**, "***competencies in both secondary and higher education lack clarity; they're mentioned but ill-defined*." And one of the faculties of TU states that "*Grades 11 and 12 are designed as competency-based curriculum, but Bachelor level has no such claim. There is no demarcation between set competencies and learning outcomes," leading to potential confusion."*

This is a mixed view. KU states high clarity, while TU points to a lack of clear demarcation and differing approaches (competency-based vs. no explicit claim). MWU responses range from unclear to clear, suggesting inconsistency across subjects or institutions. The implementation of competency-based curricula appears to be a point of divergence.

Adequacy of Grade 11 and 12 Content for Bachelor-level Studies

Although Grades 11 and 12courses provide a basic foundation, universities mostly agree on their partial fit for Bachelor-level education and point out important shortcomings. The emphasis of Kathmandu University (KU) on *"proper harmonising between tertiary and secondary levels is finding the curriculum "*, Nepal Open University (NOU) notes, *"student's learning performance level seems not satisfactory."* MW University faculty notes, *"students often struggle with critical thinking and academic writing,"* Finding the secondary school content "not sufficient" for demands of higher education and calling for significant change in Bachelor-level curricula. Likewise, faculty member Tribhuvan University (TU) notes a *"gap in teaching and learning methods,"* whereby students even with a strong scientific background, lack the *"pedagogical knowledge"* needed for specialised programs such as B.Ed.

Strong agreement results that although Grades 11 and 12materials somewhat equip students, they usually lack the depth, practical application, critical thinking/academic writing skills needed for a Bachelor's degree. Still another issue is the "*learning performance level*" (NOU). Emphasised is the need of harmony.

Emphasized Teaching and Learning Methods at Bachelor Level

With a focus towards physical and hybrid delivery, Kathmandu University (KU) kept project-based and activity-based learning top priority. With the emphasis on inductive, participatory, and group projects, Nepal Open University (NOU) mostly adopts online tools. While MW University emphasises a mix of student and teacher-cantered approaches, including lectures,

discussions, demonstrations, and project work it also notes critically that stressed student-cantered methods are often *"not used in the classroom."* Likewise, although Tribhuvan University (TU) advises a wide range of approaches including laboratory work, experimentation, discussion, and problem-solving, it notes that in practice theoretical classes remain "mostly dominated by the lecture method". This shows a general desire for varied, active learning, usually hampered by difficulties in practical implementation.

Most colleges assert to stress active learning approaches (project-based, activity-based, participatory, cooperative) centred on the students. TU clearly notes, though, that actual classroom practice usually falls back on lecture-based approaches and that there is a discrepancy between stressed and applied approaches. This points to a discrepancy between intended instruction and actual application.

Students expressed similar views with the experts from TU. The teaching and learning methods of bachelor's level is more teacher centric. One student expressed; I feel the teaching method in secondary level were more understandable as the teachers were eager to teach students but I feel it is not same for bachelors." Other student viewed, "In 11 and 12 teachers guided us in every time, they gave us homework and gave feedback. Teachers cared us and closely watched our activities but now, I am missing in the classroom. Teachers do not have any concerned regarding our regularity and study." These two views of students indicate that the teaching and learning environment at schools was more teacher guided and in bachelors' level there is freedom of choice for the students. Both approaches have positive and negative side. In school, students need more support from teachers and students follow teachers' instruction but in bachelor's level students become matured and they can proceed their learning independently and this kind of situation can develop self-directed learning habits on students.

Innovative/Alternative Teaching Strategies

KU faculty members state the university is incorporating online and AI-integrated learning**,** demonstrating a move towards technological advancements in education. Nepal Open University found to be employing a pragmatic, context-adaptive approach**,** tailoring methods to specific needs rather than universal strategies**.** MWU faculty members accept, broad student-centered**,** IT-based, and project-based learning**,** incorporating mobile applications, and project work to make learning more engaging. Tribhuvan University

advocates for specific pedagogical models like flipped learning, reciprocal teaching**,** critical thinking, and community engagement. These shows a strong shift towards active, technology-enhanced, and student-centric pedagogies across universities in Nepal.

Specific Modifications for Content Alignment

Universities' faculties suggest key modifications for content alignment between secondary (Grades 11 and 12) and Bachelor-level curricula. KU faculty advocates for narrowing down content in Grades 11 and 12. NOU faculty member suggested for having a comprehensive review and improvement of scope and sequence across both levels. Faculty members of MWU suggest an extensive stakeholder consultation for the basic change that guarantees a smooth development and direct relevance of secondary content to Bachelor studies. This includes combining basic academic writing and introductory Bachelor-level ideas in Grades 11 and 12 to produce a less nervous English transition. In order to improve practical skills and career readiness, TU suggests including entrepreneurship courses and notes the need of filling in teaching approaches.

Faculty recommendations from the university include narrowing down content (KU, NOU implicitly), reviewing and enhancing the scope and sequence (NOU) of both level curricula for appropriate harmony. Students focus on to balance the transition from school level to university education. They viewed that the curriculum should contains both theoretical as well as applied (practical) aspects so that students can easily grasp the content of bachelor's level.

Improving Curriculum Development Process for Better Alignment with CDC

Improving curriculum alignment with the Curriculum Development Centre (CDC) mostly depends on cooperation and a stronger development process. While professors at Kathmandu University said *"The curriculum developed by CDC is good enough,"* Nepal Open University recommended *"Some introductory part and, other linkage is necessary to add in the courses."*

Emphasising the need of harmonising through research, cooperatively with CDC, interacting with 11 and 12 teachers and students, and creating a joint task force for CDC and University faculty, Mid-Western University faculty member offered a range of recommendations. Underlining the need of a harmonization between grades 11 and 12 and Bachelor level, they argued for regular review meetings for alignment and feedback loops

between secondary education and underlined that focus should be given need analysis of target groups. They also believed that the curriculum would be improved better if the Grades 11 and 12 curricula should have the content linkage to bachelor level and that improvements should come from "each teacher's (subject teacher), student's experience just like teaching methods, teaching goals." Similarly, a Tribhuvan University faculty member found the need for a more robust and rigorous approach, ensuring the involvement of multiple stakeholders throughout the curriculum design process.

Further Insights/Recommendations on Curriculum Development and Vertical Alignment

Mid-Western University faculty gave extensive recommendations, stressing seeking advice and suggestions from relevant stakeholders, highlighting the crucial nature of horizontal and vertical relationships, and advocating for curricula to be according to needs of students and society, and market, based on a need analysis of the target group and society. They underlined that vertical connection is necessary and compulsory, and proposed to develop a national curriculum alignment framework**,** promote continuous dialogue between school and university educators, and create student friendly content and a feedback-oriented curriculum. Joint workshops or seminars for high school and university instructors should be conducted to minimize the gaps curriculum. Update curriculum regularly in 2/3 years, ensuring it is related with society and aims to decrease gap between grades 11 and 12 and Bachelor level by assigning experts of related contents (area). Tribhuvan University member, similarly called for workshops between course developers from both levels, revision of bachelor-level curriculum following Grades 11 and 12, and the alignment of both courses with current market demands.

The major recommendations are for continuous revision based on market and societal demands, a more systematic and formal approach to vertical alignment (national framework, joint workshops, continuous dialogue), and a consistent focus on student-friendliness and relevance. The idea of narrowing down content and ensuring feedback mechanisms are also prominent

In conclusion, this part of the study provides a deeper comprehension of curriculum development processes and vertical alignment between Grades 11-12 and Bachelor-level curricula in Nepal, revealing both attempted and real differences across institutions. Kathmandu University and Tribhuvan University use structured, multi-stakeholder

curriculum design methods, whereas Nepal Open University and Mid-West University have different levels of expert participation and review frequency. A major concern is the lack of student participation in curriculum design, despite their significance as curriculum beneficiaries. Faculty perspectives of vertical alignment differ; whilst KU and NOU stress purposeful alignment efforts, MWU and TU point out inconsistencies, inadequate consistency, and institutional disconnects from the Curriculum Development Centre (CDC). Students in the science and technology streams found the Grades 11-12 curriculum to be useful and foundational for the Bachelor's-level courses, with gaps in practical application and terminological complexity. Students of humanities saw a gap between practical secondary education and theory-heavy undergraduate degrees. The discussion also emphasises a disconnect between planned instructional strategies and classroom realities: while universities claim to employ student-centered, project-based, and technology-integrated techniques, students often faced teacher-dominated methods, particularly at TU. The educators' suggestions centre on developing curricular materials and pedagogies through collaborative workshops, stakeholder discussions, curriculum shortening, and the creation of a national vertical alignment framework so that the curricula across levels can be coherent and additive minimizing content overlaps. These findings emphasise the significance of ongoing, feedback-driven curriculum adjustments, better uniformity across levels, and stronger interactions between the CDC and universities in promoting smooth academic transitions and improved student preparedness.

Chapter X: Conclusion and Recommendations

Based on the thematic analysis of qualitative responses and previously discussed curriculum comparisons of four subjects- Mathematics, English, Nepali and Social Studies conclusions and recommendations have been made aiming to strengthen the vertical alignment, pedagogical coherence, assessment integrity, and content relevance of the selected subjects from Grades 11 and 12and the Bachelor level in Nepal. Some recommendations have also been drawn based on the review of Nepal's Grades 11 and 12 curriculum and CBSE curricula of India.

Recommendations

In the following section, the recommendations have been organized subject-wise.

Mathematics

Strengthen Vertical Alignment Across Levels. To ensure a smooth academic transition, the curriculum must articulate clear, level-wise competencies. Topics such as Algebra (e.g., group theory, matrix applications) and Geometry (e.g., 3D reasoning and vectors) should be gradually introduced in Grades 11 and 12 to better prepare students for the bachelor level. Revising the curriculum to scaffold concepts more progressively, as seen in A-level and IB programs, can enhance coherence.

Ensure Consistency in Teaching and Learning Methods. Pedagogical methods must align across school and university levels. While school-level teachers are adopting interactive strategies like project work, group activities, and real-life applications, these are largely absent in bachelor-level classrooms. Both levels should integrate ICT tools (e.g., GeoGebra, Desmos) and encourage active learning to promote conceptual understanding and critical thinking.

Reform and Align Assessment Practices. Student assessment must go beyond rote memorization. Grades 11 and 12benefit from internal assessment, but bachelor-level programs rely heavily on final exams. Internal assessments at the undergraduate level, such as mini-projects, problem-based learning tasks, and reflective assignments, should be introduced. Moreover, clear rubrics and external moderation systems should be developed to improve reliability and fairness in evaluations.

Revise Curriculum Content for Relevance and Application. Curriculum designers must review and revise the content to enhance both academic depth and real-life applicability. Statistical tools, basic programming (e.g., Python, R), and data visualization should be

embedded in the curriculum. Additionally, complex topics in Calculus (e.g., hyperbolic functions) can be simplified or deferred, while essential algebraic structures can be introduced earlier.

Promote Continuous Professional Development. Finally, regular training programs and workshops should be provided to both school and university-level teachers to ensure they are equipped with up-to-date content knowledge, assessment literacy, and modern teaching strategies.

Social Studies

Strengthen Vertical Alignment Across All Disciplines. The theme of Caste, Ethnicity, and Identity must be intentionally aligned across levels to ensure coherent understanding. In Grade 11 Social Studies (Unit II), students are introduced to the meaning, definitions, and characteristics of caste and ethnicity (2.1), and distinctions between them (2.2). This foundational unit should include examples like Dalit, Janajati, and Madhesi identities, which are also covered under Dalit and inclusive laws, and changing definitions of Madhesi and caste identity in the Nepali context. However, to strengthen vertical alignment, these topics should not remain abstract. In Grade 12 Life Skills, the curriculum should emphasize how caste and ethnicity influence discrimination, access to rights, and social behavior. Content should integrate Grade 11 knowledge with skill-based learning—e.g., using real-life stories of Madhesi and Dalit youth to discuss inclusion and equality.
At the Bachelor Level (Sost.Ed.343), critical engagement must be deepened through sociological theories like conflict theory and intersectionality. Practical assignments should include analysis of Dalit-related laws, ethnic movements, and field studies on the changing identity of Madhesi groups.

Subjects such as Geography and Civics align well and share a strong vertical alignment between Grades 11 and 12 and Bachelor's programs because the curriculum exhibits a progression in knowledge and skills. However, it becomes noticeable that gaps arise in Sociology, Anthropology, and History area. Secondary school curricula in these areas tend to be more basic, descriptive, and context-driven, whereas Bachelor programs require more intense engagement with abstract theoretical frameworks, critical analyses, and interdisciplinary considerations. This leaves a shortfall in the preparedness of students (from secondary school) as they transition into university-level study. To address this problem,

basic sociological and anthropological theories must be inserted into an earlier academic stream. For example, including basics such as social structures, institutions, and important theorists. On the other hand, History begins with the modern, particularly in connection with Nepal's political developments, while, at the Bachelor level, ancient civilizations and general civilizational themes are topics of discussion. This reverse sequence can confuse students. To tackle this, curriculum planners should think about synchronizing the chronological agenda so that secondary-level students have a foundational comprehension of early human civilizations prior to tackling the more dynamic historical and political developments at the higher level.

Address Pedagogical Discontinuity Between Grades 11 and 12 and Bachelor Level. The teaching methods used in Grades 11 and 12 do not connect seamlessly with the approaches found in Bachelor-level (B.Ed.) programs. The secondary education system prioritizes practical student-centered teaching through role plays and projects but B.Ed. programs primarily rely on lectures without integrating life skills and reflective practice. The solution to this gap requires B.Ed. programs to demonstrate the educational methods they support by using inquiry-based participatory learning methods. Grades 11 and 12 theoretically focus on student-centered and experiential teaching methods but actual classroom implementation varies widely. The suggested teaching methods including project-based learning and role plays and discussions face inconsistent implementation because educators lack proper training and face limited time and lack of motivation. Many classrooms fail to effectively implement digital technology for teaching because they do not have proper access to digital tools or teachers do not use available technology correctly. The curriculum's advanced teaching approach fails to reach its complete potential because of this discrepancy. Several important measures must be implemented to close the existing gap. The secondary level educators need continuous practical professional development that teaches them how to implement project work alongside role play and collaborative learning approaches in student-centered classrooms. Schools need to have proper ICT equipment including computers and multimedia tools and teachers must receive training to use digital pedagogy for meaningful technology integration in their classrooms. The implementation of innovative teaching practices in classrooms requires regular monitoring and support systems to maintain their consistent application across all educational settings.

Reform Assessment Systems for Coherence and Skill Development. Assessment approaches used in Grades 11 and 12 do not match the evaluation methods found in Bachelor-level programs. Students in schools encounter assessment methods which evaluate their academic progress alongside their skills together with their values and behavioral development. The implementation of this method does not achieve its intended objectives in practice. The evaluation methods used in Bachelor-level education focus on theoretical content through final tests which do not evaluate student behavior or socio-emotional growth. To address this assessment gap B.Ed. programs ought to integrate soft skills evaluation tools that include peer feedback alongside participation rubrics and self-reflection checklists. The adoption of a 50% theoretical and 50% practical assessment system would encourage students to master content while applying knowledge to real-world situations. The Grades 11 and 12 assessment process requires an organized and standard method for implementing formative evaluation. The current approach to holistic assessment experiences different levels of implementation between educational institutions. The educational system needs to provide teachers with training about proper evaluation methods for soft skills and values and behavior through rubrics and reflective journals and peer evaluations. Portfolio assessment systems enable students to demonstrate their academic development through continuous evaluation while promoting educational engagement. Students will benefit from having project-based evaluations joined with traditional written exams because this approach will establish equal importance between intellectual learning and practical abilities which results in students achieving both academic and everyday competencies.

To improve Curriculum Relevance and Interdisciplinary Integration. The present Grades 11 and 12 curriculum contains theoretical elements that fail to represent modern-day world transformations Students face obstacles when different subjects lack interdisciplinary integration which stops them from understanding important connections between topics. The curriculum needs to incorporate modern skills including digital capabilities along with environmental consciousness and active participation in civic matters. Projects that merge Geography with Economics or History with Civic Studies enable students to develop critical thinking skills alongside real-world problem-solving abilities. Educational institutions need to perform curriculum assessments regularly to eliminate outdated content while adding current information that will help students succeed in college and handle modern-day issues.

Demand Based Training: Offer teacher training that is subject specific and driven by demand with an emphasis on the practical application of pedagogy and curriculum implementation.

Encourage Institutional Collaboration for Curriculum Coherence. Curriculum coherence faces a major obstacle because the organizations which handle secondary education do not work with the organizations that control tertiary education. Presently curriculum development methods remain disconnected while being exclusive and they do not follow a continuous process. The establishment of joint curriculum review committees needs to bring together representatives from secondary schools with university institutions Tribhuvan University. Through these committees learning goals and content can be synchronized between education levels. The annual curriculum review workshops need to include teachers together with students and faculty members and policymakers to create productive discussions. The B.Ed. program outcomes should be continuously evaluated to generate systematic feedback which will enhance secondary curriculum development for a connected and meaningful educational journey.

English Language

Increase Alignment of the Curriculum Between the Grades 11 and 12 and Bachelor Levels. Development of a coherent curriculum in the Bachelor of Education level by following a competency-based curriculum that aims at developing students' fundamental skills in English language use in their practical and professional areas.

Incorporate Contents for the Interest of the Students. The contents in the current Grades 11 and 12 curricula are to be revised by incorporating contents that relate to the recent global development, AI technology, digital learning and so on.

Reduce Content Loading of Curriculum and Make the Language Curriculum more Functional. As the primary goal of the English curriculum for bachelor level students is to develop their English proficiency, the bachelor level curriculum can be made less-content laden, and more a functional one to develop students reading, writing, listening and speaking skills, that also develop their vocabulary and grammar simultaneously.

Create Space for Oral Skills to Develop English Language Proficiency. The listening and speaking skills in Grades 11 and 12 are less-focused and these skills are almost given zero

focus in the bachelor level curricula of the selected streams. As stated by students, these skills are rarely taught in schools and universities even if they are included in the curriculum.

Address the Need for Academic Writing Skills for Students. The Grades 11 and 12 curricula may focus on developing students' basic skills in academic writing. As of now, the academic writing part is largely missing the currently practiced curricula.

Reduce Complexity in Reading Texts. The complexity of reading text should be reduced in order to maintain the readability of the texts for the target age group. The texts prescribed for reading should be simplified, shortened and the activities in relation to the texts comprehension should be increased.

Recommend Innovative Learning Strategies. In terms of the instructional strategies, the bachelor level curricula should provision more interactive, student-centered and communicative learning activities to provide students with extended engagement in English language use in real-life like situation.

Include Formative Assessment Procedures in the Curriculum. More space for formative assessment to be expanded by providing students with space for project work and other real-life like activities so that they can practice language to prepare for their future career.

Ensure the Technology-mediated Learning Opportunities for Children. The review of the curriculum of Grades 11 and 12 and bachelor levels showed that there is very little or no space imagined to engage students on technology-mediated and technology-enhanced learning activities. So, this study recommends that the curriculum should be made more interactive in the digital mode and adopt flipped learning techniques.

नेपाली भाषा

कक्षा ११ र १२ का नेपाली भाषा पाठ्यक्रम र स्नातक तहका नेपाली भाषा पाठ्यक्रमको अध्ययनबाट प्राप्त निष्कर्षहरूका आधारमा उक्त तहका नेपाली भाषा पाठ्यक्रमका उद्देश्यहरूको प्रस्तुतिमा एकरूपता ल्याउनुपर्ने देखिन्छ ।

- भाषा शिक्षणमा भाषिक सिपका साथै साहित्यिक आस्वादनलाई पनि ध्यान दिइनुपर्ने हुँदा कक्षा ११ र १२ मा साहित्यिक आस्वादनलाई ख्याल गर्दा अझ प्रभावकारी हुने देखिन्छ । स्नातक तहलाई आधार मानी कक्षा ११ र १२ का बोध र अभिव्यक्ति खण्डका विषयवस्तुलाई थप विस्तार गर्नु उपयुक्त देखिन्छ । कक्षा ११ र १२ को पाठ छनोटमा विविधताको उपयोग गरे जस्तै स्नातक तहमा पनि अनिवार्य विषयका रूपमा नेपाली शिक्षण गरिने हुनाले सकेसम्म विधागत विविधताका आधारमा पाठ छनोट गर्नु उपयुक्त देखिन्छ ।

- कक्षा ११ र १२ र स्नातक तहमा सम्भव भएसम्म एकै प्रकृतिको विषयवस्तु स्तरण ढाँचा अवलम्बन गर्ने व्यवस्था मिलाउँदा अन्तरसम्बन्ध अझ निकट बन्ने देखिन्छ । त्यस्तै पाठ निर्माण गर्दा समसामयिक विषयवस्तुमा जोड दिनुका साथै व्यावहारिक सिप र नवप्रवर्तनमा समेत जोड दिनुपर्ने देखिन्छ । उक्त दुवै तहका पाठ्यक्रममा व्यावहारिक तथा रोजगारीमूलक विषयवस्तुहरू समावेश गर्नुपर्ने देखिन्छ ।
- कक्षा ११ र १२ को ढाँचा अपनाई स्नातक तहमा पनि विशिष्ट कार्यकलापहरू निर्देश गर्नुका साथै कार्यकलाप, परियोजना, स्वसिकाइ आदिमा जोड दिनुका साथै साहित्यिक विधा शिक्षणका फरक फरक कार्यकलापहरू उल्लेख गर्नुपर्ने देखिन्छ । कक्षा ११ र १२ र मानविकी स्नातक तहमा विद्यमान आन्तरिक र बाह्य मूल्याङ्कन प्रक्रियालाई अझ स्पष्ट रूपमा मापनका एकाइहरू उल्लेख गर्नुपर्ने देखिन्छ भने शिक्षातर्फ स्नातक तहमा चाहिँ आन्तरिक मूल्याङ्कनकै व्यवस्था मिलाउनुपर्ने देखिन्छ । शिक्षक प्रतिक्रियाका आधारमा पनि दुवै तहमा आन्तरिक मूल्याङ्कन कार्यलाई प्रभावकारी बनाउनेतर्फ परियोजना कार्यलाई अनिवार्य गरिनुपर्ने, बाह्य मूल्याङ्कनमा व्यावहारिक लेखनका विषयवस्तु बढी र तिनको अङ्कभार कम भएको देखिन्छ । जस्तै, कक्षा १२ मा व्यावहारिक लेखनका लागि १२ ओटा विषयवस्तु निर्धारण गरी जम्मा ४ अङ्कको प्रश्न मात्र सोधिने गरेको पाइन्छ ।
- वर्तमान पाठ्यक्रममा व्याकरण, बोध र साहित्यमा अङ्कभारमा भिन्नता रहेको हुँदा एकरूपता मिलाउनुपर्ने देखिन्छ । स्नातक तहका भिन्न सङ्कायमा शिक्षण गर्नुपर्ने भए पनि एकै किसिमले मूल्याङ्कन गर्ने परिपाटी निर्माण गर्नुपर्ने देखिन्छ ।
- पाठ्यक्रम कार्यान्वयन गर्न शिक्षकहरूलाई तालिम कार्यक्रमहरूले राम्रो प्रभाव पार्ने हुँदा तालिम तथा प्रशिक्षण कार्यक्रमलाई अझ बढी प्रभावकारी बनाउनुपर्ने देखिन्छ । शिक्षकको पेसागत विकासमा शिक्षकलाई तालिम दिएर त्यसको कार्यान्वयनको अवस्थाको निरीक्षण र मूल्याङ्कन गर्नु आवश्यक छ ।
- नेपालको भाषा पाठ्यक्रमलाई भारत वा अन्य देशको तुलनामा हेर्दा ८० प्रतिशत सहभागी अनविज्ञ रहेको भए पनि उनीहरूबाट विदेशी पाठ्यक्रमले श्रम तथा रोजगारीका साथै स्थानीयतामा जोड दिने खालको रहेको हुँदा नेपालले पनि त्यसतर्फ ध्यान दिनुपर्ने देखिन्छ । त्यस्तै सिप र खोज अनुसन्धानमूलक कार्यतर्फ पाठ्यक्रम निर्माताको ध्यान जानु जरुरी देखिन्छ ।

Conclusion

This study explored the vertical alignment of the Grades 11 and 12 mathematics, Nepali, Social studies and English language curricula with that of the Bachelor levels in Education, Management and Humanities and Social Sciences students. It also presented a brief review of the Grades 11 and 12 curricula prepared and implemented by CDC Nepal and that of CBSE India. The analysis showed that there is a dire need to establish a vertically aligned, pedagogically coherent, and practically relevant curriculum in all the selected subjects. This is

important for providing the potential learners with opportunities to attend a less easy but rewarding path of learning during their transition to higher education from school education.

The study acknowledges that the Grades 11 and 12 curricula in these selected subjects is competency-based, life-skills oriented and aims to provide hands-on skills for students to develop their content and social-emotional skills. They emphasize on the development of critical thinking, awareness about cross-cutting issues of the society in Nepal and beyond. However, as the students reported they faced a gap in terms of the contents of learning when they move from secondary level into Bachelor's degree programs. There are several activities project works, role plays, experiments, etc. for the students in Grades 11 and 12 curricula that make learning fun, but in bachelor level curricula the contents depth is high so that students reported that they faced problem dealing with the contents. Teachers also echoed the similar experiences shared by the students.

In terms of content, in all subjects, upgrading on the currently specified contents was needed. In English for example, the students demanded more recent, factual and techno-embedded contents for reading so that it will be interesting to them to go through. In social studies the contents that relate to the recent global concerns, socially important issues to be added rather than some generic contents of geography and civics. In Nepali subject also, more practical activities to be included to link their education to their daily life and towards developing students' skills in dealing with issue of writing in Nepali for public and professional communication. Also, assessment procedures vary considerably. The Grades 11 and 12 curricula include formative, behavioral, and participatory appraisal, whereas evaluation for Bachelor's is still dominated by summative exams, expecting students to respond to theoretical contents in written examinations. For this reason, more balanced assessment approaches that merge theory with practice are needed for both levels, along with more assessment tools that test soft skills, critical thinking, and reflective learning. The teachers at both levels indicated, the adoption of student-centered teaching methods is a good thing but at the same time it faces challenges due to unequal resources, insufficient teacher training, and restricted access to ICT tools. Through the comparison of the curriculum developed and implemented by CBSE of India and that of Nepal, it was found that Nepal's curriculum required further work in terms of developing critical thinking skills, life skills and soft skills as per the market needs. For example, in English curricula, though the overall

nature of the courses in both countries was similar, the CBSE curricula is more detailed and specific.

The findings of the study also signal that the teacher education program curricula and curricula implemented in schools needed further work to make them coherent and aligned so that students transitioning to higher education do not face challenges in catching up with the contents and processes involved. In that the developers of school and university-level curricula need to come together to make a coherent whole.

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Annex 1

Desk Review Matrix

A. Comparative Review of Grades 11 and 12 Curricula: Nepal vs. India

Curriculum Structure & Governance

Aspect	Nepal	India	Comparative Analysis	Observations & Gaps
Governing Body				
Academic Streams				
Curriculum Framework				

Goal/competency of the curriculum

Subject	Nepal (Grade 11 and 12)	India (CBSE/ Grade 11 and 12)	Comparative Analysis	Gaps & Recommendations
English				
Maths				
Social Studies				

Subject-Wise Comparative Analysis

Subject	Nepal (Grades 11 and 12)	India (CBSE/ Grades 11 and 12)	Comparative Analysis	Gaps & Recommendations
English				
Maths				
Social Studies				

Hindi/Nepali				

Teaching & Learning Strategies

Aspect	**Nepal**	**India**	**Comparative Analysis**	**Recommendations**
Teaching Methods				
Use of Technology				
Research & Project Work				
Assessment & Evaluation				

Assessment & Evaluation Systems

Aspect	Nepal	India (CBSE/)	Comparative Analysis	Recommendations
Examinations				
Grading System				
Practical Exams & Projects				

B. **Research Matrix for Studying the Harmonization Between Grades 11 and 12 and Bachelor-Level Curriculum of Nepal**

Research Objective	Research Questions	Data Collection Methods	Data Sources	Analysis Method	Expected Outcome
1. Compare the vertical sequence and alignment of the curriculum of selected subjects (Nepali, English, Maths, Social Studies) in Grades 11 and 12 with that of the Bachelor level.	1.1 What are the similarities and differences in learning competencies between Grades 11 and 12 and Bachelor level?	- Desk Review (Curriculum Documents) - Comparative Analysis - Key Informant Interviews (KII) - Consultative Workshops	(Grades 11 and 12 and Bachelor-level curriculum - Curriculum developers - University faculties	- Thematic analysis for qualitative data - Comparative analysis of curriculum components	Clear understanding of content alignment, gaps, and inconsistencies in vertical sequencing.
	1.2 How are content, teaching methodologies, and student assessments aligned across these levels?				

2. Identify necessary aspects of improvement in the vertical sequence of the curriculum of selected subjects.	2.1 What challenges exist in transitioning from Grades 11 and 12 to Bachelor level? 2.2 What are stakeholders' perspectives on the gaps in curriculum design?	- Focus Group Discussions (FGDs) - Semi-structured Interviews - Review of student performance trends	- Teachers and students of Grades 11 and 12 and Bachelor level - University faculties - Education policy experts	- Qualitative coding of responses - Thematic content analysis	Identification of specific areas for curriculum improvement and transition smoothness.
3. Make pragmatic recommendations for improvement in curriculum design.	3.1 What structural and content modifications are needed for better curriculum continuity? 3.2 What best practices from other countries (India) can be adapted?	- Policy Review (India's curriculum) - Stakeholder Consultations - Workshops for curriculum improvement	- Grades 11 and 12 and Bachelor-level curricula from India - Education policymakers - Subject matter experts	- Policy analysis - Best practice comparison - Consensus-based recommendations	Evidence-based, actionable recommendations for aligning curricula to improve transition and coherence.

Annex 2

Detailed Research Matrix for Curriculum Alignment Study

Matrix for Curriculum Alignment for English

Goal/Competency

Grade 11	Grade 12	Bachelor Level (Humanities)	Bachelor Level (Management)	Bachelor Level (Science)	Bachelor Level
Grade 11>					
Grade 12>					

Comparative Analysis:

Gaps Identified:

Recommendations for Improvement:

Research Areas	Grade 11	Grade 12	Bachelor Level	Comparative Analysis	Gaps Identified	Recommendations
Goals/Competency	Grade 11>					
Contents						
Teaching & Learning Strategies						
Student Evaluation						
Goals/Competency						
Contents						
Teaching & Learning Strategies						
Student Evaluation						
Goals/Competency						
Contents						
Teaching & Learning Strategies						
Student Evaluation						
Goals/Competency						
Contents						
Teaching & Learning Strategies						
Student Evaluation						

Annex 3

Workshop Form: Curriculum Review and Development

Please complete the following form based on your experiences.

Section 1: General Information about Participants

Name (Optional):

Designation: (e.g., University Faculty, Curriculum Developer, Textbook Writer, Subject Teacher, Education Policy Maker, Researcher)

Institution/Organization:

Subject Area: (e.g., Mathematics, Nepali, English, Social Studies)

Years of Experience in Education:

Section 2: Vertical Sequencing and Alignment

How well do you think the current curriculum aligns vertically from Grades 11 and 12 to the Bachelor level in your subject?

Please provide your observation in this regard: ……

What are the areas that have strong vertical sequencing and alignment between the Grades 11 and 12 curriculum and that of the Bachelor level? Please list out your observation in points.

……

……

……

What areas need improvement to make the Grades 11 and 12 curriculum aligned with the Bachelor level curriculum?

……

……

……

Are there any missing foundational concepts that should be introduced at Grades 11 and 12 to prepare students for higher education? If yes, please provide the details of them and make a list.

……

……

……

In what ways do you think the transition between Grades 11 and 12 and Bachelor level can be made smoother for students?

……

……

……

What are the strengths of the Grades 11 and 12 curriculum to prepare the students for transition to higher education?

……

……

……

What are the weaknesses in the Grades 11 and 12 curriculum in relation to the transitions to higher education?

……

……

……

In what ways shall the current curriculum of Grades 11 and 12 be improved to closely link it to the bachelor level curriculum?

……

……

……

Section 3: Teaching and Learning Methods

What methods and techniques have been suggested in Grades 11 and 12 and bachelor level curriculum? Please make a list of them.

……

……

How effective are the current teaching and learning methods prescribed in the Grades 11 and 12 curriculum?

……

……

……

What types of innovative methods/techniques can be introduced in the Grades 11 and 12 so that students can prepare for the bachelor level?

……

……

……

How well does the Grades 11 and 12 curriculum integrate technology and digital learning tools?

……

……

……

What challenges do teachers face in implementing modern teaching methodologies while delivering the Grades 11 and 12 curriculum?

……

……

……

Are there any specific skills (e.g., critical thinking, problem-solving, research skills) that should be emphasized more in the curriculum to implement with the methods and techniques?

……

……

……

Section 4: Student Evaluation and Assessment

What evaluation and assessment methods are suggested in the Grades 11 and 12 curriculum?

……

……

……

Do you think the current evaluation and assessment methods suggested in the curriculum are relevant and useful? If yes, how and if not, why?

……

……

……

Do current assessments practices adequately measure students' understanding and application of concepts taught in your subject? If yes, how?

……

……

……

What are the strengths of the current evaluation system suggested in Grades 11 and 12 curriculum? Do they adequately match the curriculum of bachelor level?

……

……

What improvements would you suggest for the evaluation procedures?

……

……

What specific skills are expected to be developed and measured by the currently provisioned assessment methods?

……

……

Section 5: Curriculum Content and Relevance

How relevant is the current curriculum to students' future career prospects and real-world applications?

……

……

What are the most outdated topics in the curriculum that should be revised or removed?

……

……

What new topics or subjects should be added to make the curriculum more relevant?

……

……

How well does the curriculum incorporate interdisciplinary learning and cross-subject integration?

……

……

Section 6: Policy and Implementation Challenges

What challenges do educators face in effectively implementing the curriculum?

……

……

Are there sufficient resources (e.g., textbooks, digital tools, training) available to support curriculum implementation?

……

……

How well do teacher training programs prepare educators to implement the curriculum?

……

……

What improvements are needed in teacher training and professional development to support curriculum effectiveness?

……

……

Section 7: General Feedback and Recommendations

What are your overall recommendations for improving the curriculum?

……

……

How can stakeholders (teachers, administrators, policymakers, students) collaborate more effectively to improve curriculum development?

……

……

What specific actions are required for improving the current curriculum of Grades 11 and 12 to link it with the bachelor level curricula? Provide a list of improvements needed.

……

……

Any additional comments, suggestions, or concerns?

Annex 4

Subject-Specific Discussion Questions

1. What are your overall thoughts on the current curriculum for Grades 11and 12 and Bachelor levels in your subject?
2. How effectively does the curriculum prepare students for higher education and future careers?
3. How do you perceive the vertical sequencing from Grades 11and 12 to the Bachelor level in your subject?
4. What are the strengths and weaknesses of the current vertical sequencing?
5. Can you provide specific examples where vertical sequencing has been effective or ineffective?
6. How well does the grade 11and 12 curricula align with Bachelor-level courses in your subject?
7. What challenges do you face in achieving proper curriculum alignment?
8. What strategies have you used or observed to improve curriculum alignment?
9. How clearly are subject competencies and goals reflected in the curriculum?
10. Do you think the content covered in Grades 11and12 adequately prepares students for Bachelor-level studies? Why or why not?
11. What modifications would you suggest to improve content alignment between these levels?
12. What teaching and learning methods are emphasized in your subject's curriculum?
13. How effective are these methods in achieving desired learning outcomes?
14. What innovative teaching methods could be incorporated to enhance learning?
15. How are students assessed in your subject at both levels?
16. Do you think the evaluation methods are fair and comprehensive? Why or why not?
17. What improvements would you suggest for evaluation procedures?
18. What are your recommendations for improving vertical sequencing and alignment in your subject?
19. How can the curriculum development process in your subject be enhanced to align better with educational objectives?
20. What additional resources or support would be beneficial for curriculum developers in your subject area?

21. Do you have any additional insights on curriculum development and alignment?

Appendix 5

Open Ended Interview for University Teachers

University Information:

Dear Professors

Namaskar!

This research study supported by the Curriculum Development Centre (CDC), focuses on the harmonization of the Grades 11 and 12 curricula with Bachelor-level curricula in Nepal. One of the key objectives of the study is to explore the curriculum development processes and examine the current practices of vertical alignment between secondary (Grades 11 and 12) and higher education (Bachelor-level) across various universities in Nepal. The study aims to identify gaps and recommend strategies for improving coherence and continuity in curriculum design across these educational levels. Therefore, we kindly request your valuable insights by responding to the following open-ended questionnaire. Your input will play a crucial role in shaping recommendations for improving curriculum alignment and educational quality in Nepal.

Thank you for your time and contribution.

1. Can you explain the process your university follows for developing Bachelor-level curricula in your subject area?
2. To what extent does your university consider vertical alignment between the Grade 11and12 curriculum and the Bachelor-level curriculum in your subject?
3. What are your overall impressions of the current curriculum for Grades 11 and 12, as well as the Bachelor level, in your subject area?
4. Do you think the Grade 11and12 curriculum aligns with the expectations and content of Bachelor-level courses in your subject? If yes how?
5. How clearly are subject-specific competencies and learning goals articulated and reflected in the curriculum at both secondary and tertiary levels?
6. In your opinion, does the content covered in Grades 11 and 12 adequately prepare students for Bachelor-level studies at your university? Why or why not?

7. What teaching and learning methods are emphasized in your subject's curriculum at the Bachelor level?
8. How effective are these teaching methods in achieving the intended learning outcomes?
9. What innovative or alternative teaching strategies could be introduced to enhance student learning in your subject?
10. What specific modifications would you recommend to improve content alignment between the secondary (Grades 11and 12) and Bachelor-level curricula?
11. How can the curriculum development process in your subject be improved to better align with the Grade 11and12 curriculum developed by the Curriculum Development Centre (CDC)?
12. What additional resources or support would be helpful for curriculum developers working in your subject area?
13. Do you have any further insights or recommendations regarding curriculum development and vertical alignment between secondary and tertiary education levels? please give some specific suggestions.

Appendix 6

Questions for Students

Section A:

Background Information:

Program and Year of Study:

Subject/Discipline:

Section B: Curriculum Alignment and Preparation

- How well do you think your Grades 11 and 12 studies prepared you for your current Bachelor-level courses? Please explain.
- Were there any specific subjects or topics in Grades 11 and 12 that you found particularly helpful or unhelpful for your university studies? Why?
- Do you feel there is a clear connection between what you learned in Grades 11 and 12 and what you are learning now? Please give examples.
- What challenges did you face when transitioning from secondary to university-level education?
- In your opinion, what are the major gaps between the Grades 11 and 12curriculum and the Bachelor-level curriculum in your subject?

Section C: Teaching Methods and Learning Experience

- How would you describe the teaching and learning methods used in your Bachelor-level courses compared to those in Grades 11 and 12?
- Which teaching methods have helped you learn most effectively at the university level?
- What changes or improvements would you suggest in the Grades 11 and 12curriculum to better prepare students for university education**?**

Section D: Additional Feedback

- What additional support (e.g., orientation, bridge courses, academic counselling) would have helped you transition more smoothly into university studies?
- Do you have any other suggestions or insights regarding curriculum alignment between secondary and university education in Nepal?