# A CRITICAL ANALYSIS OF ENGLISH QUESTION PAPERS FROM THE FEDERAL BOARD THROUGH THE LENS OF BLOOM'S TAXONOMY COGNITIVE DOMAIN

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**Abstract.** The current research endeavor presented a critical analysis of the English question papers from the Federal Board of Intermediate and Secondary Education (FBISE) for Grade-X, specifically focusing on the years 2023 and 2024. The objectives of the study were: (i).to assess the cognitive levels of the items of SSC-II, English Question papers, conducted by FBISE Islamabad in the year 2023 and 2024, (ii) to analyse the order of thinking of items of SSC-II, English Question papers, administered by the FBISE, Islamabad in the year 2023 and 2024 by using the framework of the cognitive domain of Bloom's taxonomy, (iii). to compare both the question papers 2023 and 2024 to identify significant improvements if any in the, 2024 compared to English Question paper 2023. Utilizing Bloom's Taxonomy as a framework, the study investigated the cognitive levels of questions to assess their alignment with higher-order thinking skills (HOTS) essential for contemporary education. The methodology involved a quantitative analysis of question papers, further a checklist was used to mark the items against corresponding cognitive levels of Bloom's Taxonomy after understanding the connotation and denotation meaning of action verb used in each item. The cognitive level of each item was determined based on Bloom's Taxonomy (BT). The study also identified the areas for improvement. Findings revealed a predominance of lower order thinking skills (LOTS) in the question items, indicating a need for reform in question design to foster critical thinking and analytical abilities among students. The study concluded with recommendations aimed at enhancing the quality of paper designing, developing and setting. In addition, a portion of higher order thinking needs to be renationalized and increased at an appropriate level and the assessment should be aligned with 21st-century skills and educational standards.

**Keywords:** English Question Paper, Bloom's Taxonomy, Cognitive domain, Higher-order thinking skills (HOTS), Lower-order thinking skills (LOTS)

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## 1. Introduction

Adequate question paper pattern and its quality standards play a pivotal role in shaping student success and preparing them for the demands of a competitive global workplace. By ensuring that assessments are aligned with educational goals and industry needs, educational institutions can significantly enhance student outcomes and contribute to broader societal progress. While the traditional way of education just transfers the content knowledge while the global trends and modern education align teaching and its assessment system with life skills to enable the learners to deal with contemporary challenges (Hadi, 2018). One main issue that the question paper rare address the 21st century skills and higher order thinkings where to cope up with new challenges, the students need to learn higher order thinking skills so that they could participate actively in educational development because human mind is classified into higher-order thinking skills (HOTS) and lower-order thinking skills (LOTS) in terms of ability (Tanujaya, 2017). The students with HOTS may attempt challenging problems in various situations. In this context, the assessment system, particularly question paper has a significant role in developing higher-order thinking skills (HOTS) in students. No doubt, the International best practices have emphasized the authentic assessment, formative assessment, performance-based assessment, and digital assessment but Federal Board of Intermediate and Secondary Education (FBISE) has also made progress in many areas but there is a room to further align major part of the question paper with higher order thinking and 4Cs of 21st century skills to enhance the quality and reliability of the assessment. To gain deeper insights, a thorough review of the specific question papers, marking schemes, and examiner reports is recommended. The Federal Board of Intermediate and Secondary Education (FBISE) plays a pivotal role in shaping the educational landscape of Pakistan. The annual examinations conducted by FBISE, particularly for Grade-X, are crucial milestones in a student's academic journey. A comprehensive assessment of these examinations is essential to identify strengths, weaknesses, and areas for improvement. The current study delves into a critical analysis of Grade-X English annual question papers of FBISE for the years 2023 and 2024, examining their alignment with cognitive domain of Bloom's Taxonomy, identifying academic issues, finding their difficulty level, vertical progression and proposing recommendations for their quality enhancement. In addition to the above, consulting with language experts and educational researchers may also provide valuable perspectives to align the existing assessment and evaluation process with best global practices of assessment and evaluation (Chinedu, 2015).

### 1.1. Problem Statement

The literature suggests that teaching and learning of the classrooms solely depends on the paper pattern (Rind, 2019). Most secondary school teachers teach while keeping the exam paper in view and mainly focus on the selected contents of the textbook, holding a high chance of inclusion in the final exam paper (Rind, 2019). Mostly the teachers restrict their teaching and students' learning to paper patterns and selected contents that could produce better results in examinations. This phenomenon carries dangerous consequences if the English language paper is designed based on lower order thinking (Rind & Malik, 2019). The existing paper pattern encourages purely cramming and prepare low quality productivity that leads to good grades in the final exam result without any development of critical, analytical and creative thinking. Furthermore, the

NEAS identified that most of the question papers are disproportionate and commonly focus on specific portions of the syllabus, or sometimes they are very difficult or easy for students of the prescribed age group. Most of the questions relate to the lower level of Blooms Taxonomy (Bhutto & Rind, 2022). The current study will assess the SSC-II English question papers of FPISE 2023 and 2024 Islamabad in terms of their difficulty level and cognitive level of Bloom taxonomy.

### 1.2. Objectives of the Study

The study revolved around the following objectives:

1. To assess the cognitive levels of the items of SSC-II, English Question papers, conducted by FBISE Islamabad in the year 2023 and 2024.
2. To analyse the order of thinking of items of SSC-II, English Question papers, administered by the FBISE, Islamabad in the year 2023 and 2024 by using the framework of the cognitive domain of Bloom's taxonomy.
3. To compare both the question papers 2023 and 2024 to identify significant improvements if any in the, 2024 compared to English Question paper 2023.

### 1.3. Research Question of the Study

Following research questions were addressed:

1. What are the cognitive levels of the items in the SSC-II English question papers conducted by the FBISE Islamabad in the years 2023 and 2024?
2. How do the items of the SSC-II English question papers administered by the FBISE Islamabad in 2023 and 2024 reflect the order of thinking according to Bloom's Taxonomy cognitive domain framework?
3. What significant improvements, if any, can be identified when comparing the SSC-II English question papers from 2023 and 2024?

### 1.4. Significance of the Study

The current study may contribute to a more positive learning experience for students by ensuring that paper pattern balanced, challenging, meaningful and according to global standard and national needs. it can also contribute to a more effective and equitable education system in Pakistan, ultimately leading to better outcomes for students. The findings may guide the development of future question papers to ensure they are more balanced, challenging, and aligned with the needs of 21st-century learners.

## 2. Literature Review

The history of the paper pattern in Pakistan stemmed from the British Education System in 1880; in which the competency level has been fixed very low (Ishaq et al., 2020). An efficient and effective paper pattern is essential for the educational system, as it can play a vital role in the teaching and learning processes, contributing to the attainment of educational objectives (Shahid & Ambreen, n.d.). In Pakistan, the secondary exams are conducted by respective Boards of Intermediate and Secondary Education (BISE) and the papers are developed by these boards centrally. The students from all sectors participate in these exams. Additionally, the is also a Cambridge International Examinations (CIE), Ordinary level and Advanced level offer parallel public examinations alternative to traditional exam system. The English paper of the same grade of Cambridge system is comparatively higher in terms of psychometric priorities but it is slightly risky to entirely rely on the western curricula. Despite countless drawbacks, the papers developed under British Counsel for A-Level and O-Level promote quality of skills and knowledge as per

global needs (Pillay, 2017). These papers have comparatively better impact on the students when they enter tertiary education (Chicho and Hussein, 2022). In Pakistani school system, both the formative and summative evaluation are carried out, the former is conducted during learning process, while the later one is carried out at the end of the activity or academic year to assess the accomplishment of preset objectives (Pillay, 2017). It is an interesting aspect that the examination system and its criteria are devised and developed based on paper pattern (Khan et al., 2021).

### 2.1. Key Guidelines for Developing Standardized Question Paper

According to Mahroof & Saeed, (2021), the development of question papers necessitates to ensure validity and reliability in measuring student learning. To achieve this, the following guidelines should be ensured whether: (i). The curriculum is systematically divided into content strands, each representing specific learning objectives. (ii). The number of items, both selected-response (multiple-choice, true/false, etc.) and constructed-response (short answer, essay, etc.), are determined for each strand to ensure adequate coverage of the curriculum. (iii). Whether the items have been estimated in terms of difficulty level based on their expertise and knowledge of the subject matter. (iv). The items difficulty has been calibrated using statistical analysis of student performance to categorize items as easy, moderate, or difficult (Chomal, 2020).

### 2.2. Percentage Allocation of levels of Cognitive domains (K, U, A)

Designing, developing and setting of question papers are systematic processes and slightly tricky in terms of its composition keeping in view the cognitive levels as per curriculum requirements. Following proportion of Cognitive Levels may be adopted:

**Table 1** *Different Cognitive Levels to the Questions in Each Section of Question Paper.*

| **Cognitive Level Percentage** | **Percentage for Grades-IX** |
|---|---|
| Knowledge (Remembering) | 30% |
| Understanding | 50% |
| Applying (Analyze + Evaluate + Create) | 20% |
| Total | 100 % |

### 2.3. General Overview on Question Paper as Assessment Tool

Question paper is used as a central tool in education for conducting summative assessments at the end of an academic year or semester. In some contexts, question paper is the only tool used in examinations to assess the learners' achievement assessment (Kaur, 2018). The question paper, designed using Bloom's taxonomy framework, demonstrates construct validity by incorporating questions that target not only surface knowledge but also deeper cognitive abilities indicative of students' underlying potential (Mahroof & Saeed, 2021). Teachers across diverse educational settings believe that development of well-designed question papers can yield dependable outcomes to be both ethically justifiable and strategically beneficial. Therefore, the question paper needs continuous analysis and improvement in the examination process of the educational setup for effective education (Kaur, 2018). Similarly, most teachers use complex language in question papers that makes it difficult for students to understand and answer. It is crucial for teachers to recognize that the primary function of a question paper is to build a **communication channel** between students and examiner, rather than an instructional tool (Constantinou, 2020). Thus, to make the language clear to understand and answer the questions, the channel of communication should be very simple and well-defined. The current literature is

abounding with contextual as well as international studies while using Bloom's taxonomy of Educational Objectives. Further, the qualitative study analyzes the alignment of the Matric English curriculum SLOs and the question papers with the cognitive domain of Bloom's taxonomy (BT) for determining the difficulty level of the items of question papers. The findings of the study of English question paper of the year 2024 revealed that, the remember level of BT received a high weightage of 52 % of items reflecting LOTS. That research recommended that the significant part of the items of question paper should be based on higher order thinking (HOTS) (Zamir, 2023). According to Kalasuramath et al. (2015), question papers serve as a critical tool in education, shaping the learning and assessment experiences of students. A well-designed question paper can effectively assess students' understanding, critical thinking skills, and problem-solving abilities. However, poorly designed question papers can limit learning, promote rote memorization, and hinder the development of higher-order thinking skills. The current research paper critically analysed the quality of SSC-II English question papers in Pakistan, focusing on difficulty level, and alignment of the items of question papers with the Bloom's Taxonomy. While the findings of Qasrawi (2020), concluded that question papers play a pivotal role in the assessment process. They provide a standardized means of evaluating students' knowledge and skills. A well-constructed question paper can motivate students to learn, encourage critical thinking, and provide valuable feedback to teachers and students alike. However, a poorly designed question paper can lead to inaccurate assessments, demotivate students, and undermine the credibility of the education system. Bloom's Taxonomy provides a framework for classifying educational objectives into six cognitive levels:

a. **Remember:** Recalling facts, terms, basic concepts.
b. **Understand:** Interpreting information, explaining ideas.
c. **Apply:** Using learned knowledge in new situations.
d. **Analyse:** Breaking down information into parts to explore understandings and relationships.
e. **Evaluate:** Judging the value of material for a given purpose.
f. **Create:** Producing new or original work.

By analysing question papers using Bloom's Taxonomy, educators can assess the cognitive demand of questions and determine whether they effectively measure students' higher-order thinking skills. Some studies were reviewed and where the quality of question papers was analysed by using Bloom's Taxonomy. These studies have highlighted various issues, including: (i). Overemphasis on lower order thinking skills**. (**ii). Poorly constructed questions (iii). Lack of alignment with curriculum**.** (iv). Insufficient variety of question types. In conclusion, a question paper is a powerful tool for assessing student learning. However, their effectiveness depends on their quality and alignment with educational goals. By carefully considering the factors outlined in this paper, educators can develop high-quality question papers that promote critical thinking, problem-solving, and creativity. Furthermore, by analysing the results of assessments, educators can identify areas for improvement in teaching and learning practices (Qasrawi & Beni Abdelrahman, 2020).

### 2.4. Challenges in Developing English Question Paper at SSC Level

The literature on English paper pattern and designing at the secondary school level in Pakistan reveals significant challenges and opportunities. Recent studies emphasized the need for curriculum reform, teacher training, and the development of effective teaching modules to

improve the English paper pattern and ultimately enhance proficiency among students. Following areas were focused to bring major reforms in the assessment system:

**2.4.1. Curriculum Design and Relevance.** The English syllabus at the secondary level is criticized for not adequately preparing students as informed citizens, lacking essential democratic and political concepts (Shah et al., 2012). A review of textbooks in the provinces of Pakistan highlighted the necessity for textbooks to align with student interests and contemporary educational needs (Iqbal & Khan, 2013).

**2.4.2. Teacher Training and Module Development.** Studies suggested that teachers require professional development to adapt to new curricula and teaching methodologies and understand the tangible techniques of evaluation to improve the question paper and enhance English competencies required at secondary school level (Hussain, 2016).

**2.4.3. Digital technology Integration**. One main issue that the paper development process is purely manual and conventional in nature therefore keeping proper balance in terms of its difficulty level and quality is impossible. In this digital age, an online portal for question paper items collection and a items bank for question paper items storage are essential for timely question paper development. In addition, a software, for balanced question paper development, and ensuring appropriate ratio in all important aspects will be integral part of the quality paper composition.

**2.4.4. Challenges in Implementation.** Teachers face significant challenges, including student disengagement and inadequate resources, which hinder the designing and developing English language question paper and skills' development. The lack of standardized assessment methods further complicates the evaluation of student progress in English proficiency (Shafique et al., 2022). Despite these challenges, there is a growing recognition of the need for comprehensive reforms in English language requisition and improving competencies as a second language in Pakistan, focusing on curriculum relevance, teacher preparedness, and student engagement

## 3. Research Design

The study employed a quantitative research method and descriptive research design. The study conducted a comprehensive assessment of the SCC-II Annual English Question Papers from the Federal Board of Intermediate and Secondary Education (FBISE) for the years 2023 and 2024. The study described the characteristics of population to understand the cognitive levels of items of English question papers annual exam 2023 and 2024.

### 3.1. Conceptual Framework

The conceptual framework was grounded in Bloom's Taxonomy, focusing on the cognitive levels of the questions posed in the exams. This framework guided the analysis of the questions to determine whether they have effectively assessed the higher-order thinking skills. Furthermore, the framework also incorporated validity and reliability theories to evaluate the effectiveness of the assessments in measuring students' English competencies.

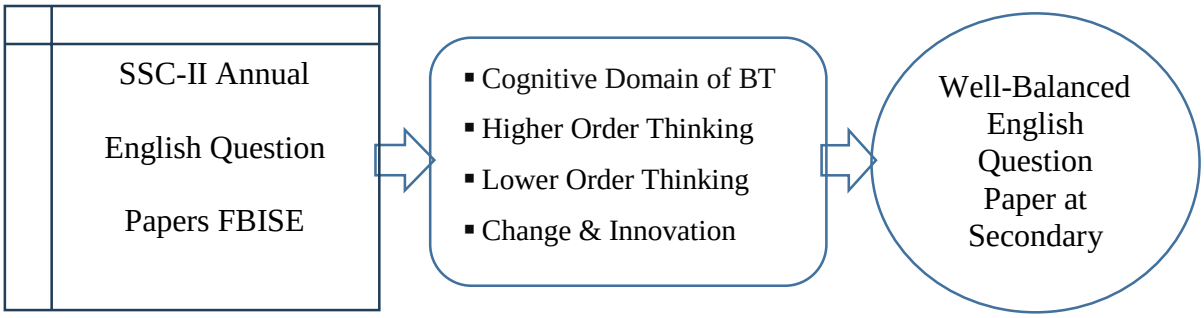


*Figure 1, Conceptual Framework*

### 3.2. Population

The population for this study comprised of all English question papers of SSC-II administered by the FBISE for the years 2023 and 2024. The current study encompassed the actual question papers, marking schemes, and available student performance data related to these assessments.

### 3.3. Sampling

A purposive sampling technique was employed to select the two specific English question papers administered by FPSC in Annual examination 2023 and 2024 for detailed analysis. This technique was justified as it allowed for a focused examination of the materials that are directly relevant to the research objectives.

### 3.4. Validity and Reliability of Question Papers

Cronbach's Alpha was calculated to assess the reliability of both question papers 2023 and 2024, which were 0.7 and 0.8 respectively. The values of Cronbach's Alpha showed that both the question papers have adequate internal consistency. While a content validity index (CVI) was employed to determine how well the questions aligned with the intended learning outcomes.

**3.5. Data Collection.** The data collection process was carried out by using purposive sampling technique to get best information for the study. The researcher obtained SSC-II, 10th Grade English question papers 2023 and 2024 from the Federal Board of Intermediate and Secondary Education (BISE) Islamabad. Both the exam question papers comprised multiple-choice questions, short-answer questions and long questions. The focused on the question papers, to understand how English exams have changed over time and to assess what kinds of questions are being asked to determine their level.

## 4. Data Analysis

The researcher examined the connotation and denotation meaning of action verb used in each item. A checklist was used to mark the items against corresponding cognitive levels of Bloom's Taxonomy. The cognitive level of each item was determined based on Bloom's Taxonomy (BT). The researcher figured out which items recall, understanding, applying, analysing, evaluating, and creating. The items were grouped based on their cognitive level. The researcher ensured that how many questions (items) were of same type and how many marks each question (item) was worth. The researcher used the table to analyse the distribution of questions across various cognitive levels which helped to understand how well the question papers of exam assessed various thinking skills. The process enabled the researcher to gain insights into the quality and balance of the question paper of exam. Similarly, the difficulty level of the items was also identified by grouping the items in LOTs and HOTs. Detailed content analysis of the question papers was conducted to categorize questions according to Bloom's Taxonomy. The steps in content analysis involved coding questions into cognitive levels (e.g., remembering, understanding, applying, analyzing, evaluating, and creating). This data was analyzed through descriptive statistics including percentage, mean score whereas the level of the items of question papers was analyzed through checklist for matching verb with level of Bloom's Taxonomy. The analysis was interpreted to answer research questions of the study. The researcher focused on horizontal and vertical analysis of the question papers which have been enclosed in the following tables.

**Table 3**. *FBISE Islamabad. English Question Paper for Annual Examination 2023*

| Section | Items | Type of Item | Number of Items | Marks | Level |
|---|---|---|---|---|---|
| **A** | 1 | Multiple Choice Questions | 15 | 15 | Recall |
| **B** | 2 | Read the following passage carefully and answer any five of the following questions. Question is compulsory | 5/7<br>1/2 | 18<br>2 | Understand, Analyze |
| | 3 | Part - A<br>(a) Paraphrase any one of the following stanzas<br>Part - B<br>Read the following stanza or Poem and answer the questions appended to it | 1/2<br>1/2 | 2<br>2 | Understand<br>Analyze |
| | 4 | **A**- Filling the blinks with appropriate form of Verbs given in the brackets (Any Four)<br>**B**- Change the following into Indirect Speech (Any four)<br>**C**- Do as directed any four of the following | 4/7<br>4/7<br>4/7 | 4<br>4<br>4 | Apply, Understand |
| **C** | 5 | Write a letter to the superintendent of your nearest Police Station about increasing number of mobile snatchings. **Or**<br>Write an application to the in charge of your traffic police | 1/2 | 8 | Apply, Create |
| | 6 | Describe the art of drawing, using appropriate/correct transitional devices (at least six) for connecting your ideas logically in paragraph | 1 - 6/6 | 6 | Understand |
| | 7 | Write an essay on any ONE of the following topics: (200-250 words)<br>▪ Floods **OR**<br>▪ Drug Addiction **OR**<br>▪ An Ideal Student | 1/3 | 10 | Create, Evaluate |

**Table 3**. revealed that Question 1 is entirely knowledge based, Question 2 and 3 fall under Understand/ Analyze, Question 4 is in Apply/ Understand. Question 5 falls in Apply/create, Question 6 in Understand while the last question 7 falls under cognitive level create and evaluate. Table revealed that total 71.42 falls in first three levels of cognitive level of Bloom's Taxonomy i.e. Lover Order Thinkings (LOTs) whereas, 28.57 % of the items of the English question paper of SSC-II conducted under FPSC in 2023 falls in Higher Order Thinkings (HOTs).

**Table 4**. *FBISE Islamabad. English Question Paper for Annual Examination 2024*

| Section | Items | Type of Item | Number of Items | Marks | Level |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| **A** | 1 | Multiple Choice Questions | 15 | 15 | Recall |
| **B** | 2 | Read the following passage carefully and answer any five of the following questions. Question is compulsory | 5/7<br>1/2 | 18<br>2 | Understanding |
| | 3 | Part - A<br>Paraphrase any one of the following stanzas | 1/2 | 2 | Understanding |
| | | Part - B<br>Read the following stanza or Poem and answer<br>the questions appended to it | 1/2 | 2 | Analyzing |
| | 4 | **A-** Do as directed any four of the following given in the brackets (Any Four)<br>**B-** Change the following sentences into Indirect narration speech (Any four).<br>**C-** Filling the blinks with appropriate degree of adjectives | 4/7<br>4/7<br>4/7 | 4<br>4<br>4 | Understanding<br>Apply<br>Analyze |
| **C** | 5 | **i.** Write an application to the principal for proper arrangement of clean drinking water in school **Or**<br>ii. Write a letter to the editor of the newspaper highlighting the need of park in your area. | 1/2 | 8 | Apply,<br>Create |
| | 6 | Use appropriate transitional devices in any six of the blanks to complete the process. | 1- 6/9 | 6 | Apply |
| | 7 | Write an essay on any ONE of the following topics: (200-250 words)<br>▪ Travel as part of education **OR**<br>▪ Benefits of digital technology **OR**<br>▪ My favorite hobbies | 1/3 | 10 | Create,<br>Evaluate |

**Table 4.** revealed that Question 1 is entirely knowledge based, Question 2 and 3 (Part-A) fall under the level Understand, Question 3 (Part-B) falls in level Analysing, Question 4 (Part-A) is in Understand, (Part-B) falls in Apply, and (Part-C) falls under Analyse. Question 5 (Part-i) falls in Apply, and (Part-ii) falls in Create. Question 6 falls in level Apply, while the last question 7 falls under cognitive level create and evaluate. Table revealed that total 78.57% of the items falls in first three levels of cognitive level of Bloom's Taxonomy i.e. Lover Order Thinkings (LOTs) whereas, 21.43 % of the items of the English question paper of SSC-II conducted under FPSC in 2024 falls in Higher Order Thinkings (HOTs).

**Table 5.** *Reflection of Cognitive Level of Bloom's Taxonomy in English Question Papers*

| **Cognitive Level** | **Question Paper 2023** | **Question Paper 2024** | **Level of Items** |
|---|---|---|---|

| | Items | % | Items | % | Items | % |
|---|---|---|---|---|---|---|
| Recall | 26 | 43.3% | 29 | 46% | 55 | 44.71% |
| Understand | 16 | 26.7% | 19 | 30.16% | 35 | 28.46% |
| Apply | 4 | 6.7% | 2 | 3.17% | 6 | 4.88% |
| Analyze | 9 | 15% | 8 | 12.7% | 17 | 13.82% |
| Evaluate | 3 | 5% | 2 | 3.17% | 5 | 4.06% |
| Create | 2 | 3.3% | 3 | 4.8% | 5 | 4.07% |
| Total | 60 | 100% | 63 | 100.03% | 123 | 100% |

Table 5 revealed that in question paper 2024, a significant portion of the questions (46%) require students to recall facts, definitions, and concepts which is 43.3% in in question paper 2023 and comparatively less than question paper 2024. In question paper 2023, 26% of questions require interpreting information, summarizing, and paraphrasing as compared to 30.16% of question paper 2024. In question paper 2023, 4% of the questions require students to apply rules and principles to new situations whereas there is only 3.17% application in question paper 2024. In question paper 2023, 15% of questions analyse literary devices, while in question paper 2024 there is 12.7% questions analyzing. Total 5% questions make judgments and evaluate in question paper 2023 while in question paper 2024 it is 3.17%. Only 3.3% of the questions of question paper 2023 help to create new ideas while in question paper 2023, whereas in question paper 2024, 4.8% of the questions develop the creative skills. Overall, 21 95 % of the question items in both papers 2023 and 2024 assess the HOTs while the major part (78.05%) assesses the lower order thinkings. Table shows that question paper 2023 assess more HOTs as compared to question paper 2024.

**Table 6.** *Comparison of Question Papers in Terms Order of Thinking*

| **Thinking Level** | **Cognitive Level** | ***Question Papers 2023*** | | | ***Question Papers 2024*** | | |
|---|---|---|---|---|---|---|---|
| | | f | % | Overall % | f | % | Overall % |
| **Lower Order Thinking Skills** | Remember | 26 | 43.3% | 76.7% | 29 | 46% | 79.33% |
| | Understand | 16 | 26.7% | | 19 | 30.16% | |
| | Apply | 4 | 6.7% | | 2 | 3.17% | |
| **Higher Order Thinking Skills** | Analyze | 9 | 15% | 23.3% | 8 | 12.7% | 20.67% |
| | Evaluate | 3 | 5% | | 2 | 3.17% | |
| | Create | 2 | 3.3% | | 3 | 4.8% | |

**Table 6.** revealed that question paper 2023 assesses 76.7% LOTs which less as compared to 79.33% of the question paper 2023. Similarly, question paper 2023 assesses more (23.3%) HOTs while the question paper 2024 assesses less HOTs as compared to question paper 2024.

**Table 7** *Comparison of Question Papers in terms of Cognitive Level of Bloom's Taxonomy*

| Cognitive Level | Question Paper 2023 (%) | Question Paper 2024 (%) | Change (%) |
|---|---|---|---|
| Remember | 43% | 46% | +3% |
| Understand | 27% | 30% | +3% |
| Apply | 7% | 3% | - 4% |
| Analyze | 15% | 12% | - 3% |
| Evaluate | 5% | 3% | - 2% |
| Create | 3% | 5% | +3% |

Table 7 revealed that in question paper 2024, a s portion of the questions (46%) and (30%) of LOTs more than the question paper 2023. Similarly, a significant part of HOTs is less than the portion of question paper 2023.In addition, the application part of the of question paper 2024 is less than as compared to the part of question paper 2023. Only 3% of the questions of question paper 2023 help to create new ideas while in question paper 2024, it was noted 5%.

**Findings**

The current study analyzed the section A, B & C of English compulsory Question Papers SSC-II 2023 and 2024 based on the levels of Bloom's Taxonomy. Comparison of both SSC-II English question papers 2023 and 2024 was carried out respectively. Both the papers were classified into section A, B and C and the findings were presented in a clear and concise manner.

a. Major part (76.7%) in question paper 2023 and (79.33%) in paper 2024 assess the LOTs whereas, the question paper 2024 was found more LOTs focused.
b. The question paper 2023 had a higher percentage (23.3%) of HOTs questions compared to the question paper 2024 which was (20.67%).
c. Both question paper papers showed a slight increase in questions requiring recall of facts (43% in 2023 and 46% in 2024).
d. Both question papers had nearly a similar increase in questions requiring understanding and interpreting information which was 27% in question paper 2023 and 30% in 2024.
e. The question paper 2024 had a significant decrease 3% in questions requiring applying knowledge to new situations as compared to 7% in 2023.
f. There was a slight decrease (12%) in analysing questions in the 2024 paper compared to 15% in 2023.
g. The 2024 paper showed a slight increase (3%) in questions requiring evaluation as compared to (5%) in 2023.
h. The questions assessing creation of new ideas was more (5%) in question paper 2024 compared to 3% in 2023.
i. The question paper 2023 assessed a wider range of cognitive skills, with a better balance between LOTs and HOTs as compared to question paper 2024.

j. The question paper 2024 had a slight increase in some creative skills, lack in applying knowledge and analysing information.

**Discussion and Recommendations**

The educational landscape in Pakistan is significantly influenced by the assessment patterns established by Boards of Intermediate and Secondary Education (BISE) across the country. This study emphasized that traditional examination formats that prioritize rote memorization over critical thinking, limiting students' ability to engage with lower order thinkings. The primary objectives include assessing the cognitive levels of English question papers from FBISE for Grade-X, focusing on years 2023 and 2024. Bloom's Taxonomy was used as a framework and the study investigated the cognitive levels of questions to assess their alignment with higher-order thinking skills (HOTS) essential for contemporary education. The cognitive level of each item was determined based on Bloom's Taxonomy (BT) and the study highlighted that a substantial portion of questions falls within lower order thinking categories, which do not adequately prepare students for real-world challenges. The current question papers exhibit a misalignment with educational goals that emphasize higher-order cognitive skills. The findings of the study highlighted that there is no vertical progression as the English question paper 2024 is lower in quality as compared to English question paper 2023. So, there is year-wise decline of the standards in terms of cognitive level of Bloom's Taxonomy. The study suggested to revise the existing question formats to incorporate more HOTS, ensuring a balanced representation of cognitive domains, and aligning assessments with global best practices and 21st century skills including critical and creative thinking. The findings aim to contribute to a more effective educational system by advocating for reforms that enhance both teaching, learning and assessment methodologies.

Based on the findings of the study, following recommendations are made to improve the designing, developing, pattern, validity and consistency of English question papers at secondary school level in Pakistan:

- More questions may be included that require students to apply learned concepts to solve problems or create new situations.
- There should be balance between LOTs and HOTs assessments in question paper, ensuring a mix of foundational knowledge and higher-level thinking skills.
- An online portal may be developed for the collection of question paper items. Subsequently, an item bank for storing these question paper items may be developed to ensure timely and well-balanced question papers. In addition, software may be developed to ensure balanced question papers and appropriate ratio.
- A balanced question paper may de designed to address all cognitive levels of Bloom Taxonomy, but the focus should be on HOTs and 21st century skills.
- A paper should consider the cognitive development of the students when setting the question paper.
- Some craft questions may be added to encourage students to analyse information, identify patterns, and make connections between ideas.
- Clear instructions may be provided for each question, specifying the expected cognitive level of the response.
- The items of English question papers may be created more better to assess students' overall understanding and encourage the development of critical thinking skills.

- Question paper should be valid, reliable and consistent so that it could evaluate all the desired skills appropriately.
- The items should assess a wider range question types for evaluating various language skills.
- The question paper should be balanced and avoid overemphasis on specific topics or skills.
- A part of creative writing and critical thinking should be included in the question paper.

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