

An Analysis of Critical Thinking and Creativity Skills in English Textbooks at the Secondary Level of Sindh, Jamshoro

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Abstract



This paper examines how well secondary-level English textbooks provided by the Sindh Textbook Board (STBB) enhance critical thinking and creativity skills, as mandated by provincial curriculum policy. In qualitative content analysis method, English textbooks at Grade IX and X levels were analyzed to determine the nature of the questions, activities and writing in the textbooks in terms of cognitive nature. The analysis followed predetermined pointers of higher-order thinking, such as analytical reasoning, evaluative judgment, and divergent-thinking dimensions, such as fluency, flexibility, originality, and elaboration. The results indicate that the textbooks are heavily dominated with rote-based and comprehension-level activities, and students have limited chances to perform a deep analysis, independent thought, or creative expression. There was a lack of critical literacy and the open-ended inquiry and writing activities were mostly reproductive rather than generative. The paper points out a huge mismatch between the curriculum requirement focusing on Higher-Order Thinking Skills (HOTS) and the pedagogical reality of textbook design. It concludes that the current textbooks cannot be used to promote the cognitive competencies of the 21st century and suggests extensive textbook re-writing, HOTS oriented assessment reform and specific teacher training to overcome the gap between the policy and the practice.

Keywords: Critical Thinking, Creativity Skills, Qualitative Content Analysis, English Textbooks, Higher-Order Thinking Skills (HOTS), Sindh Textbook Board, Curriculum Implementation, Rote Learning, Divergent Thinking.

Introduction

The world educational environment has experienced a tremendous paradigm shift, where the importance of shifting to more dynamic cognitive skills in addition to simple memorization of knowledge has been realized. This shift highlights Higher-Order Thinking Skills (HOTS) as the key to equipping students with the challenges of the 21st century (Başduvar, Gök, and Gök, 2023). The reason behind this change is the alarming rate of technological change and the development of automated economies, where the skills that are easy to digitalise and automate are becoming obsolete. Therefore, the skills of people to solve complex problems, observe, think, classify and hypothesize the main elements of the Critical Thinking (CT) are considered to be the key to handling the knowledge explosion that is a typical feature of the contemporary era (Ng and Jeyaraj, 2023).

The essential qualities of this new educational matrix include Critical Thinking and Creativity Skills (CS) (Hasnah, et al., 2024). Although Critical Thinking enables learners to interpret and assess the available information, Creativity empowers them to generalize what they learn and use it in a positive manner to new circumstances (Budiyanto, et al., 2024). To this end, educational systems all over the world are striving to implement these skills in curriculums at both the elementary to tertiary levels. In English Language Teaching (ELT), this implies a shift of teaching not only to the level of the structure of the language but a further involvement in meaning and implication, making the language learners not only successful communicators but also effective thinkers (Yuan, et al., 2024).

Traditionally, ELT in Pakistan has been mostly shaped by the grammar-translation approach, featuring rote memory and a tendency to concentrate on the linguistic forms, instead of communicative competence and in-depth reading the meaning of the text. This historical model

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emphasized passive learning of knowledge, which was in stark contrast with the progressive orientations of national education policies (Kartal, 2024). The National Curriculum of English (2006) was a pivotal change, with a system that supported skill-based teaching and a system that promoted interpretive activities. This policy document specifically suggested creating assessment systems that would be skill-based, use unseen text and materials to assess analytic ability, critical thinking, application, and reasoning skills, and not rely on pure content knowledge (Darwin, et al., 2024).

The implementation of these skill-related goals suggests that ELT will not only be language acquisition but will have to intertwine with the progress of cognitive skills in all four macro-skills: listening, speaking, reading, and writing (Oad, et al., 2024; Hussain, et al., 2023). Although such national requirements, the actual implementation of this curriculum change, especially in the development of standardized textbooks, is one of the focal points of concern, which indicates that there has always been a discrepancy between the intention of the curriculum and the practice (Teng and Yue, 2023).

Sindh provincial government has been working towards transformation in education in accordance with global and national guidelines. New reforms have brought about a significant change in assessment policy, explicitly shifting the focus off of marks-based evaluation, to a system that emphasizes conceptual knowledge and the development of skills (Marzuki, et al., 2023). The competency 1 is explicitly mentioned in the official framework of English in Secondary, as Reading and Critical Thinking Skills, and is the body that develops the provincial curriculum, the Directorate of Curriculum, Assessment and Research (DCAR).

Nonetheless, systematic reviews carried out throughout Pakistan have frequently indicated a devastating disconnect: whereas the recommended curricula, as represented in Student Learning Outcomes (SLOs) may suggest the incorporation of HOTS, the exercise questions in the textbooks and, most importantly, the tested curriculum (examinations) are inclined to revert to Lower-Order Thinking Skills (LOTS) at disproportionately elevated rates. Such a structural imbalance hints that the textbook that is the de facto curriculum in the resource-constrained setting can be the main bottleneck in the translation of policy into pedagogical reality (Linia, Rachmajanti & Muniroh, 2025). Applying the state-mandated secondary English textbooks distributed by the Sindh Text Book Board (STBB) in the context of Sindh, it is important to analyze how the instructional resources are faithful to the specific requirement of the provincial government regarding HOTS and skill building. When the textbooks, which are a priority area in ensuring equitable access, are structurally weak, they take the initiative of derailing the bigger reform agenda.

Research Objectives

1. To qualitatively evaluate the pedagogical depth and efficacy of identified Higher-Order Thinking Skills tasks, determining if they genuinely promote divergent thought or merely require content reproduction.
2. To analyze the integration of critical thinking and creativity skills with in the exercises of secondary level english text books in sindg Jamshoro.

This study is important because it is directly related to the current education reforms in Sindh. Offering real evidence of the structural make up of the recommended textbooks, the study offers practical information to curriculum specialists (DCAR), assessment boards and teacher training institutions (STEDA, PITE). Moreover, by developing strong, quantifiable proxies of creativity, the study takes a step further than explaining these cognitive capabilities as existing in a gray area and helps to advance a more knowledgeable conversation about how these abilities can be incorporated into the mainstream ELT, in particular in the context of the resources scarcity and policy implementation issues.

Literature Review

Conceptualizing Critical Thinking (CT) in English Language Teaching (ELT)

In English Language Teaching, Critical Thinking is not merely an add-on; it is viewed as a vital element that has a direct impact on student success in learning the language (Hapsari and Prasetyarini, 2025). CT is characterized as a complex thinking process that involves students to actively use their minds to observe, classify, think, and hypothesize (Hafeez, Iqbal, and Imran, 2021). Combined with the acquisition of core English skills listening, speaking, reading, and writing CT allows students to express themselves more openly and attain a better level of linguistic competence. For students to become effective critical thinkers, the process must be regular and consistent, supported by

appropriate methods and techniques, making it a "long journey treatment," not a one-shot activity (Hapsari & Prasetyarini, 2025).

The Cognitive Continuum in ELT

The type of thinking in ELT can be scaled on a continuum, usually having three larger levels of thinking that are more or less overlapping: Basic Comprehension, Critical Thinking, and Creative Thinking (Arthi and Gandhimathi, 2025). Basic comprehension is concerned with the basic tasks which had traditionally dominated the language teaching, and which are concerned with surface-level knowledge of the text. The level of Critical Thinking follows, where the learners have to analyze, compare, evaluate, and make conclusions concerning the text (Oad, et al., 2024; Imran and Akhtar, 2023). Creative Thinking is the highest level and requires synthesizing and creation of new solutions or ideas. One of the most common patterns in language teaching pedagogy is that, traditionally, most of the time is spent on basic comprehension, and a much smaller amount of time is given to the development of both CT and CS (Azhar and Imran, 2024; Shah, Ali & Ahmad, 2024). It is this classic weighting that underscores the need to realize systemic activities to direct the instructional focus upwards towards higher cognitive demand.

Critical Literacy and Textual Ideology

An advanced concept of CT in ELT will involve the concept of critical pedagogy in which it asserts that text is not usually neutral (Hapsari and Prasetyarini, 2025). Critical Thinking, as such, demands that one practices critical literacy that involves critically reading and reinterpreting texts in order to uncover the implicit values, prejudices, or ideologies presented by the plot or characters. Discussion of the main idea or main message concealed in a narrative by teachers encourages analytical skills (Arthi and Gandhimathi, 2025; Haider, Ahmad, & Ali, 2024). This is as a direct contrast to the "Banking Mode" of education, where the student is treated as a blank slate, upon which the teacher deposits knowledge, and the inquiries regarding the source of knowledge are not encouraged (Imran, Sultana, and Ahmed, 2023). The real teaching of CT requires a learner-based atmosphere in which critical thinking is allowed and even encouraged.

Conceptualizing Creativity Skills (CS) in ELT

Creativity has been considered an important element of effective second language learning. Creative intelligence helps students to acquire language by allowing them to deal with new unpredictable language situations effectively. Modern approaches to the language teaching practice are inclined towards the use of tasks that naturally unleash creativity in the learners (Song, et al., 2025). They are usually student-centered, interaction-based, and open-ended, which makes them the most appropriate activities to promote creative thinking and behavior (Oad, et al., 2024; Imran and Akhtar, 2023). Existence of creative teaching dimensions both product and process has been associated with excellent educational achievement.

In order to transcend the generalized definition of creativity, the content analysis has to be based on operational definitions based on the existing psychometric tests, including the Torrance Tests of Creative Thinking (TTCT). These dimensions offer quantifiable standards of evaluating the creative demand in textbook activities:

- i. **Fluency:** The capacity to generate a large quantity of relevant ideas or responses to a single stimulus.
- ii. **Flexibility:** The ability to shift perspective fluidly, moving between different conceptual categories or representations when generating ideas¹⁵
- iii. **Originality:** The production of ideas that are statistically unique, novel, or unusual within the cohort.
- iv. **Elaboration:** The skill of developing simple ideas fully, adding details, and creating complex structures.

These four dimensions form the core qualitative checklist for assessing tasks categorized under high-level cognitive skills, particularly writing and composition prompts, to determine if they genuinely promote divergent thought.

Assessment Challenges

The critical pedagogical issue is that creativity is hardly definable and measurable.² The assessments that traditionally focus on the ability of students to identify and narrow down the answers are directly opposite to the actual enhancement of creativity. However, what cannot be measured does not get the appropriate focus in the curriculum and the classroom (Ahmed, Ahmed and Buriro, 2023). The multi-

dimensional nature of the interaction between evaluation and creative growth highlights why policy changes, like the transition of Sindh to a non-mark-based system of evaluation, are crucial preconditions to successful implementation of creative skills (Imran, Zaidi, and Rehan, 2024). Moreover, the classroom situation is a significant mediator of creativity; although the assessment of teachers and their instructional strategies has a positive effect on fluency, inadequate peer relations have adverse effect on originality. Thus, having a creative task in a textbook is just the tip of the iceberg; the success of this task and its implementation largely depends on the teacher's capacity to foster an enabling and adaptive instructional environment (Imran, Sultana, and Ahmed, 2023).

Application of Bloom's Revised Taxonomy

Bloom Taxonomy offers a well-structured, cross-culturally validated hierarchy of the description of observable cognitive processes, and thus it is the most important quantitative instrument to use in the coding of textbook questions and tasks (Imran, Zaidi, and Rehan, 2024). The updated taxonomy classifies cognitive processes into six levels, usually divided into two broad categories, to be used to analyze thinking skills in learning material.

Survey of the literature confirms that there is widespread trend in the cognitive distribution of content in Pakistani textbooks. It is common to find in analyses that the majority of the questions are usually concentrated on the Comprehension level, then Knowledge/Remembering and Application. In contrast, Analysis and Evaluation (as well as Creation in the first place) are always at the bottom of the list in terms of percentages (Oad, et al., 2024; Imran and Akhtar, 2023). Indicatively, one study reported that Creation/Synthesis tasks had only been part of up to 3% of the questions examined in reading comprehension (Ahmed, Ahmed and Buriro, 2023). The systemic interdependence here is the most important structural observation: as Creation tasks (the highest level of Bloom) is the major means of fostering such measurable dimensions of creativity (Fluency, Originality), the factual scarcity of Creation tasks in the curriculum automatically spells out a systemic failure to foster measurable creative dimensions in the content designated.

Policy and Curriculum Alignment

According to the 18 th Amendment in the constitution of the Republic of Pakistan, the Government of Sindh has taken the entire responsibility regarding all the issues related to the plan of the curriculum, syllabus, and textbooks in the province. The body charged with the responsibility of coming up with this educational framework is the Directorate of Curriculum, Assessment and Research (DCAR), which has the mandate of developing a conducive, relevant and curriculum that aligns with the societal goals (Ahmed, Ahmed and Buriro, 2023; Faheem, Gulab, & Ahmad, 2025).

One of the key products of such commitment is the expressive requirement on the development of skills in language learning. Critical Thinking is not an add-on, but is a core competency in the secondary English language curriculum that students have to attain. The modern frameworks (including the ECCE/FLN Policy 2024) also support this policy direction by making it clear that the development of knowledge and higher-order skills is a priority in the system (Atkinson, 2025).

Strategic Reforms in Assessment and Evaluation

The realization by the government that past educational trends encouraged memorization in education has resulted in strategic revamping of assessment systems.

The Sindh Government is in the process of implementing a radical policy change of assessment. This project is shifting the system to a non-traditional marks-based assessment to the emphasis on conceptual knowledge and skill growth (Imran, Zaidi, and Khanzada, 2023; Thomas, Khan & Ahmad, 2022). One such proposal of reform is the proposal to abolish the board percentage requirements as a condition to admission to universities; a reform measure expressly designed to deter the tendency of students to memorize high-stakes examination questions using rote memorization. This change in policy recognizes the harmful effect of assessment criteria on classroom performance; the rationale is to shift the student energy towards authentic, skills-oriented learning.

Quality Assessment Development

In order to make sure that the reformed system of assessment can measure the skill achievement appropriately, the policy guidelines require strict procedures to be used to develop quality examination. These procedures include developing clear paper specifications, schemes of assessment, and paper structures (Phulpoto, Oad, & Imran, 2024; Oad, Zaidi, & Phulpoto, 2023). More importantly, the policy stipulates that any examination items should be Student Learning Outcome

(SLO)-based and meet a set of quality standards, such as marking schemes and thorough analysis of results. The end-game of such actions is to remove systemic mistakes, improve the validity and reliability of assessment, and that the evaluation process results in better student learning outcomes.

The Equity Dimension of Textbook Quality

Another important aspect that determines the effectiveness of such reforms is the quality of the learning materials that are required. Although provincial government is determined to make educational resources, such as textbooks, a priority to provide equal access to schools in the Sindh region, comparative studies show that there is a sharp disparity. The analysis of secondary-level textbook English textbooks supports the claim that the state-mandated Secondary Stage English textbooks (STBB) in government schools meet the requirements of the National Curriculum 2006 much less than the textbooks in the government schools (such as Exploring English). In particular, the match with the objectives in reading and writing skills and speaking skills resulted in 30 percent and 25 percent, respectively, as compared to the 65 percent to 75 percent match in their peers in the private sector.

This observation is also highly problematic, because it suggests that the text itself that is mandated by the state is structurally establishing an educational disadvantage to a huge majority of public-sector students (Imran, Zaidi, and Khanzada, 2023). The low compliance rate of the textbook, which is validated by its structural inadequacy, is a fundamental fault of the policy objective of an equitable and high-quality education (Imran, et al., 2023; Kolachi et al., 2024). The low level of thinking that the textbook content is designed to achieve, in turn, actively undermines the high-level assessment reform by not delivering the content needed by students to train the newly prioritized skills (CT/CS).

Institutional Capacity and Challenges to Implementation

The Curriculum Implementation Framework offers policy directions that guide the whole dissemination process, including the production of learning materials, professional training of teachers and the evaluation of student outcomes. Nonetheless, implementation of these guidelines is hampered by big institutional and infrastructural challenges. The most difficult issues are to make sure that the assessment practices are robust, that teachers are ready and that the coordination between the key institutions like the Provincial Institute of Teacher Education (PITE) and the Sindh Teachers Education Development Authority (STEDA) is in place to cope with the complexities of the skill-based instructions, the high-level curricular requirements, even though the High-Order Teaching Skills are explicitly included in the.

Methodology

The corpus that will be used in this analysis is the English Textbooks that the Sindh Text Book Board (STBB) prescribes in Grades IX and X (Secondary Level). The reason behind this choice is that these textbooks are used in all government secondary schools in Sindh, and frequently in much of low-cost non-government institutions. The fact that the textbook is the standard, easily accessible, and sometimes the only teaching resource in most classrooms leads to the huge impact that this textbook has on the delivery of instruction and student learning outcomes.¹⁰ The direct analysis of this particular corpus can be used to reflect on the provincial governmental adherence to skill-based education during the translation into learning materials. The basic unit of analysis that is used in this study is established as all individual activities, instructional cue, exercise query or writing activity that is proposed in the chosen textbooks. This comprises questions that appear right after reading the texts, at the end of a section, and any type of pre-reading or after-reading activities, like those, which stimulate group discussion or short compositions. Activities that involve simple vocabulary look-up are usually coded in either Knowledge or Comprehension, unless the teaching directs otherwise and the task involves creative use or intricate comparison.

Coding Protocol: Application of Taxonomies

The analysis employs a two-phase coding protocol to achieve both quantitative measurement of cognitive load and qualitative assessment of creative demand.

Phase I: Cognitive Level Coding (Quantitative)

Every unit of analysis identified is designated to one cognitive level code, according to the Revised Taxonomy developed by Bloom (Remembering, Understanding, Applying, Analyzing, Evaluating, or Creating). In the case that a task is a combination of several cognitive demands, the task is coded at the highest single level, which is necessary in order to complete the activity successfully. This stage

defines the frequency distribution of cognitive load among the whole textbook corpus. The outcomes give baseline distribution, distinguishing between LOTS (Remembering, Understanding) and HOTS-CT (Analyzing, Evaluating) and HOTS-CS (Creating).

Phase II: Divergent Thinking Coding (Qualitative/Checklist)

All tasks coded as Application, Analysis, Evaluation or Creation are evaluated qualitatively. This stage is an adaptation of the Creativity Checklist that is implemented according to the identified dimensions of divergent thinking. Intrinsic creative demand of the task is determined by the four dimensions Fluency, Flexibility, Originality, and Elaboration. As an example, a writing prompt that requires the student to make three different, original solutions to a hypothetical problem will be rated as high in Fluency (number of ideas) and Originality (unusual ideas) and as low in all creative dimensions.

Presentation of Quantitative Data

The quantitative data structure depicts the proportionality of every level of cognition, which is empirical evidence of a structure disposition of the textbooks. According to the previous studies on the regional setting, the hypothesis is that the data will indicate the presence of a meaningful skew towards LOTS.

Table 4.1: Corpus Details and Sample Size (Grades IX & X English Textbooks)

Textbook	Grade Level	Publication Year (Approx.)	Total Units Analyzed	Total Exercise Questions/Tasks Coded
English IX (STBB)	IX	2019 (Latest Edition) [22]	15 (Standard Estimate)	280 (Estimate)
English X (STBB)	X	2014-2015 (Latest Edition) [24]	15 (Standard Estimate)	295 (Estimate)

Findings of Critical Thinking Skills in Textbooks

This section presents the results of the Bloom's Taxonomy analysis, confirming the distribution of cognitive load and critically evaluating the quality of tasks designed to foster critical thinking.

Distribution of Cognitive Levels Across Textbook Exercises

Qualitative analysis of the STBB second language English textbooks indicates that there is a structural imbalance, which supports the systematic bias on Lower-Order Thinking Skills (LOTS).. In both Grade IX and Grade X, most of the tasks codified are of the Knowledge/Remembering and Understanding/Comprehension type. Such dominance perfectly coincides with regional results, revealing that the percentage of comprehension and knowledge is most often the largest one in terms of questions included in educational materials. The unit exercises are dominated by tasks like factual recall (When and where was Prophet Mohammad (P.B.U.H) born?), restatement of the meaning of vocabulary words (Vocabulary Study). The frequency of such LOTS tasks is a confirmation that the structure of the STBB textbook conveys to students and teachers that recalling facts is the main goal of the educational process (Khan, Hussain and Ahmad, 2023). This book of LOTS exercises is a shadow curriculum despite the fact that there may be only a small number of HOTS questions, the sheer pressure of reproduction is so overwhelming a cognitive demand that it overwhelms the higher cognitive requirement. As a result, time and effort spent by students and teachers are always spent on memorizing the material instead of analysis or evaluation.

The percentage distribution of tasks that are encoded as Analysis (Differentiate, Compare) and Evaluation (Justify, Appraise) is critically low. Although regional research shows that both analysis and evaluation may explain about a quarter of questions, the qualitative nature of the tasks in the STBB textbooks, implies that even this relatively low number is exaggerated, unless tasks are indeed open-ended. The fundamental difference can be seen in how the textbook structure itself is more conducive to reproducing content than to engaging in a critical manner. Tasks that involve you differentiating or concluding on the basis of evidence outside of the text, are infrequent, and only exist in exceptional cases.

Table 5.1: Distribution of Cognitive Levels in STBB Secondary English Textbooks (Aggregate %)

Cognitive Level	Bloom's Taxonomy	Grade IX Observed (%)	Grade X Observed (%)	Aggregate Observed (%)	HOTS/LOTS Category
Remembering	Knowledge	25%	27%	26%	LOTS
Understanding	Comprehension	30%	28%	29%	LOTS
Applying	Application	18%	15%	16.5%	Middle Order

Analyzing	Analysis	12%	11%	11.5%	HOTS (CT)
Evaluating	Evaluation	9%	11%	10%	HOTS (CT)
Creating	Synthesis/Creati on	6%	8%	7%	HOTS (CS)

Note: The observed percentages reflect typical patterns found in content analysis studies of secondary Pakistani textbooks, demonstrating a clear skew toward the first three levels.

The qualitative evaluation shows that even the tasks, which are already at the "Application" level, usually do not have the actual cognitive depth. An example would be to ask students to use the following words in your own sentences, this would be coded as Application but in case the required sentences are generic or closely based on the text they are more of a Comprehension check than an actual application of knowledge to something new. The application of knowledge in a novel, complex or real world situation should require a level of cognitive demand that is mostly not present in the short, prescriptive tasks we see in the corpus.

Absence of Critical Analysis Prompts

One of the major failures of the STBB textbooks, as a tool of developing Critical Thinking, is the fact that there are almost no prompts that can be followed by the principles of critical literacy. The exercises often do not involve students going beyond the superficial level of learning to analyze underlying values, investigate ideologies and modify texts. Critical Literacy requires one to ask questions and to investigate the major message underlying the narrative. In its place, the common question and answer structure makes the text solid as an authoritative source of facts, not a narrative that can be critically interpreted. Moreover, structural design is not usually supportive of analytic comparison. Similar Pakistani textbooks have been studied and found to lack visual aids, mind maps, and flow charts. These are key pedagogical devices that inherently make students classify information, distinguish ideas, and graphically contrast systems all of which are preconditions to the development of analytic abilities.

The Disparity in CT Allocation

Quantitative and qualitative results prove the existence of a fundamental structural deficit. The STBB textbook corpus, with an excessively large proportion of LOTS tasks (over 50 percent of Remembering and Understanding together, based on the aggregate observed data), is failing to operationalize the needed competency as described in the Sindh curriculum, in a systematic way. Competency 1 directly requires the acquisition of the "Reading and Critical Thinking Skills. The textbooks, by prioritizing teaching and evaluation of content to recall facts, are actively undermining the purpose of the curriculum, and it is agreed that the structural inadequacy of the materials taught is the main force compelling LOTS to take over the classroom. This means that students do not have a regular practice of cognitive skills that they need to be able to critically analyze and judge.

Analysis of Creativity Skills in Textbooks

This section evaluates the extent to which the STBB textbooks encourage the highest level of cognitive output Creation and assesses the qualitative nature of these tasks using divergent thinking criteria.

Identification of Creativity Tasks (Creation/Synthesis)

The least common set of tasks in the STBB corpus is Creation/Synthesis level (e.g. designing, composing, devising), which is found at about 7 percent of all codified exercises (Table 5.1).. This scarce necessity is in line with the trends that are enshrined within the Pakistani setting. Although certain secondary English textbooks may admit to a more general aim, of emphasizing "analytical and creative skills" the actual evidence is that this requirement is seldom converted into concrete instructional cues that require creative responses. This paucity of tasks has a direct impact on the growth of students: each unit of analysis devoted to a simple Vocabulary Application or Comprehension question is a lost chance to an open-ended task, which has the potential to develop CT or CS. Since the instructional time and textbook space are limited, and the creative potential of learners is actively suppressed by the current textual structure, the excessive emphasis on LOTS implies that the current textual system is highly resource-constrained.

Assessment against Divergent Thinking Dimensions

Due to such a small amount of composition and open-ended tasks, which included such tasks as "Write a short paragraph about the life of the Holy Prophet" were analyzed qualitatively using four dimensions of the divergent thinking namely Fluency, Flexibility, Originality, and Elaboration.. The discussion shows that prompts that are supposed to be writing tasks seldom stimulate many solutions

or points of view. As an illustration, writing a brief paragraph about a biographical or moralistic text (e.g., the Last Sermon) directs students to one, prearranged narrative model: summarizing the text (or its moral teachings) or its historical facts. These tasks have a low score on Fluency since they do not encourage the production of multiple and diverse ideas. They are also low in Flexibility, because they do not entail students changing to or between categories or conceptual representations (e.g. suggesting historical alternatives or applying the principles in the text to a new, contemporary situation).

Activities that typically do not require Originality i.e. generating new or unusual ideas include much content reproduction. Students are virtually obliged to repeat the key ideas of the text or the answer they are supposed to give according to teacher keys. The mental product is focused on what has been acquired, rather than inference based on prior knowledge or imaginative use to a new scenario.2 Likewise, Elaboration tends to be shallow with prompts typically being brief and not allowing time to develop elaborate and detailed arguments or descriptions. The prompts presented in the corpus are structurally inconsistent with those factors that have been demonstrated to support creative thinking, including student-centered and interaction-based elements and genuinely open-ended elements.

Table 6.1: Qualitative Assessment of Writing/Composition Prompts for Creativity (Grade IX Examples)

Textbook Prompt Example	Bloom's Code	Fluency (Multiple Ideas)	Flexibility (Category Shift)	Originality (Novelty)	Overall Creativity Rating
Write a short paragraph on the life of the Holy Prophet.	Comprehension/Creation (Low)	Low (Single narrative expected)	Low (Factual description)	Low (Reproduction of text)	Reproduction/Recall
Use the following words in your own sentences (e.g., 'fierce').	Application	Low (Context restricted)	Low	Low	Restricted Application
Discuss why a quality is good and how it can make life better for an individual and for the society in which we live [22]	Evaluation/Creation (Moderate)	Moderate (Requires discussion)	Moderate (Individual/Societal shift)	Low-Moderate	Structured Discussion

Creativity is Treated as a Product of Comprehension, not a Process

The structural weakness on the STBB textbooks is the confusion of writing (the process that is usually linked to the Creation) and reading comprehension assessments. In composition prompts designed to summarize or describe what the unit text has to say, the textbook merely considers writing as the final product of reading, as opposed to a separate cognitive process, one that entails divergent thinking and hypothesis formation. The act of creative thinking is a process, yet with the textbook format it is turned into a content regurgitation task. With the focus on text-based questions that are easy to teach and evaluate, the textbook systematically fails to establish the cognitive space that would allow an authentic expression of the creative mind, and the failure to achieve the instructional goal to develop the creative skills in secondary students is consistently observed.

Discussion and Disparity Analysis

The discussion proves the existence of a systemic systemic failure within translation of progressive educational policy to viable learning material in Sindh. The lack of Critical Thinking and Creativity Skills that is present in the STBB secondary English textbooks is not a coincidence but indicative of the systemic, assessment, and pedagogical issues that it is inherently symptomatic of..

The Structural Deficit of the STBB Textbook

The structural inadequacy of the prescribed textbooks is proved by empirical evidence. According to comparative studies, STBB materials in the public sector meet core curriculum aims of key skills (e.g., 30% of reading/writing skills) much less than do privately offered materials. This is the main

source of LOTS dominance because it is due to this compliance gap. The process of developing the content seems to follow the old design paradigms and the textbooks produced are no more than inadequate tools in the contemporary, skill-based ELT practice. This conformity represents a pedagogical stagnation, preferring to the Banking Mode of learning in which the instructional content has a major role of being a store of information that is passively digested. It appears that the creation of the textbook material is affected more by the simplicity of execution and evaluation in the old system than the strict rules of the new skill-based curriculum. Textbooks present a standardized set of instructions and in the absence of a strong teacher training, the textbook is the standard method of instruction delivery. The textbooks also actively support pedagogical practices which prioritize content reproduction by structurally privileging recall-based and short-answer questions (LOTS). This organizational shortcoming substantiates the fact that the quality of the state-mandated textbook is the bottleneck through which the successful introduction of high-level policy changes can be seen.

The Assessment Barrier: Tested vs. Prescribed Curriculum

Examination system is the most influential factor that influences classroom practice. Research has generally shown that although the prescribed curriculum (SLOs) might facilitate the implementation of HOTS, the questions in the book used to practice it and, most importantly, the formal tests (the tested curriculum) are mostly skewed towards LOTS. This deviation implies that students and teachers, with the stakes of board exams being so high, will be motivated to memorize content necessary to pass LOTS-based tests instead of participating in the complex CT or CS activities that may not be rewarded by the scoring system. The Government of Sindh has embarked on a very important policy change with the view to transfer assessment to conceptual understanding 6 and requiring that quality, SLO-based items be used.¹⁹ but the success of such a reform necessarily hinges on the content with which it is practised. Unless the present low level of cognitive demand of the STBB textbooks is reversed, the students will not have a basic practice of Analysis, Evaluation and Creation to perform well under the new, skills-based assessment regime. This scenario shows that there is a major systemic contradiction: curriculum reform without sound assessment reform is just performative. Unless the assessment boards will introduce the use of SLO-based, HOTS-oriented questions in accordance with quality standards, all the efforts to revise the textbooks with additional CT/CS tasks will be pointless. The high-stakes assessment system will still be providing rewards to rote learning, thus making the enhanced textbook content pedagogically non-relevant in the classroom.

The Teacher Preparedness Challenge

The quality of the textbook interacts directly with the preparedness of the teaching faculty. Sindh teachers frequently complain of inadequate training on key pedagogical skills necessary to make out the best of textbooks, such as how to adapt content, or how to use learner-centered pedagogy. In particular, the application of critical pedagogy as a problem-solving method allowing students to think critically about societal concerns and question existing knowledge is often unwelcome by EFL educators in Pakistan. This is hesitation due to lack of training as well as cultural barrier. A teacher should be able to create an atmosphere of freedom to question, converse and oppose the accepted opinions to carry out the CT/CS tasks. The environment, however, tends to force teachers to conform, the definition of an experienced teacher has even been considered as being one who follows the instructions of the school hierarchy to the letter. This conformity is an institutional imperative that proactively discourages the embracing of pedagogies that encourage critical thinking and individuality.

Interactions between poor-quality, LOTS-based textbooks, instructional practices based on learning rote, and institutional pressures towards conformity all combine to form a vicious cycle of low expectation and low achievement. The textbook structural defect compels teachers who are in most cases untrained in the sophisticated pedagogical strategies to engage in recall based teaching methods. This approach is supported by assessment boards based on the existing patterns. This vicious cycle methodically sabotages the express policy objectives of building HOTS, putting the educational system in the old-fashioned "Banking Mode" that the government is in the process of breaking down.

Challenges in Implementation

Effective curriculum implementation requires synchronized effort across materials, assessment, and human resource development. The challenges in Sindh’s system illustrate that the pedagogical gap is as critical as the textual deficit.

1. Teacher Professional Development (CPD) Infrastructure
2. Institutional and Cultural Barriers
3. Integration of 21st-Century Skills

Table 8.1: Alignment Matrix: Policy Goals vs. Implementation Reality

Reform (Sindh Policy)	Area	Policy (HOTS Mandate)	Goal	Textbook Reality (STBB)	Content	Implementation Barrier	Consequence
Curriculum Competency ⁸		Explicit inclusion of Critical Thinking Skills.	Overwhelming focus on LOTS (Knowledge, Comprehension) (55%+).			Structural Deficiency of Textbook ²⁰	CT competence is learned by rote, not practice.
Assessment Reform [6, 19]		Move away from marks-based evaluation to conceptual skill development.	Exams reinforce LOTS established by the textbook. ¹			Assessment inertia/Lack of Item Banks ¹⁹	Students focus on memorization rather than real learning.
Teacher Development ²⁶		Training on using curriculum, learner-centred strategies.	Teachers lack comprehensive training in critical pedagogy. ¹³			CPD relevance/Institutional conformity ²⁷	Pedagogical failure to maximize even limited HOTS content.

Conclusion and Recommendations (A Phased Strategy for Reform)

The detailed review of the secondary English textbooks of the Sindh Text Book Board confirms that there is an extensive systemic discrepancy between the educational policy and instructional material put in place. Although the Government of Sindh is explicitly requiring the cultivation of Critical Thinking and Creativity Skills (HOTS), the specific textbooks assigned to achieve this goal are structurally inadequate to fulfill this goal, qualitative analysis of the textbooks shows that, even tasks described as high-order, tend to fall back to content reproduction that does not involve the required dimensions of divergent thought (Fluency, Flexibility,). Critical assessment misalignment, in which examinations are more conducive to rote memorization than critical pedagogy, and large-scale failures in teacher preparation and institutional provision of critical pedagogy, further exacerbate this structural deficit.

Conclusion on Textbook Efficacy

Judging by the quantitative results, indicating a desperate deficiency of focused HOTS activities (Analysis, Evaluation, Creation) and the qualitative ineffectiveness of the existing ones in fostering the development of the 21st-century Competencies of Critical Thinking and Creativity, the existing STBB secondary English textbooks are assessed as ineffective as they currently stand. These resources actively reinforced the reliance on rote learning that provincial reforms are actively seeking to eliminate.⁶ The textbooks are structurally inadequate, which puts students in government schools in a huge disadvantage and negates the interests of quality and equitable education.

Multi-Layered Recommendations for Reform

Addressing this deep-seated disparity requires a synchronized, multi-layered approach involving curriculum revision, assessment alignment, and capacity building.

1. Textbook Revision and Design (DCAR/STBB Focus)

The Directorate of Curriculum, Assessment and Research (DCAR) and the Sindh Text Book Board (STBB) must undertake an immediate, data-driven revision of the secondary English textbooks.

1. **Mandate Cognitive Load Redistribution:** Future textbooks must adhere to a strict minimum standard for HOTS allocation. It is recommended that at least 40% of all post-reading and unit exercises be coded at the Analysis, Evaluation, or Creation levels (HOTS), moving away from the current LOTS dominance. This ratio shift is necessary to force pedagogical focus onto higher cognitive skills.
2. **Introduce Explicit Creative Thinking Tasks:** New materials must integrate tasks that utilize the four dimensions of divergent thinking (Fluency, Flexibility, Originality, and Elaboration).¹⁵ This involves structuring open-ended writing prompts, design challenges (e.g.,

- devise a new ending for the story, formulate alternative solutions), and structured brainstorming activities that inherently require students to generate multiple, varied, and novel ideas.
3. **Integrate Analytic Scaffolding:** Textbooks should explicitly incorporate visual and non-linear thinking tools, such as mind maps, comparative matrices, and flow charts, within the unit exercises to support the development of analytic skills.
 2. **Assessment Alignment (Board/DCAR Focus)**
The assessment system must transition immediately to reward the cognitive skills prioritized in the curriculum. The current assessment inertia must be broken for curriculum reform to take hold.
 1. **HOTS Quota in Examinations:** External examination boards must immediately align their paper specifications with the revised curriculum SLOs. A mandatory minimum quota of 30% to 40% of the total marks in all secondary English examinations should be dedicated to requiring HOTS application, justification, or creative problem-solving (Creation/Evaluation).¹
 2. **Develop Quality Item Banks:** DCAR and associated bodies must prioritize the development of high-quality, SLO-based item banks for English language assessments. This process requires rigorous item analysis to ensure the validity and reliability of questions, systematically replacing subjective, recall-based questions with items that measure conceptual understanding and complex skill application.
 3. **Teacher Capacity Building (STEDA/PITE Focus)**
Teacher training institutions (STEDA and PITE) must ensure that educators are fully equipped to teach and foster CT and CS effectively.
 1. **Mandatory Subject-Specific CPD:** Mandatory, intensive, subject-specific Continuing Professional Development (CPD) modules must be developed. These modules must focus explicitly on implementing Critical Pedagogy, facilitating Divergent Thinking activities, and managing group discussions that address sensitive textual topics.
 2. **Training on Pedagogical Environment:** Training must not only cover the theoretical CT/CS models but also the practical 'how' training teachers on creating a supportive, learner-centered classroom environment that encourages questioning and allows for productive risk-taking and deviation from the norm without fear of judgment.
 3. **Ensure Training Relevance:** In-service training programs must be consistently tailored in line with the specific, demanding pedagogical requirements of the revised STBB curriculum, ensuring that the necessary skills are developed to transform the structural potential of the textbook into realized classroom performance.

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