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Barriers and Facilitators in Developing Higher-Order Thinking Skills among Students in English Classrooms

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Abstract

This qualitative study investigates teachers' and students' perceptions regarding barriers and facilitators in developing higher-order thinking skills (HOTS) among undergraduate students before and after undertaking the Functional English (FE) course. For data collection, semi-structured interviews and focus group discussions were administered in two phases before and at the completion of the FE course. Thematic analysis was carried out using the NVivo version 10. Analysis revealed that teachers and students considered teachers the most influencing factor for fostering HOTS in English classrooms. A teacher can exemplify, provide a classroom environment in terms of opportunities of asking and responding to questions, and attach value to such thinking skills. Students' previous experience and exposure in enhancing thinking skills were also mentioned as a potential factor for the aforementioned. The present study implies inculcating HOTS in language classrooms for life-long learning.

Key Words: Barriers, Critical Thinking, Facilitators, Higher-order Thinking Skills (HOTS)

Introduction

The advancement of digital literacies, new technologies, global communication, social networking, and creativity changed all spheres of life. 21st-century students need to develop thinking skills, and universities should prepare students for their roles as global citizens (Saleh, 2019). Higher-order thinking skills (HOTS) demand students to think creatively and critically by drawing comparisons, making justifications, and practicing inquiry-based learning (Nourdad et al., 2018). In this sense, students who learn critical thinking and problemsolving skills often perform better in their educational process (Nguyễn & Nguyễn, 2017). The students practice critical thinking skills, examine others' thinking, and analyze situations. HOTS

enable students to think independently and rationally (Mursvid & Kurniawati, 2019).

Critical thinking (CT) in operational terms means the ability to distinguish higher-order questions, make an effort to explore such questions, and believe in the existence of multiple correct viewpoints based on their rationality and evidence (Gibbs, 1994; Miterianifa et al., 2021; Tait & Knight, 1996; Wisker & Brown, 1996). Various studies have been conducted to explore the development of CT skills in higher education in Pakistan (Aliakbari & Sadeghdaghighi, 2012; Cassum et al., 2013; Lipman, 2003; Manan & Mehmood, 2015; Mangena & Chabeli, 2005; Saeed et al., 2012) which have figured out enablers and barriers in promoting CT skills among students in the classroom. The following four



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broad areas have been identified by Cassum et al. (2013) in the context of Pakistan, which are thought to be affecting the development of critical thinking either positively or negatively: i) Faculty capability, ii) Students' traits, iii) Kind of learning environment, iv) Organizational beliefs and means.

Literature Review

The teacher's competence relates to the requisite knowledge of and disposition toward HOTS (Cassum et al., 2013). The questioning technique has been identified as a basic tool to engage learners in critical thinking, provided that questions must not discourage original thoughts. A great majority (89%) of higher education faculty is convinced to have critical thinking is a major goal of higher education, but most of them need to develop the capacity how to do that (Paul & Elder, 2008). Kember and Leung (2008) identified several reasons that may affect how teachers teach at higher education institutions. A significant reason, for instance, is curriculum design which compels teachers to present more content in a limited time, leaving little to no space for thoughtful discussions and questions about that content. Moreover, teachers are not provided clarity about what is expected of them to develop critical thinking skills among students. Higher education teachers must be trained to improve their professional beliefs about and practices of developing thinking habits among students (Weiler, 2004). Teachers mainly deliver scientific content while teaching science rather than equipping science students with the skills to acquire and evaluate information (Ali, 2016). <u>Lipman (2003)</u> considers language teachers' role as more significant in promoting CT skills. Mahvuddin et al. (2004) also believe that capacity building and training for language teachers to integrate CT skills in classroom instructions. Tsui (2002) promotes opportunities for students to think independently and make decisions for their learning. Learners' informal mutual interactions about academic and current issues, including cross-questioning, debate, and discussion, are seen as a tool for promoting rational thinking among language learners (Pascarella & Terenzini, 2003; Xu, 2011). The teachers in Pakistan are not trained to instruct with innovative methods and student-centered activities to promote HOTS (Cassum et al., 2013).

Some features are identified among learners that hinder rational thinking, such as acting impulsively and being dependent on the teacher. The other barriers include learning disconnected chunks of information, memorizing instead of comprehending, valuing their views the most, following a fixed approach rather than being flexible, lacking intellectual courage, and being unable to appreciate the worth of good thinking in the process of learning. Such learners' traits are seen as obstacles in promoting critical thinking among learners (Abrami et al., 2015). In Pakistan, students at the school level are found busy noting down information given by teachers as it is to memorize it (Cassum et al., 2013). Gellin (2003) conducted a meta-analysis of eight studies and concluded that students with frequent peer social interaction and involvement in group activities outperformed in depicting CT skills. Perry (1999), in his seminal longitudinal study of tracking students' thinking throughout a degree program, found that students' ability and disposition towards CT were the main factors shaping their thinking skills. Higher education has followed this model frequently to conduct students' assessments (Boyer, 2014; Laurillard, 2013; Ramsden, 2003). Weiler (2004) has suggested some student-centered strategies, including questions that promote discussion, technology-driven immediate feedback, projects and presentation by students, peer-tutoring, implementing inquiry, and problem-solving approaches. Carroll (2004) mentions openmindedness and skepticism as the essential attributes of a critical thinker.

Teachers know the importance of trust in student-teacher interaction (Akbar et al., 2013), which creates a conducive environment for enhancing HOTS. Senechal (2010) mentions a huge gap between what is delivered in the classroom and what is required in real life. Teachers acknowledge the importance of a shared vision of promoting critical thinking at the institutional level (Cassum et al., 2013). The curriculum implementation and assessment practices are not aligned with this vision. Teachers have mentioned the heavy workload, insufficient time, and lack of technical assistance to the teacher as factors hindering the promotion of critical thinking among students. One of the most potent barriers for teachers is the content-laden

curricula in higher education (<u>Chaffee, 1992;</u> <u>Halpern, 2014; Reed & Kromrey, 2001</u>).

In Pakistan, Higher Education Commission (2012), has suggested applying and assessing HOTS in higher education courses. An assessment that requires students to give reasons and evidence for their response can help create room for a reward for thinking critically (Duplass & Zeidler, 2002). Students in Pakistani culture are not encouraged to question especially critical and debatable ones (Manan & Mehmood, 2015). Such students are likely unable to employ their knowledge understanding in complex and diverse real-life situations (Thein et al., 2010). Questioning during language classes and allowing students to discuss those questions democratically is vital for promoting critical thinking (Seker & Kömür, 2008).

Buskist and Irons (2008) mention barriers to enhancing CT skills that include challenging the authority of a teacher, memorizing as compared to analyzing and synthesizing cultural norms, and lack of practice. Similarly, a few other hindering factors are a similar pattern of standardized tests and limited time for teachers to accomplish multiple teaching, research, and management tasks. Moreover, teachers have a limited capacity to assess critical thinking, and a lack of resources in Pakistan is reported as a hurdle in developing CT skills in students (Cassum et al., 2013). Despite all stakeholders' wish to have critical thinkers as products of higher education, hardly any clear and practical effort has been made in this regard. The present study explored teachers and teachers) perceptions students (Prospective regarding barriers and facilitators in HOTS before and after taking the Functional English (FE) course.

Methodology

This study adopted a qualitative research design to explore the possible barriers and facilitators in developing HOTS among students (Cohen et al., 2017). This qualitative study was completed in two phases.

Population and Sample

The purposive sampling technique was used to choose students in the undergraduate program of B.Ed. and ADE offered in the higher education

institutions of Khyber Pakhtunkhwa (three Regional Institutes for Teacher Education [RITE] colleges and two universities) in the year 2016. All five teachers teaching the FE course in the FALL semester (2016) in the five sample institutions and two teachers who had taken it earlier were chosen for interviews. The students' sample for focus group discussion comprised 40 students (8 students from each university) out of 140 population studying FE Course in the B.Ed (Hons) semester-II.

Research Instruments

For taking insights regarding barriers and facilitators for developing HOTS among prospective teachers, two research instruments were developed, i.e., semi-structured interviews and focus group discussions. The semi-structured interview and focus-group discussion protocol included five broad areas: problems faced while teaching/ learning English, the most interesting aspects of teaching/ learning English, gender variations in students' learning approaches, and favorable and hindering factors for teaching/ learning English. Triangulation and rich, thick descriptions were employed as validation strategies to confirm the trustworthiness and credibility of the results (Creswell & Poth, 2016).

Data Collection

The faculty of the relevant institutions recommended the sampled students. The faculty mentioned those students who can openly share their views in contrast to students who are shy and reluctant to share their thoughts. Semi-structured interviews (for teachers) and focus group discussions (teachers and students) were used to collect data about teachers' and students' perceptions about what hinders and what facilitates the development of critical thinking skills pre and post-course implementation (Phase I, Phase II) undertaking FE course (a compulsory course offered in the second semester of B.Ed. and ADE program).

Data Analysis

The data was gathered from both tools in the form of audio recording. It was transcribed and organized for thematic analysis using NVivo. The six steps of getting familiar with data were reading, re-reading, creating initial codes, looking for themes, describing and labeling themes, and generating the result (Braun & Clarke, 2006). The focus group discussion groups were termed FG-1-FG-5. The teacher participants are from T1 to T5, while the student participants are from S1 to S8. Each focus group comprised eight participants.

Findings

The data analyzed is presented below in three broad areas in Phase I. The themes depicted teachers' and students' perspectives about hindering and facilitating factors in developing the role of HOTS among students. The themes drawn from Phase-I and Phase -II are presented in figure: 1.1

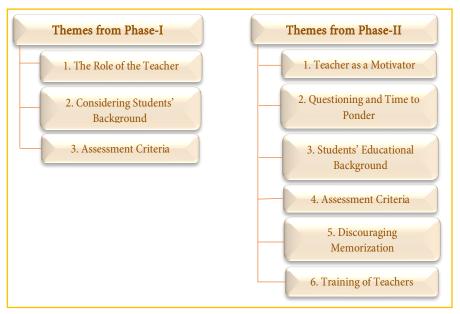


Figure: 1

Phase I

During Phase I, before studying the FE course, the perceptions of teachers and students have been categorized into three main themes below:

The Role of the Teacher

The students' perspectives about teachers in the current research depicted that teachers were well aware of their responsibilities and highly dedicated to providing their pupils with the highest educational opportunities. In their reflections on the instructors' roles, the students offered diverse perspectives, identifying them as "facilitators" and "barriers." The term "encourage" kept on appearing repeatedly. For instance, one student indicated:

"Teacher has a vital influence in improving pupils' thinking by supporting and applauding them." (FG4, S4)

"When professors support pupils, they get the confidence to express their ideas without holding back." (FG4, S2)

"The main obstacle is teachers discouraging behavior on the incorrect response while using our critical thinking to react to them. We pause and avoid answering because we worry, we could be mistaken once more." (FG3, S1)

"Everybody becomes mindful and reluctant to speak out or react in class the following time when the teacher encourages us to do so, but then the class laughs at the response." (FG3, S2)

"Our teachers get us involved in many activities. They pose inquiries and maintain our attention in class." (FG2, S5)

A good learning environment may include questions and participate in activities that promote critical thinking.

The teachers' perspectives for this course have been viewed differently than how it is more common in Pakistan.

"My role is fairly beneficial in fostering the development of critical thinking abilities, ensuring that they [students] learn how to respond, how to handle challenging circumstances, how to decide the value of something." (T1)

"All [teaching] approaches are worthless if they are not in the hands of an effective instructor. A skilled teacher may use the lecture method to teach critical thinking. Why not ask plenty of questions during lectures and give students time for discussion so that I, as a competent teacher, can improve students' critical thinking skills?"(T2)

This course inherently allows teachers to practice a democratic approach while teaching. T2 had the insight to see that even lecturing provided an opportunity to develop critical thinking abilities. Most of the pupils were reluctant to speak out for fear of being teased by their peers or, in the worst-case scenario, by their professors for making a mistake in front of the class. All of the teachers were fully aware of this fact and agreed that FE courses play a crucial role in enhancing the interest level of both teaching and learning. T5 remarked in a very positive way:

"I never discouraged them [students] at all. No matter what, I have always given them a voice and allowed them to reply."

Concerns about student numbers and the difficulties of managing extensive courses are two potential drawbacks of increasing student participation:

"It is challenging to handle group activities and assigning grades since the class is overloaded." (T3)

Thus, teachers can play a vital role by motivating and encouraging students to higher-order thinking during class instruction.

Students' Background

Students' background is also considered for upcoming learning in the FE course. Teachers considered pupils' social and intellectual backgrounds as possible facilitators/obstacles. All of the teachers acknowledged that the student's academic and social backgrounds were one of the key

elements influencing the learning of students generally and the growth of their rational thinking abilities.

"A student's educational background for sure influences student learning. For instance, pupils from public sector schools speak English much differently than those from Beacon House institutions, etc. It's comparable to comparing individuals who have never been exposed to a language versus others who have had every chance." (T2)

"Lack of self-assurance, reluctance to raise questions in class and a poor academic foundation are barriers to the growth of critical thinking." (T4).

Due to weak academic backgrounds and low self-esteem, students from government institutions are less likely to participate in discussions and inquiries. Girls are traditionally expected to complete all home tasks in addition to academics in many middle-class households, whereas males spend more time engaging in outdoor sports. Many female students believed that guys had better possibilities to learn from real-world experiences and more exposure to the outside world. A female student stated:

"Occasionally, family responsibilities impede our learning since we cannot devote enough time to it. I used to go home when my mother was sick and had to work very hard at home, which hindered my progress in class." (FG4, S4)

Less wealthy students who enroll in higher education at reputable institutions confront several obstacles while trying to stay up with their peers, frequently leaving them feeling insecure.

Assessment Criteria

Teachers and students could not remark on the evaluation standards for the B.Ed. and FE courses because the course had just begun for the students. However, they mentioned that the former examination system was one of the main barriers to acquiring and honing their CT abilities, which solely promotes memorization.

"We haven't been tested yet because we've only recently started this course; however, if we take into account our former test method, it promoted rote memorization." (FG5, S2)

"I don't believe the prior examination [conditions] were beneficial since we used to memorize." (FG1, S2)

"We are [were] compelled to memorize to pass the exam," S5 (FG2) said.

One educator said the following:

"Learning via rote recall impedes critical thought. How we test and how the teachers teach encourage rote memorization." (T2)

Most of the instructors shared the same opinions and believed that the prior evaluation standards were a significant obstacle to encouraging critical thinking. The topic of pouring knowledge was also brought up in the discussion. They described spoon-feeding as

"Our inability to think critically and our rote memorization of the notes undoubtedly inhibits our ability to learn." (FG4, S5)

"Spoon feeding prevents children from learning to think critically. It prevents us from thinking." (FG2, S5)

They were all opposed to such a testing structure. Their exposure to new assessment types creates awareness of the distinctions between the old and new examination patterns and increases their expectations about improving their learning via thought. Both teachers and students expected that the FE course's summative and formative assessments would enhance their learning.

Phase II

Towards the end of the course, the teachers and students discussed their perspectives on the facilitators and barriers to enhancing higher-order thinking abilities as they undertook this course.

In this study, the role of the teacher as a key facilitator for the growth of critical thinking and general learning has come to light. Students in Phase I pictured their professors as "experts," "encouragers," and "facilitators." Teachers held similar opinions as well. The function of the instructor is:

Teacher as a Motivator

After reading the FE Course, the students' and teachers' perceptions have emerged as a mentor and great motivators, and encouragers to take responsibility for their learning under the teachers' guidance. Three students in focus group discussions specifically mentioned this, for instance:

"She was so motivating that we always looked forward to her lesson." (FG4, S5)

"Our teacher gave us much support." (FG3, S2)
"Lack of support from instructors." (FG1, S4)

Pupils must be continuously inspired and reminded of their potential to overcome their shyness and lack of confidence. Students had a new, activity-based learning method that they enjoyed. They viewed their professors as sources of support, which fueled their enthusiasm for the FE class. If the teacher's negative attitude is negative, they feel this would be a significant barrier to learning.

"I never dishearten them and constantly tell them to answer, whether it's correct or bad, but I let them." (T5)

Students frequently hesitate to speak out in class out of concern that they will be ridiculed by their peers or the teacher for being incorrect, which impedes their ability to learn.

The students clearly understood the significance of the instructor in the classroom. For instance, one of the kids made the

following precise statement:

"Nobody can dispute the importance of a teacher, and in our situation, we are fortunate to have a fantastic teacher who treats us more like friends. He was critical in the growth of our cognitive abilities." (FG1, S3)

"Teacher has a pivotal role in our learning that he plays by modeling desired skills," added another student teacher.

"Everything I have learned is thanks to my teacher." (FG2, S6)

The first student-teacher views the effective instructor as "more of a buddy." When asked to highlight any hurdles they could think of, two more children expressed similar sentiments:

"...when the instructor is not nice, and we feel pressure because of his/her presence." (FG1, S2)

"The teacher's cold manner." (FG4, S6)

Students must be free to question and explore ideas in a safe environment to grow as critical thinkers. The first comment exemplifies how essential thinking abilities must be developed in a free and encouraging learning environment. The opinions of the professors were somewhat consistent. For instance, one instructor said the following when talking about the value of being friendly:

"When I say "friendly, I want to say that the instructor should establish a rapport. Your audience must feel strongly connected to you. They are unable to learn from instructors they find offensive." (FG3, S4)

Because of this, relationships are crucial. One of the teachers made a more direct connection between this and the growth of higher-order thinking skills:

"I have realized that the teacher's role is crucial in developing students' HOTS. Regarding my responsibility, I have always pushed kids to speak up." (T4)

Questioning and Time to Ponder

Students talked about asking questions as a better technique to enhance HOTS like critical thinking skills. Questioning is essential, as one student pointed out:

"Our teacher was crucial in helping us improve our critical thinking abilities. She frequently questioned us and urged us to express our opinions, whether they were correct or incorrect, on many subjects." (FG4, S1)

Several students voiced concern about needing more time for reflection because of the promotion of higher-order thinking. For instance:

"The largest obstacle, in my opinion, is when teachers don't allow their students enough time to reflect and instead start lecturing them on the material." (FG1, S5)

"Lack of sufficient time for the student to reply. Not all pupils think at the same speed; some take longer to process information and respond than others." (FG4, S2) "She used to give us time to consider her response before answering." (FG4, S1)

The pupils did not bring up the concern of an overloaded curriculum. They instead point out the problem that teachers frequently give pupils "answers" without giving them adequate time to consider and reply. As an illustration, say that the teacher always arrives at class thoroughly prepared, having carefully thought-out activities and teaching ideas (FG1, S5). While a prepared teacher is expected to manage their time adequately, giving pupils enough time to ponder and react requires both pedagogical expertise and human sensitivity.

Students' Educational Background

The educational backgrounds of the learners were also taken into account in light of their experiences in the course to examine how they were seen as aiding or impeding the promotion of higher-order thinking. Many students, meanwhile, see the questions in the background of language acquisition, saying things like,

"At first, it was difficult for me to learn actively due to my weak prior learning, but I found this course very helpful in enhancing my language skills and boosting my confidence." (FG2, S6)

"There is no question that we had a far better experience of learning English through this course." (FG 2, S3)

"It influenced a lot because we had some information which benefited us in this session." (FG2, S5)

"Even though our prior experience was dull, the educational background helped." (FG1, S2)

"Yes, our school experience benefited us because we already knew the basics of the language." (FG5, S8)

Teachers also frequently neglected critical thinking in favor of focusing on student-teacher background issues that generally impeded language learning:

"I found in my class students who have a rural background and came with a poor learning experience in the past. The confidence as well. I supported them in overcoming their nervousness by extending extra help in their studies. They ultimately succeeded in gaining confidence and started performing well." (T3) "Their academic background and lack of confidence significantly impede their learning ability. I never put them down; I always heard them, whether right or wrong, but I allowed them to answer." (T5)

"Their socioeconomic status and lack of funds for mental skills presented significant obstacles, but with time they gained confidence and began participating in all activities." (T1)

The teacher opinions underline the inequity in school education provision, where private schools in cities have a significant edge over rural schools. The concept of confidence is stressed in all three responses.

Assessment Criteria

Both students and teachers were unhappy with the traditional examination for its focus on recall. In their opinion, the evaluation described in the FE course is expected to be very helpful in promoting desired skills.

A midterm assessment and continuous assessment activities, such as presentations and assignments, each received 25% of the credit in the FE course, leaving the final written paper to acquire the remaining 50% of the credit. Two students expressed the following opinions when asked to remark on this marks distribution:

"Marks distribution offers a chance to examine all language skills." (FG4, S1)

"In the semester system, particularly in this course, the distribution of grades is good. We received 25, which is fantastic, for our assignments, presentations, and other tasks." (FG3, S1)

Their remarks imply that this distribution is beneficial for evaluating all linguistic abilities. Students naturally pay more attention to learning all these abilities when they know they will be assessed and inspected.

One instructor made the following observation on credit given for ongoing assessment tasks:

"Being a language instructor makes me extremely pleased because I can evaluate my students' speaking, listening, and involvement skills and their questioning and answers, which is superior in terms of language development." (T2)

Discouraging Memorization

The students underwent a continuous assessment throughout the semester in Phase II, close to the end of the course; two students expressed their opinions quite succinctly:

"We all believe that the former test method encouraged memorization and rote learning." (FG3, S1)

"It inhibits memorization," (FG4, S3)

All language abilities are evaluated in the FE course, which benefits students' learning and discourages memorization.

One teacher noted,

"The teachers were extremely aware of the issues generated by exams that awarded the majority of the rewards for recall."

"When I talked about the evaluation system as unhelpful in promoting good thinking skills, I had in my mind the old evaluation system, which used to test factual knowledge using recall. However, the assessment approach followed in the course of FE; I found it different as it promoted original thinking and enduring learning among learners as they were exposed to independent learning." (T5)

What the pupils described above is supported by teacher remarks. Teachers felt that the old test system was a significant barrier to encouraging students to think critically. They know that the FE course allows students to test their full language proficiency and discourages memorization.

Training of Teachers

A detailed statement on the significance of teacher training was made:

"Assessment is essential; however, I witnessed the use of questions in evaluation which required regurgitating the memorized material. I believe that while creating a question paper, teachers should be instructed or reminded to include questions that allow each student to respond using their ability to analyze and evaluate. So, my priority is to educate instructors on how to ask the right questions. Then I'll suggest that the assessment, namely the oral exam, must incorporate speaking and listening because CT is involved in instant question answers,

which do not rely on memorization. This is something I recommend in particular for the FE test." (T2)

Discussion

Teachers and students all denoted the same facilitators and barriers in developing HOTS. The activity-based course, teachers. teachers' instructional strategies, learner-centered classrooms, and evaluation criteria emerged as facilitators. The teacher's role as a traditional instructor is knowledge provider, while teachers' roles have emerged as facilitators, encouragers, and friends. Students developed a learning bond with their teachers by involving in peer discussions and activities in the classroom. In the FE course, the teacher's role has transformed into a guide who involves students in questioning and challenging tasks. This way the teacher is central to motivating students for asking questions and establishing a classroom learning environment that is acceptable and feasible.

The barriers during Phase I emerged in the form of an assessment process. The students were optimistic that they would get freedom from the traditional assessment system that served rote memorization and recall. During Phase II, both groups of participants (teachers and students) described assessment in a semester system as helpful in evaluation. The range of skills has been assessed in the semester system. However, neither the teachers nor students depicted any clarity about assessing HOTS in the examination except in classroom activities and formative assessment. Fostering basic thinking skills may contribute to enhancing understanding. On the other hand, Ausubel et al. (1978) study found no association between teaching strategy and meaningful learning, Kirschner et al. (2006) research confirmed this finding.

Students previously learned English through rote memorization possessing weak backgrounds. Teachers also indicated students' background as the barriers hindering their learning but students' active participation in inquiry-based tasks highlighted their enthusiasm and further supported the idea that change could be brought about by guidance and assistance. In this study, the teachers were much

more positive and identified areas where students faced difficulties instead of blaming students for their mistakes. Students also recognized their weaknesses. They all have been living in a system where memorization is considered essential, and a change was not easy to follow. Therefore, students were delighted with the freedom and opportunities the course provided. The student's interest and motivation indicated that they do not want their development in critical thinking skills to be deterred by their previous experiences. The approaches teachers' applied in teaching the course implied their enthusiasm and willingness to transform their instructional methods into advanced and engaged ones. These abovementioned aspects signify that the previous learning experience is not easily overcome. The students seemed enthusiastic about the innovative and creative aspects of the course. The student's academic background emerged facilitating or hindering element. Those students who attended non-English medium schools considered their background as a barrier.

Conclusion

During the 1st phase of the study, the teachers and (prospective teachers) unanimously mentioned the critical role of teachers in promoting HOTS. The traditional assessment system was seen as a severe constraint to achieving desired skills. Learners' background was also found to influence further learning. The data of the second phase revealed details about how teachers' roles worked during the course implementation. Teachers followed the guidelines provided by the course guide and used the learning materials suggested for activities. Teachers' encouragement and making students actively participate proved very helpful in developing HOTS Moreover, the students were no longer bound to specific content. The teachinglearning was student-centered and involved group activities. Students were encouraged to engage in conversation with one another, providing lots of chances for discussion and debate. The course requirements offered a flexible and supportive structure, and these elements allowed the teachers to broaden the abilities taught helpfully.

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