EXAMINING PRE-SERVICE ELT TEACHERS' QUESTIONING STRATEGIES

İNGİLİZCE ÖĞRETMEN ADAYLARININ SORU SORMA STRATEJİLERİNİN İNCELENMESİ

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ABSTRACT

Promoting learners' higher-order thinking, which is also called critical thinking. requires using instructional strategies beyond merely recalling information but analyzing, evaluating, and creating information, as suggested in Bloom's Revised Taxonomy of Educational Objectives (2001). As an indispensable vehicle for instructional practice and assessment, questioning is both an end to be achieved and a valuable means to attaining higher-order thinking levels. Bearing in mind that a teacher who can incorporate the so-called skills may transfer those to future language practitioners, teacher educators are on the lookout for designing courses that foster critical thinking. In this study, one of the core courses entitled 'Literature in ELT' was chosen to explore the questioning levels of pre-service ELT learners (henceforth PTEs) at a university to uncover their knowledge of higher-order thinking levels using Bloom's Revised Taxonomy as a framework. Randomly selected short stories which were classified according to Common European Framework of References (CEFR) levels were distributed to the learners. Afterwards, they were asked to generate questions imagining that they would assign these stories to their future learners to check their reading comprehension. The questions were gathered to determine what levels of Bloom's Revised Taxonomy the questions correspond to and examine the frequency and distribution of the questions at each level. The findings revealed that questions created by PTEs, addressing lower-level thinking skills in the taxonomy, outweighed the higher-order thinking skills for each level of stories.

ÖZ

Öğrencilerin eleştirel düşünme olarak da adlandırılan üst düzey düşünmelerini sağlayabilmek, Bloom'un Gözden Geçirilmiş Eğitim Hedefleri Taksonomisinde (2001) önerildiği gibi, sadece bilgiyi hatırlamanın ötesinde, bilgiyi analiz etme, değerlendirme ve yaratma gibi öğretim stratejilerini kullanmayı gerektirir. Öğretimde uygulama ve değerlendirme için vazgeçilmez bir araç olan sorgulama hem ulaşılması gereken bir amaç hem de üst düzey düşünme seviyelerine erişmek için değerli bir araçtır. Söz konusu becerileri edinen bir öğretmenin, bunları geleceğin dil öğretmenlerine aktarabileceğini göz önünde bulunduran öğretmen eğitimcileri, eleştirel düşünmeyi teşvik eden dersler tasarlama arayışı içindedir. Bu çalışmada, Bloom'un Gözden Geçirilmiş Taksonomisini bir çerçeve olarak kullanarak, bir üniversitedeki İngiliz Dili Eğitimi öğrencilerinin üst düzey düşünme düzeylerine ilişkin bilgilerini ortaya çıkarmak amacıyla sorgulama becerilerini araştırmak amacıyla 'Edebiyat ve Dil Öğretimi' başlıklı temel derslerden biri seçilmiştir. Öğrencilere, Avrupa Ortak Referans Çerçevesi seviyelerine göre sınıflandırılmış rastgele seçilmiş kısa hikayeler dağıtılmıştır. Daha sonra, bu hikayeleri gelecekteki öğrencilerine okutacaklarını hayal ederek sorular oluşturmaları istenmiştir. Soruların Bloom'un Gözden Geçirilmiş Taksonomisinin hangi seviyelerine karşılık geldiği ve her seviyedeki soruların sıklığı ve dağılımı incelenmiştir. Bulgular, öğretmen adayları tarafından oluşturulan ve taksonomideki alt düzey düşünme becerilerine hitap eden soruların, hikayelerin her seviyesi için üst düzey düşünme becerilerinden daha ağır bastığını ortaya koymuştur.

Introduction

With the emergence of 21st-century skills, the term 'critical thinking' has arisen as one of the learning outcomes for modern education. It has been popularized, yet no based asset has been established, and individual meanings differ (Alagözlü, 2007; Ennis, 2011; Epstein, 1999; Evancho, 2000; Facione, 2011). Critical thinking seems to be highly subtle to observe and acquire as it involves relatively complex higher-order thinking skills and processes which require judgement, analysis, synthesis, reflection, self-monitoring (Doğan & Başol, 2021; Doğanay & Ünal, 2006; Douglas, 2000; Halpern, 2007; Pukiene & Doğan, 2022; Ryan, 2019; Toharudin, 2017), comparison, classification, sequencing, cause/effect, patterning, webbing, deductive and inductive reasoning, forecasting, planning and critiquing (Johnson & Lamb, 2011 as cited in Mcbain, 2011). Even though there is no clear-cut definition of the notion of critical thinking and the most effective ways to teach it (Collins, 2016; Seferoglu & Akbıyık, 2006; Scriven & Paul, 2008; Vaughn, 2005), it is accepted as one of the components of the 21st-century skills and is commonly included within cognitive skills to optimize active and engaging tasks that are required to develop inferences and evaluate the outcomes of thinking processes (OECD,2016).

The variety in the definition of critical thinking stems from different philosophical, psychological, and educational perspectives on critical thinking. Benjamin Bloom (1956) holds an educational approach to defining critical thinking emphasizing thinking abilities and observable thinking behaviors in contrast to the philosophical and psychological perspectives of critical thinking. Bloom's taxonomy of Educational Objectives (1956), frequently referred to as Bloom's taxonomy, with six levels of thinking which were originally knowledge, comprehension, application, analysis, synthesis, and evaluation, was revised with the collaboration of Anderson Krathwohl and his colleagues in 2001. The levels were renamed as verbs- remembering, understanding, applying, analyzing, and the top two levels -evaluating and creating- were switched. The top three levels of Bloom's taxonomy of educational objectives- analyzing, evaluating, and creating- are suggested to be a component of critical thinking. The taxonomy has become a helpful guide for teachers in language teaching and learning in standardizing learning objectives. These higher-order thinking skills have been mainly involved in the planning and implementing instructional decisions such as setting learning outcomes, structuring thinking tasks, checking reading comprehension and posing questions.

Literature Review

Not very easily observed, critical thinking embraces and targets higher-order thinking skills, thus one of the most precise indicators of critical thinking stands as questioning. Therefore, questioning becomes the most important in-class tool and technique to observe and develop higher-order thinking skills, and it 'lies at the basis of all good teaching' (Betts, 1910, p.55). Learning is enhanced through higher-order questions by allowing learners to provide in-depth explanations. The more a teacher consistently boosts the level of their questions, the more elaborate and intriguing the learners' responses will be. Learners' thinking levels are directly and indirectly related to the questions posed by teachers. Simple recall questions do not encourage more profound thoughts. Not only are questioning strategies necessary for developing critical thinking skills, but they are also considered essential for effective instruction, classroom interaction and reading comprehension checks. For instance, in language teaching and learning contexts, teachers should develop specific pre-task questions that help stimulate learners' prior knowledge and experiences, setting the basis for critical thinking and preparing learners for follow-up activities. Teachers should be able to pose thought-provoking questions and effectively employ them to pique learners' interest and encourage cognitive engagement. Likewise, generating the right questions is of great importance in developing and improving learners' critical thinking, making it indispensable for the PTEs to be trained on how to be critical thinkers themselves first and form questions appropriately to train their learners. By modelling appropriate questioning, teachers with a good command of various questioning strategies can help learners think and learn independently. Bearing in mind that a teacher who can incorporate the skills above may transfer those to future language learners, teacher educators are on the lookout for designing courses that foster critical thinking. In pre-service ELT programs, the courses should lead the learners to become self-regulated critical thinkers. With a grasp of the idea, the study focused on the questioning levels of PTEs in search of higher-order thinking skills, as outlined in Figure 1 below.
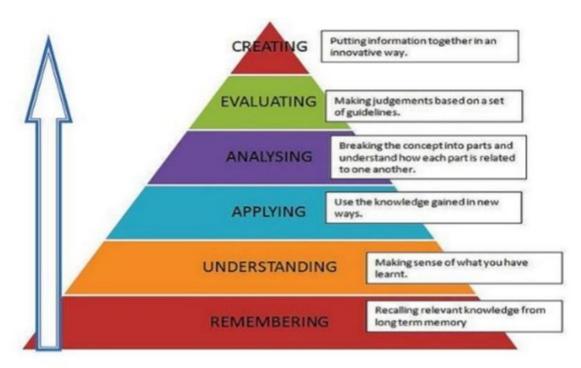
Figure 1. Köksal and Ulum (2018)

English language teachers' questioning strategies have been studied in various contexts since they have been considered one of the essentials of effective teaching, embodying multi-faceted functions such as building a bridge between learning, teaching and evaluation. Many studies were conducted on examining both pre-service and in-service ELT teachers' questioning in several respects: from the types of questions they utilized, the relationship between questioning and thinking skills or metacognition to its role in teaching and facilitating language skills.

Most of the studies relied heavily on fostering critical thinking skills using higher-level order questions (Akatsuka, 2019; Collins, 2014; Doğanay & Ünal, 2006; Milawati & Suryati, 2019). A survey to reveal lecturers' levels of questions in Indonesia tertiary education was conducted by Ashadi and Lubis (2017) at a private university in North Sumatra. The teachers' questions were gathered from summative tests administered in their classrooms. The 65 questions were subject to content analysis based on Gallagner/Aschner Bloom Classification System and the results yielded that lower-order thinking question types (69%) outweighed higher-order question types (31%). Most lecturers used lower-order questions, which demanded basic knowledge and understanding of the students through recalling facts. Another study which adopted a qualitative design aimed to explore the level of teacher questioning through classroom observation records. The findings showed that out of four types of questioning strategies, redirecting and reinforcement are found more frequently than rephrasing and probing, which are categorized as lower-level questioning (Milawati & Suryati, 2019). A study by Azerefegn (2008) employed Bloom's taxonomy to classify the questions based on the levels of thinking and found that remembering questions were in the first rank (77.1%) according to the frequency of use. It was followed by understanding questions (22.9%). The findings revealed that the teachers could not effectively use the questioning strategies. Khorsand (2009) studied teachers' questioning skills and levels within the Iranian context and found that only 4.19 % of the participants generated questions at the highest three levels of Bloom's taxonomy. Multiple case studies investigating the practice of teacher questioning gathered data from interviews and multiple sources, namely, interviews, textbook analysis, and observations. The studies revealed that teachers depended on textbooks which exposed them to low-level questions. This led them to have difficulty in generating high-level questions (Sunggingwati & Nguyen, 2013; Tarman & Kuran, 2014; Tyas, Nurkamto & Marmanto, 2020). Regarding pre-service teachers, several studies were conducted to analyze their critical thinking through questioning levels. A Japanese review study by Akatsuka (2019) examined the awareness of critical thinking attitudes in EFL context. The findings revealed that EFL teachers could foster students' higher-

order thinking if they organized their courses accordingly. The results also indicated that students' critical thinking attitudes and speaking skills improved regardless of their English proficiency level.

The relationship between critical thinking and questioning behaviors of PTEs was investigated from multiple sources at a state university context and in Türkiye. There found to be a connection between their thinking levels and questioning. The findings suggested that the participants who scored higher, experienced more intensive thinking processes than the lower score group (Şeker & Kömür, 2008). PTEs questioning strategies were studied during classroom interaction by Masyruha, Atmowardoyo and Salija (2018) in a descriptive study to reveal the types of questioning. It was found that most PTEs' questions fell into the remembering level. However, they could reach the applying-level-question when they were asked to elaborate more on the introduced issues. As the teachers of the 21st century, the PTEs must be reflective practitioners, effective problem solvers, and inquirers. Hence, they must be able to find opportunities to cultivate their critical thought and inquisitiveness, which is possible through teacher education programs encompassing critical thinking skills in the curriculum. Investigation into PTEs' questioning levels has been lacking regarding EFL teacher education context (Brouwer, 2015; Hanks, 2018; Khalifa & Weir, 2009). This study can be considered as a practice to unveil PTEs' ability to generate questions through CEFR-graded reader texts to address this research gap.

Methodology

Research Design and Questions

In this study, the questioning skills of PTEs were descriptively examined based on Bloom's Revised Taxonomy of Educational Objectives (2001). The study set out to seek the answers to the following questions:

1. Which levels of questions are generated by PTEs?
2. What is the distribution of PTEs' questions according to CEFR levels?

Limitations

Data collection rests on gathering and classifying PTEs' questions generated according to one-shot delivered CEFR level texts. The study adopted a quantitative design and data were obtained from the participants through online written forms. Different texts distributed at several intervals can be used to increase the reliability of the data. Data gathering can be expanded by utilizing real-time oral interaction in the classroom. The research is only limited to an ELT department at a state university. More studies in different higher education environments would have implications for further quantitative and qualitative studies in various courses.

Research Context and Participants

The participants of the study were third-year students of the English Language Teaching department at a state university in Türkiye. The group was selected voluntarily through convenience sampling. The participants were the PTEs taking a 'Literature in English Language Teaching' course delivered by one of the researchers. They were assumed to be almost at the same proficiency level as they were obliged to initially take the standardized national university entrance exam to be validated to commence their departmental program. Afterwards, they all had to take and receive a minimum score of 85 out of 100 from the English language proficiency exam to be able to start their departmental courses. The participants previously took advanced-level English skills courses such as Advanced Reading, Writing, Speaking, English Structure, Listening and Pronunciation during their freshman year. They also took field courses such as Language Acquisition, Approaches to Language Teaching, Teaching Language Skills, Critical Reading and Writing, English Literature, and departmental elective courses along with Educational Sciences courses; namely, Educational Psychology, Educational Philosophy, Educational Technologies, Research Methods in Education and Educational History. 104 PTEs (75 females and 29 males) participated in the study.

Data collection was conducted during the online 'Literature in English Language Teaching course, endorsed with a compiled coursebook and additional supplementary materials involving audio-visual components through the online Moodle platform provided by the university throughout the spring term.

Data Collection and Analysis Procedures

In a course entitled 'Literature in ELT', PTEs have access to multiple literary texts in the curriculum; therefore, the course was purposefully chosen for the purposes mentioned above. Within the framework of the course, where prospective teachers are prepared to utilize literature to teach English in their future classrooms; PTEs were asked to formulate questions that they would use in their story-reading lessons to check reading comprehension. Within the framework of this course, four short stories ranging from A1 to B2 (CEFR) levels were distributed to the learners, and their questions regarding the stories were gathered in return. These questions formed the data of the study. Providing a set for presenting cognitive levels for questioning, Bloom's Revised Taxonomy of Educational Objectives (2001) was used as the instrument to analyze the data on the questioning skills of PTEs.

To have a better understanding and analysis of PTEs' questioning skills, qualitative analysis was conducted in the initial phase of the study. The questions were subjected to descriptive content analysis. They were coded according to Revised Bloom's Taxonomy of measurable/action verbs and categorized to classify the levels of thinking addressed through questions regarding stories distributed depending on Bloom's Taxonomy of Educational Objectives (Anderson & Krathwohl, 2001). In this phase of the study, the categorization of the questions was carried out by three researchers to ensure cross-checking (Creswell, 2017) according to six levels of Bloom's Taxonomy, arranged in hierarchical form, moving from the lowest level of thinking to the highest level of thinking (or from the most minor complex to the most complex). The initial phase of categorizing the questions through content analysis made it possible to handle the data in a frequency distribution to scrutinize them numerically through SPSS 25 (Statistical Package for the Social Sciences).

Findings and Discussion

This section will provide the findings and discussion by addressing each research question.

Research Question 1. What levels of questions are generated by the PTEs?

The results drawn from the data to seek an answer to Research Question 1 are provided in Table 1. The frequencies are shown with the abbreviation of (f) and the percentages are added to the table under the "%" symbol. The CEFR-graded stories are given as A1/A2/B1/B2 vertically. The levels of the questions addressed to the objectives of Bloom's Revised Taxonomy are presented horizontally.

Table 1. Pre-service teachers' questioning levels

	A1		A2		B1		B2	
	f	%	f	%	f	%	f	%
Remembering	74	71.2	61	58.7	48	46.2	25	24
Understanding	23	22.1	29	27.9	22	21.2	32	30.8
Applying	2	1.9	4	3.8	5	4.8	9	8.7
Analyzing	3	2.9	4	3.8	13	12.5	9	8.7
Evaluating	2	1.9	5	4.8	15	14.4	20	19.2
Creating	0	0	1	1	1	1	9	8.7

As indicated by the percentages and frequencies, for A1 stories, 74 participants with the highest percentage (71.2%) formulated questions at the lowest level-Remembering, which is also the case for the A2 (58.7%/61), and B1(46.2%/48) stories respectively. Only for the B2 level, the highest percentage and frequency (30.8%/32) were for the questions at the Understanding level, which is also one of the lowest levels.

The highest level of thinking, Creating level, receives the least frequency and percentage (0 %/0) for A1 story, only 1%/1 for A2 and B1 stories, and for the B2 story, it receives also low level of frequency and questioning (8.7 % /9).

These frequencies and percentages indicate that PTEs generated questions which exhibit memory by recalling facts, terms, basic concepts, and answers. There is not an even distribution of questions. They mainly used action verbs; namely, choose, find, label, list, match, name, select, tell verbs and wh- (information) questions, which relates to remembering level in Bloom's Revised Taxonomy. These findings of PTEs are parallel to the

results of Khorsand (2009), Milawati and Suryati, (2019), Sunggingwati and Nguyen (2013), Tarman and Kuran (2014), and Tyas, Nurkamto and Marmanto's (2020) studies which yielded lower levels in teachers' questioning. In general, the generated questions seek answers to Remembering level questions such as; 'Who are the main characters in the story?', 'What do the two mice see in the kitchen?' followed by Understanding level questions such as 'What are the differences between the country mouse and the town mouse's house?', which require searching for less deep meanings and a small amount of time for acquainting the reader with the story. On the other hand, when the frequency of questions analyzed depending on the Bloom's Revised Taxonomy levels, the results indicate that PTEs generated few questions which seek answers to higher cognitive levels such as, 'Do you think it is worth the risks and efforts to have everything bigger and shinier? (evaluating), 'Write an ending telling what happened to the Cooper after the robbery by changing the last paragraph' (creating), and 'Using the evidence in the text, how do you think Dan Cooper disappeared?' (analyzing), which improves questioning skills in teachers. Nevertheless, considering the majority, the PTEs' questions to check their future learners' comprehension of the narrative texts and to engage them actively in the reading material seem to have focused on questions probing into story elements, namely, the setting, the main character, and the main events at the knowledge level.

Lower level questions (remembering and understanding) required factual information such as 'How far is the Earth from the Moon?' or merely yes/no answers: 'Does it rain on the moon?'. Level 2 questions are about the key concepts regarding the topic, such as gravity, and air pollution that require brief explanations: 'What is car pollution? Does the sun have gravity?'. Level 3 questions can be characterized by expressing prior knowledge in the question itself and thus probing for a concept: 'If the Earth moves around the Sun, why do we have cloudy days?'. Prior knowledge was defined as either coming from prior experiences or readings, or knowledge learned from the text that was integrated into existing schemata. The highest question level, Level 4, consisted of questions about relationships among the key concepts in a given topic. They seek explanations that link two or more key concepts; for instance, for the topic of Earth, two key concepts were gravity and rotation: 'What helps Earth rotate, its gravity or the Sun's gravity?'

Although good questions were defined to be open-ended, involving more than just a memory recall, and encouraging active learning (Sullivan& Clarke, 1991), when the questions of the PTEs were examined, open-ended questions are fewer. The PTEs need to be aware of the importance of developing more inferential skills and evaluative questioning skills.

Research Question 2. What is the distribution of PTEs' questions levels according to CEFR?

The distribution of PTEs' questions posed for different CEFR level stories, corresponding to the higher order thinking levels- analyzing, evaluating, and creating was analyzed through descriptive analyses. Table 2. displays the distribution of pre-service teachers' questioning levels based on A1-A2 and B1-B2 CEFR levels.

Table 2. Distribution of pre-service teachers' questioning levels based on CEFR levels

	A1-A2		B1-B2	
	f	%	f	%
Remembering	135	32.45	73	17.54
Understanding	52	12.5	54	13
Applying	6	1.44	14	3.36
Analysing	7	1.68	22	5.3
Evaluating	7	1.68	35	8.4
Creating	1	0,24	10	2.4

The frequencies are shown with the abbreviation of (f) and the percentages are added to the table under the "%" symbol. The CEFR-graded stories are given as A1/A2/B1/B2 vertically. The levels of the questions addressed to the objectives of Bloom's Revised Taxonomy are presented horizontally.

Fostering higher order thinking skills for PTEs first depends on the nourishment of teachers' higher order thinking skills (Borg, 2013; Elder & Paul, 1994). The findings of the study reveal that prospective teachers do not employ higher level questions. Most PTEs use lower-level questioning techniques focusing on memory and

knowledge rather than raising higher level questions. The small increase in the number of questions for creation level for B1 and B2 leveled stories might imply that higher-level cognitive tasks, such as reasoning, inferential, and evaluative questions, can be more attainable through texts with greater complexity. However, rather than the amount of vocabulary and syntactic level of the text, the cognitive level of the questions might stem from the students' lack of higher-order thinking while preparing questions for given text. From the low number of higher-order thinking questions, it is evident that PTEs do not possess the competencies required for higher-order thinking questioning. The CEFR level of the stories does not seem to be related to the level of thinking skills.

Even though recall and comprehension questions suggested by the students are at the lowest level of cognitive processing in the taxonomy, those questions are still valuable in terms of their contribution to comprehension check, knowledge construction, and creating a shared understanding of the subject matter (Benjelloun & El Allame, 2019; Black, 2005; Fisher, 2005; Halvorsen, 2005; Myhill & Dunkin 2005; Stapleton, 2002). Reading comprehension should be beyond mere retrieval of facts or information within the text. It involves a dynamic interplay between cognitive and metacognitive strategies and nonstrategic knowledge when making sense of what they are reading or have read.

The results also imply that their awareness of different sorts of questions should be fostered to scaffold their understanding of questioning better. Through such a study, the participants were allowed to evaluate their performance in questioning, reflecting on their weak and strong points. The questions collected from the PTE's provide a data-driven framework of questioning techniques that could serve as a powerful guide for teacher educators dealing with English teacher candidates. The Council of Higher education has long been aware of the need for integration of critical pedagogies into second language teacher education programs. Literature and research have raised issues of teachers' questioning being insufficient for higher-level cognition.

Conclusion

Critical thinking, standing as one of the core components of 21st-century skills, is reflected and clearly prominent through the observation of questioning. Questioning, and in this connection, critical thinking skills can be improved through diligent work. Before training the language practitioners, especially and primarily the teachers should be trained to thoroughly train their students. Teacher-training departments figure into prospective teachers' critical thinking skills, and future careers as teachers. Therefore, the study investigated the extent to which the PTEs' questions stimulate thinking and how much they differ in the levels of Bloom's taxonomy. Exploring the diversity of questioning behaviors of the pre-service teachers and the questions, it was found that there is a need for studies for further studies regarding prospective learners' questioning behaviors and the call for teacher educators' attention to improving prospective teachers' questioning ability.

The findings of the study showed that pre-service teachers need to be trained to pose effective and stimulating questions to trigger higher-order level thinking. Likewise, the previous studies indicated that effective questioning should be prioritized in pre-service education. As some researchers suggest, (Barkhuizen, 2014; Darling-Hammond, 2006; Dogan & Başol, 2021; Forehand, 2010; Jie & Yuang, 2015; Khorsand, 2009; Krathwohl, 2002; Tarakçıoğlu, 2008) undergraduate methodology courses would provide opportunities to implement questioning training based on Bloom's taxonomy. Correlatively, according to the findings of the present study, it might be suggested that chances for further improving questioning skills should be included within the programs and curriculums both by the Council of Higher Education and the faculties associated. Hereby, teacher-trainers and in-service teachers should also be a part of the development. Like a chain reaction, teacher trainers had better refresh their skills to be good models, and to provide opportunities for the teacher-trainees to improve their critical thinking skills. In-service teachers on the other hand, should also get in-service training to keep improving their questioning skills to raise generations competent in the needs 21st-century proposes. It is suggested that teachers attend workshops or training programs to enhance higher-order level questions. The questioning strategy plays a vital role in the development of the reading and critical thinking skills of the learners. Hence, teacher questions, disregarding the level and grade of the students, should not only address the cultivation of skills of memorizing, retrieving information, restating, or paraphrasing. The nature of questioning and teachers' behaviors on questioning in language classrooms should be further detailed and focused.

Implications for Further Studies

This research study lied heavily on the questioning skills of 3rd-year PTEs at a state university. Further studies might be conducted on different grades within the scope of other courses focusing on comparing these graders' questioning skills. Another aspect to investigate might be comparing the questioning skills of pre-service teachers, novice teachers and experienced teachers regarding these diverse variables. An implementation procedure could also be included within, comparing the questioning skills before and after to raise the participants' awareness on the importance of questioning and how to generate thought-provoking and well-formulated questions. This implementation could be in the form of a questioning strategy training focusing on integrating critical thinking developed in cooperation with program planners and field experts and, further, be integrated within the SLTE curriculum. Another suggestion might be that of a longitudinal study through which participants' gradual performances and improvements are traced per year. Furthermore, the questioning mentioned above strategy training should be expanded to the other teacher education departments and in-service teacher development programs.
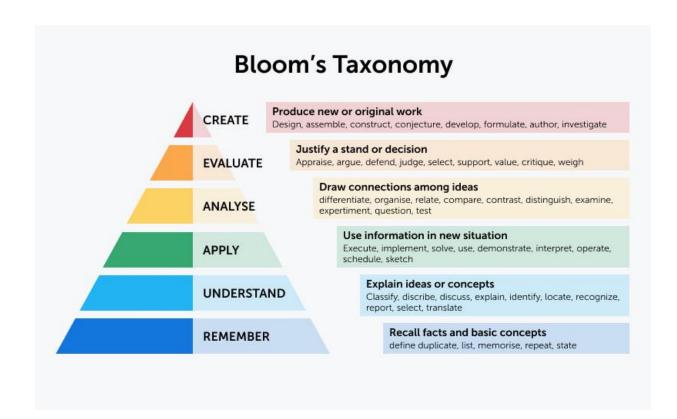
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Appendix 1. Revised Bloom's Taxonomy of Action Verbs

Bloom's Taxonomy

CREATE — **Produce new or original work**
Design, assemble, construct, conjecture, develop, formulate, author, investigate

EVALUATE — **Justify a stand or decision**
Appraise, argue, defend, judge, select, support, value, critique, weigh

ANALYSE — **Draw connections among ideas**
differentiate, organise, relate, compare, contrast, distinguish, examine, expertiment, question, test

APPLY — **Use information in new situation**
Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

UNDERSTAND — **Explain ideas or concepts**
Classify, discribe, discuss, explain, identify, locate, recognize, report, select, translate

REMEMBER — **Recall facts and basic concepts**
define duplicate, list, memorise, repeat, state

GENİŞLETİLMİŞ ÖZET

'Eleştirel düşünme' terimi, 21. yüzyıl becerilerinin ortaya çıkmasıyla birlikte modern eğitimin öğrenme çıktılarından biri olarak hayatımıza girmiştir. Bu terim popülerleşmiş olmasına rağmen tek bir tanım üzerinde ortak görüş verilmemiştir ve karşımıza bireysel birçok farklı tanım çıkmaktadır.

Eleştirel düşünme; muhakeme, analiz, sentez, yansıtma ve kendini izlemeyi gerektiren nispeten karmaşık üst düzey düşünme beceri ve süreçlerini içerdiğinden gözlemlenmesi ve edinilmesi oldukça zor görünmektedir zira karşılaştırma, sınıflandırma, sıralama, neden/sonuç, örüntüleme, ağ oluşturma, tümdengelimli ve tümevarımlı akıl yürütme, tahmin etme, planlama ve eleştirme gibi pek çok karmaşık becerilerin bir arada kullanılmasını şart koşmaktadır.

Eleştirel düşünmenin tanımındaki çeşitlilik, eleştirel düşünmeye ilişkin farklı felsefi, psikolojik ve eğitimsel perspektiflerden kaynaklanmaktadır. Benjamin Bloom (1956), eleştirel düşünmenin felsefi ve psikolojik perspektiflerinin aksine, düşünme becerilerini ve gözlemlenebilir düşünme davranışlarını vurgulayan eleştirel düşünmeyi tanımlamaya yönelik eğitimsel bir yaklaşıma sahiptir. Sıklıkla Bloom'un taksonomisi olarak anılan ve başlangıçta bilgi, kavrama, uygulama, analiz, sentez ve değerlendirme olmak üzere altı düşünme düzeyi içeren Bloom'un Eğitim Hedefleri Taksonomisi (1956), 2001 yılında Anderson Krathwohl ve meslektaşlarının iş birliği ile revize edilmiştir. Seviyeler fiil olarak yeniden adlandırılmış -hatırlama, anlama, uygulama, analiz etme- ve en üstteki iki seviye -değerlendirme ve yaratma- değiştirilmiştir. Bloom'un eğitim hedefleri taksonomisinin ilk üç seviyesinin- analiz etme, değerlendirme ve yaratma- eleştirel düşünmenin bir bileşeni olduğu öne sürülmektedir. Taksonomi, dil öğretimi ve öğreniminde öğretmenler için öğrenme hedeflerini standartlaştırmada yardımcı bir rehber haline gelmiştir. Bu üst düzey düşünme becerileri, öğrenme çıktılarını belirleme, düşünme görevlerini yapılandırma, okuduğunu anlamayı kontrol etme ve soru sorma gibi öğretimsel kararların planlanması ve uygulanmasında temel olarak yer almıştır.

Öğrencilerin eleştirel düşünme olarak da adlandırılan üst düzey düşünmelerini sağlayabilmek, Bloom'un Gözden Geçirilmiş Eğitim Hedefleri Taksonomisinde (2001) önerildiği gibi, sadece bilgiyi hatırlamanın ötesinde, bilgiyi analiz etme, değerlendirme ve yaratma gibi öğretim stratejilerini kullanmayı gerektirir. Öğretimde uygulama ve değerlendirme için vazgeçilmez bir araç olan sorgulama hem ulaşılması gereken bir amaç hem de üst düzey düşünme seviyelerine erişmek için değerli bir araçtır. Söz konusu becerileri edinen bir öğretmenin, bunları geleceğin dil öğrencilerine aktarabileceğini göz önünde bulunduran öğretmen eğitimcileri, eleştirel düşünmeyi teşvik eden dersler tasarlama arayışı içindedir.

Bu çalışmada, Bloom'un Gözden Geçirilmiş Taksonomisini bir çerçeve olarak kullanılarak, bir üniversitedeki İngiliz Dili Eğitimi öğrencilerinin üst düzey düşünme düzeylerine ilişkin bilgilerini ortaya çıkarmak ve sorgulama becerilerini araştırmak amacıyla 'Edebiyat ve Dil Öğretimi' başlıklı temel derslerden biri seçilmiştir. Çalışmanın katılımcıları, Türkiye'deki bir üniversitesinin İngilizce Öğretmenliği bölümü üçüncü sınıf öğrencileridir. Grup, kolayda örnekleme yoluyla gönüllü olarak seçilmiştir. Katılımcılar daha önce birinci sınıfta İleri Okuma, Yazma, Konuşma, İngilizce Yapı, Dinleme ve Telaffuz gibi ileri düzey İngilizce beceri dersleri almışlardır. Ayrıca, Dil Edinimi, Dil Öğretimine Yaklaşımlar, Dil Becerilerinin Öğretimi, Eleştirel Okuma ve Yazma, İngiliz Edebiyatı gibi alan dersleri ve bölüm seçmeli dersleri ile Eğitim Bilimleri dersleri olan Eğitim Psikolojisi, Eğitim Felsefesi, Eğitim Teknolojileri, Eğitimde Araştırma Yöntemleri ve Eğitim Tarihi derslerini almışlardır. Çalışmaya 104 PTE (75 kadın ve 29 erkek) katılmıştır. Katılımcılar, araştırmacılardan biri tarafından verilen 'İngilizce Öğretiminde Edebiyat' dersini alan İngiliz Dili Eğitimi aday öğretmenlerdir. Bölüm programlarına başlayabilmeleri için standartlaştırılmış ulusal üniversite giriş sınavına girmeleri gerektiğinden, hemen hemen aynı yeterlik düzeyinde oldukları varsayılmıştır.

Öğrencilere, Avrupa Ortak Referans Çerçevesi seviyelerine göre sınıflandırılmış rastgele seçilmiş kısa hikayeler dağıtılmıştır. Daha sonra, bu hikayeleri gelecekteki öğrencilerine okutacaklarını hayal ederek sorular oluşturmaları istenmiştir. Soruların Bloom'un Gözden Geçirilmiş Taksonomisinin hangi seviyelerine karşılık geldiği ve her seviyedeki soruların sıklığı ve dağılımı incelenmiştir.

Öğretmen adaylarının soru sorma becerilerini daha iyi anlamak ve analiz etmek için çalışmanın ilk aşamasında nitel analiz yapılmıştır. Sorular betimsel içerik analizine tabi tutulmuştur. Sorular, Revize Edilmiş Bloom Taksonomisi'nin ölçülebilir/eylem fiillerine göre kodlanmış ve Bloom'un Eğitim Hedefleri Taksonomisi'ne

(Anderson & Krathwohl, 2001) bağlı olarak dağıtılan hikâyelerle ilgili sorular aracılığıyla ele alınan düşünme düzeylerini sınıflandırmak için kategorize edilmiştir. Çalışmanın bu aşamasında soruların kategorizasyonu, çapraz kontrolü sağlamak amacıyla (Creswell, 2017) Bloom Taksonomisi'nin en düşük düşünme düzeyinden en yüksek düşünme düzeyine (ya da en az karmaşık olandan en karmaşık olana) doğru hiyerarşik biçimde düzenlenmiş altı düzeyine göre üç araştırmacı tarafından gerçekleştirilmiştir. Soruların içerik analizi yoluyla kategorize edilmesinin ilk aşaması, verilerin SPSS 25 (Sosyal Bilimler için İstatistik Paketi) aracılığıyla sayısal olarak incelenmesi için bir frekans dağılımında ele alınmasını mümkün kılmıştır. Öğretmen adaylarının üst düzey düşünme seviyelerine (analiz etme, değerlendirme ve yaratma) karşılık gelen farklı CEFR seviyesindeki hikayeler için sorulan soruların dağılımı ise betimsel analizler yoluyla incelenmiştir.

Bulgular, öğretmen adayları tarafından oluşturulan ve taksonomideki alt düzey düşünme becerilerine hitap eden soruların, hikayelerin her seviyesi için üst düzey düşünme becerilerinden daha ağır bastığını ortaya koymuştur. Çalışmada elde edilen frekanslar ve yüzdeler ise, öğretmen adaylarının olguları, terimleri, temel kavramları ve cevapları hatırlayarak hafıza soruları ürettiğini göstermektedir. Soruların dağılımı üst düzey beceriler bakımından eşit değildir. Sorularda ağırlıklı olarak eylem fiilleri, yani seç, bul, etiketle, listele, eşleştir, adlandır, söyle fiilleri ve Bloom'un Gözden Geçirilmiş Taksonomisi'ndeki hatırlama seviyesiyle ilgili olan wh- (bilgi) soruları kullanılmıştır.