

WHAT'S IN A QUESTION? TUTORING TECHNIQUE THROUGH THE LENS OF BLOOM'S REVISED TAXONOMY

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This study explores the alignment between questions asked by a tutor during a writing center consultation and the cognitive goals outlined in Bloom's Revised Taxonomy (BRT). By analyzing six writing center consultations at a research-intensive university in Central Asia, this research demonstrates that BRT can be used to understand the cognitive purposes of questioning in tutoring. The findings reveal that tutors frequently employ questioning techniques that target lower-order thinking skills, such as remembering and understanding, but less often prompt students to engage in higher-order thinking skills such as evaluating, and, especially, creating. Moreover, this study highlights the role of wait time in facilitating students' responses, showing that insufficient time constrains deeper thinking. These findings highlight the need for tutor training that prioritizes purposeful questioning and mindful wait time as key strategies for supporting critical thinking, particularly in multilingual post-Soviet educational contexts.

INTRODUCTION

In writing center studies, there has been a particular focus and interest in question-asking as a “major tutoring strategy” (Thompson and Mackiewicz 62) used for various purposes, including cognitive ones. The main reason writing center practitioners and scholars have been interested in questioning is to shift away from directive approaches towards non-directive ones, which, as Mackiewicz and Thompson show through their empirical study of tutoring, “facilitate extensive and constructive responses” (53), giving tutees more room to make decisions and take ownership over their work.

This shift is especially relevant in post-Soviet educational contexts, such as Kazakhstan, where this study was conducted, as directive teaching methods continue to dominate classroom instruction. As a result, tutors in training may find it difficult to implement non-directive tutoring strategies, like open-ended questioning, in consultations. In these situations, when educational traditions sometimes oppose collaborative or student-centered approaches, it is crucial to comprehend how questioning enhances student learning. Mackiewicz and Thompson's framework is particularly useful because it connects specific question types to pedagogical purposes and offers a structured

way to understand how questioning facilitates learning in writing center settings. Their work, widely cited in writing center scholarship, offers one of the most detailed models for understanding the rhetorical and instructional roles of tutoring questions. Questions used in tutoring have been categorized into common ground (to establish shared understanding), social coordination (to manage the flow and roles of the consultation), and conversation control questions (to guide or redirect the conversation) (Mackiewicz and Thompson). These categories reflect different functions in the tutoring consultation and are carried out through specific question types. For example, tutors may use Socratic questions to build common ground by probing assumptions or employing pumping questions to control the conversation while encouraging students' thinking. These forms of questioning help scaffold learning by prompting students to reflect, articulate ideas, and engage in more complex cognitive tasks, making them ideal tools for supporting skill development. For instance, Mackiewicz and Thompson note that pumping questions are used more often than "any other cognitive scaffolding strategy" (109), to "guide student writers' thinking and generate responses from them" (12), moving them along in the consultation process past "testing their understanding of the instruction" (78).

As tutoring questions guide students from basic understanding to deeper analysis, they serve as tools for promoting increasingly complex thinking. It is therefore surprising that writing center scholars have rarely explored the connections between questioning as a cognitive

scaffolding technique in tutoring and Bloom's (Revised) Taxonomy. Initially proposed by Benjamin Bloom (1956), this taxonomy is meant to be used in classroom instruction to classify the "intended behavior of students—the ways in which individuals are to act, think, or feel as the result of participating in some unit of instruction" (12). The taxonomy outlined six cognitive levels arranged in order of increasing complexity: knowledge, comprehension, application, analysis, synthesis, and evaluation. It culminated in evaluation, that is, "mak[ing] judgments about the value, for some purpose, of ideas, works, solutions, methods, materials, etc." (185). Evaluation was placed last because it involves "some combination of all other behaviors" (185).

This framework was later revised by a team of cognitive psychologists, instructional researchers, and assessment specialists to "incorporate new knowledge and thoughts" (Anderson and Krathwohl xxii) about how children develop and how teachers "plan for, teach, and assess their students" (xxii). There are at least two notable differences between Bloom's original taxonomy (or BT) and the revised version (or BRT), which was published in 2001: the latter uses active verbs instead of nouns (remember, understand, apply, analyze, evaluate, and create) to reflect the dynamism of cognition; and has "create" as its highest point, which integrates Bloom's synthesis insofar as it consists of "putting elements together to form a coherent or functional whole" (Anderson and Krathwohl 84). Anderson and Krathwohl argue that the final destination must be to create because it "requires users to put

parts together in a new way, or synthesize parts into something new and different creating a new form or product” (85). Overall, both the original and the revised taxonomy have been widely adopted in classroom instruction across subjects and levels of education because they help ensure the alignment of learning, teaching, and assessment goals. It has been tested in medical (Morton et al.), computer science (Almasseri and AlHojailan), management (Marley), art history (Stout), and music education (Kassner).

Despite its widespread adoption across subjects, the BRT has rarely been considered in the context of writing center pedagogy, where its potential to inform tutoring practices, especially questioning, remains largely unexplored. But the fact that writing center tutoring usually lacks an assessment component and has traditionally been presented as separate from—and sometimes in conflict with—classroom instruction may have obscured BRT’s potential for refining writing center pedagogy. This has nevertheless not prevented writing center scholars from highlighting the role of questioning in helping “students and tutors to fill in their knowledge deficits and check each other’s understanding” (Mackiewicz and Thompson 37) and in stimulating students’ critical, imaginative, and creative thinking (Tamas and Wang, Etemadzadeh et al.). What the BRT offers beyond a set of categories is a developmental model for how thinking progresses. Applying it to writing center tutoring allows us to evaluate not only what tutors ask but also how those questions promote forms of student reasoning. This is useful in training new

tutors and helping them recognize whether their questioning strategies are fostering deeper cognitive management. Thus, the BRT may welcome more intentionality to the assessment and design of tutoring moves. The fact that the language these scholars employ is aligned with the BRT categories is the starting point of the present research, which set out to explore to what extent BRT can be used to map the cognitive purposes of the various types of questions that tutors use in writing consultations.

METHODOLOGY

DATA COLLECTION AND ANALYSIS PROCEDURES

To explore whether and how BRT can be used to map the cognitive purposes of questioning as a core scaffolding technique in writing tutoring, I observed six writing center consultations, three of which were online and video recorded, while the others were offline and audio recorded. The recordings were transcribed using the software Whisper and checked manually for accuracy. In the transcripts, each tutor and student (tutee) was assigned an alias such as T1, T2, T3 and S1, S2, S3. Then the questions used by tutors were copied from the transcripts into a Google spreadsheet to begin analysis, which consisted of sorting, categorizing, color-coding, and comparing. Specifically, each question was color-coded and categorized using the BRT active verbs as well as the question types previously identified by Mackiewicz and Thompson. In addition, a separate column was used to briefly explain the rationale behind the categorizations. For instance, the

tutor's question "so could you please briefly summarize what you're talking about in this summary?" was color coded green to represent understanding in the BRT, and identified as a common ground question in the column for Mackiewicz and Thompson's types of questions, as it checks the students' understanding of the material. This method provided a clear vision of the alignment between writing center pedagogy and the BRT, focusing on each question individually. This qualitative approach allowed for an in-depth exploration of tutor-student interactions, focusing on the pedagogical intent behind each question rather than solely measuring frequency or duration. Statements followed by words such as "right" or "okay" spoken with a rising intonation were categorized as tag questions and excluded from further analysis, because they were used for purposes of social coordination and conversation management rather than cognitive purpose (tutors used such constructions to check in with the writer and move the conversation along). Additionally, some questions were difficult to unambiguously categorize according to the BRT, so they will be discussed case by case below.

RESEARCH SITE AND POPULATION

This study was conducted in a research-intensive, English medium instruction university in Central Asia, where the vast majority of students are multilingual, speaking Russian and/or Kazakh in addition to English. While the official language of tutoring is English, code-switching is nevertheless a fact of life and a tool that tutors are encouraged to employ to

their benefit for a variety of purposes (to establish common ground, build rapport, clarify or explain, etc.). All instances of code-switching in the data were translated manually.

The writing fellows who participated in the project were peer tutors in training at various stages of their practicum. They had either just begun it (as junior fellows enrolled in the second course of the 3-course training sequence) or were completing it (as senior fellows enrolled in the third course in the sequence). They were embedded in a first-year introduction to literary studies course and worked with the students in that course on two of their writing assignments by providing written feedback on their first drafts and meeting with them individually during online or in-person consultations. I observed six writing consultations, three of them led by senior writing fellows and three by junior ones. The next two sections report on and discuss the results of my thematic analysis of the observational data for a more analytical and comprehensive perspective.

RESULTS

My research shows that BRT, though created for classroom instruction, can be profitably used to map the cognitive goals of questioning as a core scaffolding technique in tutoring. This is evident in the similarities between question types used in tutoring and the BRT. For example, common ground questions, as described by Mackiewicz and Thompson, almost by definition align with the lower levels of the BRT, particularly remembering and understanding (36). This alignment suggests that

common ground questions serve as a foundational step in scaffolding students' cognitive development. In this section, I begin to show how cognitive goals of questioning may be mapped with the help of BRT and connected with question types (not only common ground but also pumping and Socratic) well established in tutoring scholarship. Applying the BRT in this context provides a clearer way for tutors to assess and refine the cognitive goals behind their questioning strategies. It turns questioning intentional, aligning it with specific learning outcomes.

ALIGNMENT BETWEEN TUTORING QUESTIONS AND THE BRT

The easiest mapping that can be demonstrated is between common ground questions as used by tutors and understanding as a lower-order thinking skill from the BRT. That is because, as Mackiewicz and Thompson explain, common ground questions are asked when the tutor "wants to ensure shared knowledge and mutual understanding" (36). They further note that these questions are meant to "assess the student writer's understanding" (37) and are thus considered cognitive scaffolds. In other words, common ground questions aim to "ascertain" what the student "needs, wants, knows, and understands about the assignment" (Mackiewicz and Thompson 204). In turn, in BRT, understanding is explained as "interpreting," "exemplifying," "classifying," "summarizing," "inferring," "comparing," and "explaining" (Anderson and Krathwohl 67). In other words, all these are actions or operations whereby the student "construct[s] meaning from instructional messages" (67). Evidently,

common ground questions and understanding from BRT are connected through the main goal of ensuring the student's comprehension of the material.

This connection is well supported in my data, which contains 11 instances of common ground questioning for purposes of checking the student's understanding. For example:

T1: So, could you please briefly summarize what you're talking about in this summary?

T1: So here... so this paragraph...what this paragraph is about?

T4: So, what do you understand you have to do?

T6: [reads student's sentence] So, is it again about the main problem of feminism?

These questions are meant to test how well the student can explain their own ideas or the requirements of the task and probe the student's understanding. Moreover, they are implicitly (or explicitly in the case of the question asked by T6) meant as a comprehension check for the tutor themselves in order to ensure mutual understanding. Consequently, these questions were categorized as common ground questions aimed at understanding as a cognitive objective of the BRT.

MISALIGNMENT BETWEEN TUTORING QUESTIONS AND THE BRT

However, while there is a clear overlap between common ground questions and the BRT cate-

gory of understanding, the same level of alignment does not seem to apply to other tutoring question types foregrounded in tutoring scholarship. More generally, the analysis revealed that the BRT provides more structured and fine-grained classifications compared to the question types identified by Mackiewicz and Thompson. This difference may arise because BRT is strictly concerned with cognitive processes in learning, while Mackiewicz and Thompson also consider the communicative and relational aspects of tutoring, such as social coordination and conversation control (Mackiewicz and Thompson 156). For example, according to Mackiewicz and Thompson, social coordination questions are asked when “the questioner attempts to get the hearer to perform some action” (36); more generally, they “relat[e] to the actions of the student and teacher” (205). In this study, the following questions were categorized as social coordination questions:

T2: Can you please read this sentence?

T5: Let’s start with the introduction.
Could you read it out loud, please?

T6: Do you want to read yourself or do
you want me to read it?

These questions do not serve a cognitive purpose per se and therefore could not be mapped using BRT, which deals with critical thinking operations. Writing center tutoring employs not only critical thinking questions but also questions that guide and coordinate tutor and writer actions in consultations.

Even though there is no easy alignment between BRT goals and the types of tutoring questions, this study found that the BRT provides good opportunities for categorization and adds depth to the analysis of questioning as a cognitive scaffolding technique. In the following sections, I will outline these opportunities and discuss how the cognitive goals of questioning as a scaffolding technique in tutoring can be mapped with the help of BRT. Specifically, I show that most questions tutors in my study asked – whether pumping, Socratic, or common ground – were aimed at the first two levels in BRT, remembering and understanding, while the least common cognitive purpose represented in the data was creating. One of the reasons for this result will be discussed below, and has to do with wait time, that is, the amount of time that tutors give tutees to think and formulate an answer to their questions.

REMEMBERING AND UNDERSTANDING: FOUNDATIONS OF COGNITIVE SCAFFOLDING IN LEARNING

Remembering and understanding are commonly described as “basic” (lower-order thinking) skills in contrast to “abstract thinking” or higher-order thinking skills (Allen). As Pooja Agarwal explains, the arrangement of cognitive skills in Bloom’s Taxonomy “has contributed to the collective notion that foundational knowledge precedes higher order learning” (190). Despite the general agreement that BRT is not a hierarchy or a set of steps towards a unified goal, Edward Furst argues that “hier-

archy is fundamental in the make-up for skills, abilities, and conceptual organizations of subject matter” (451). Therefore, remembering and understanding are foundational for higher cognitive thinking, which is critical for tutoring and education in general.

Remembering, as described by the authors of BRT, is necessary for “meaningful learning and problem solving as that knowledge is used in more complex tasks” (Anderson and Krathwohl 66). Bloom himself gives the example of terminology, arguing that it is indeed “impossible” to discuss problems in one’s field “without making use of some essential terms in that field” (62). However, while recalling information is key, it does not guarantee that the student can process and interpret it in a meaningful way. Anderson et al. explain that remembering involves recognizing and recalling relevant knowledge. For this, students need to “understand the literal meaning of communication” (Bloom 89) and, in the process, “change the communication in [their] mind or in [their] overt responses to some parallel form more meaningful to [them]” (89). In other words, understanding involves students reframing information in a way that makes sense to them, enabling them to internalize and mobilize it for learning. Without this step, students may struggle to apply their knowledge beyond simple recall. Thus, understanding serves as a bridge to higher cognitive processes such as application and analysis, which demand a deeper engagement with information. In this way, remembering and understanding are interconnected: one provides the necessary

foundation, and the other allows for meaningful learning and intellectual growth.

In writing center sessions, tutors often use questioning techniques to scaffold these foundational skills. As part of cognitive scaffolding, these techniques are sometimes referred to as “pumping” and “Socratic” questions. According to Mackiewicz and Thompson, pumping questions aim to “guide the student’s thinking and to generate responses from them” (27), increasing their “volubility” (86). While Socratic questions “lead students to discover their own misconceptions during the course of answering the questions” (Graesser et al. 501). Both types of questions relate closely to BRT’s lower-order categories: while pumping questions can range from simple recall to deeper interpretation, Socratic questions often push toward conceptual clarity, aligning with understanding in the BRT. For example, the following questions were categorized as “remembering”:

T1: So basically, according to the rubrics of your assignment, the title should be written in the form of a reference like an MLA citation. So, at the end of your summary, I see that you wrote a citation. Is it in MLA style?

T3: Is this an article or is this like...a book?

T4: Do you know the authors of these chapters?

Evidently, these questions are simpler in nature, since they do not check the student’s understanding but rather their recall of factual knowledge about an assignment. Such ques-

tions fall under the category of minimally constraining pumping questions, which guide the student to retrieve prior knowledge and confirm surface-level ideas.

In contrast, understanding questions prompt students to make sense of instructional messages, whether spoken, written, or visual (Raz et al.). These often take the form of Socratic questions or more open-ended pumping questions that check comprehension and encourage elaboration. This connects to the BRT level of understanding because the goal is not just to recall facts but to process and explain information in a meaningful way. Anderson et al. support this point by stating that understanding involves interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining. The following questions were coded and analyzed as scaffolding “understanding”:

T4: So, what do you understand you have to do?

T4: Do you know ... how you should structure each paragraph ... [and] what to do with the title?

T6: Could you tell me about your primary and secondary sources so that I know some background information on what you're talking about in your paper?

T6: [reads sentence] So is it again about the main problem of feminism?

T6: So, this example, is it your example? Or did it come from the paper?

Evidently, these questions check for clarity, encourage elaboration, and check the student's comprehension of the material. They support the goal of understanding by encouraging the student to reframe and explain ideas in their own words. For instance, T4's question “Do you know ... how you should structure each paragraph ... [and] what to do with the title?” prompts the student to retrieve what they already know, reinforcing Remembering. Meanwhile, T6's question “Could you tell me about your primary and secondary sources so that I know some background information on what you're talking about in your paper?” pushes the student to explain the information they recalled, linking to Understanding. Similarly, the question “So is it again about the main problem of feminism?” encourages the student to clarify their interpretation, making sense of the material in a more personal and analytical way.

Ultimately, although remembering and understanding are classified as lower-order thinking skills, they are essential for cognitive scaffolding in writing center sessions. Tutors use pumping and Socratic questions not just to recall facts, but to build the foundation upon which higher-order skills like application and analyzing can be built.

APPLYING AND ANALYZING: HOW TUTORS PROMPT ARGUMENTATION AND CRITICAL THINKING

“Applying” and “analyzing” are the bridge between lower-order and higher-order thinking skills. In BRT, applying includes executing and implementing. The student is expect-

ed to know “what to do in order to complete” (Anderson and Krathwohl 77) a familiar task, but also to pick out the relevant “procedure to perform an unfamiliar task” (78). The cognitive goal of applying is to use the “learned knowledge in new situations or to solve a real-life problem” (Allen). For example, the following question was categorized as “applying”:

T5: Are there any examples representing this context? I mean this one. Are there any examples to prove your argumentation ...?

The aim of this question is to encourage the student to take the knowledge they have about a particular context or argument and apply it by identifying specific examples that support their points. As students “explain and apply this knowledge in other contexts, they move up through levels of learning” (Marley 310).

This leveling can take the form of analysis, which is a “more advanced level” (Bloom 144), requiring more cognitive power. When analyzing, a student must differentiate, organize, and attribute. Anderson and Krathwohl explain that analysis is required when a teacher prompts their student to “distinguish fact from opinion,” “connect conclusions with supporting statements,” distinguish relevant from extraneous information,” or “determine how ideas are related to one another” (80). Similarly, other scholars explain it as “breaking material into its constituent parts and detecting how the parts relate to one another and to an overall structure or purpose” (Anderson and Krathwohl 215). In short, while applying focuses on using knowledge in a specific situation,

analyzing means examining the structure of the material and identifying the relationships between its components.

The cognitive goals of applying and analyzing were not as well represented in the data as the previous ones. They nevertheless played a significant role in the consultations I observed. Here are some examples of questions that were categorized as “analyzing”:

T5: Does this idea relate to the author’s idea, and if yes, could you elaborate like how?

T6: What are you talking about, and why is it the main problem? The main problem of the [indistinct] and if so, why?

T5’s question encourages the student to think critically about a certain idea and make connections as well as provide arguments to support their perspective. Similarly, T6’s question urges the student to clarify and explain their perspective and topic. Therefore, both questions fit the “analyzing” category as they have a similar goal.

Both applying and analyzing intersect with the strategies of pumping and Socratic questioning, which play a crucial role in tutoring. For instance, T5’s question (categorized under applying)—“Are there any examples representing this context? I mean this one—are there any examples to prove your argumentation or something like this?”—can be seen as both a pumping and a Socratic question. It is a pumping question because it nudges the student toward retrieving relevant information

and reinforcing their ability to apply knowledge. However, it also has a Socratic function, as it pushes the student to find supporting evidence and engage critically with their own argument. On the other hand, T5's question, "Does this idea relate to the author's idea and if yes could you elaborate like how?" and T6's "What are you talking about and why is it the main problem? The main problem of the ... and if so, why?" (both classified under analyzing) are clearer examples of Socratic questioning. These questions prompt students to break down their arguments, examine connections, and explain their reasoning. This aligns with BRT's cognitive goals, as both questioning strategies help students engage more deeply with their ideas. By using pumping to guide thought processes and Socratic questioning to challenge reasoning, tutors support the shift from applying to analyzing, reinforcing critical thinking skills.

EVALUATING AND CREATING: HIGHER ORDER THINKING AND THE LIMITS OF THE BRT

"Evaluating" and "creating" both fall under higher-order thinking skills, standing at the top of BRT. According to Anderson and Krathwohl, "evaluating" means "making judgments based on criteria and standards" (215). For example, a student may "test for internal inconsistencies or fallacies" (Anderson and Krathwohl 83) and "judging ... based on externally imposed criteria and standards" (84). Interestingly, even though Bloom placed *evaluation* at the top of his original taxonomy, he acknowledged that it was not necessarily the

"last step in thinking or problem-solving" (185). This suggests that Bloom was already aware of some of the limitations later addressed in the revision of his taxonomy.

Compared to lower-order thinking skills, evaluation appeared far less frequently in my observational data. This limited presence suggests that while tutors occasionally prompted students to make judgements or assess reasoning, such moments were an exception rather than the norm. When evaluation did emerge, it often took the form of reflective questions that encouraged students to assess a text or authorial choices. This is also encouraged by the authors of BRT, who argue that a student must be "asked to critique his or her own hypotheses or creations or those generated by someone else" (Anderson and Krathwohl 84). The following questions were categorized as "evaluating":

T1: So, what do you think about this part? [says the tutor after giving advice]

T5: Why do you think the author decided to include the information about these studies?

These questions prompt students to think critically by forming their own opinions while depending on prior knowledge. The first question acts as a pumping question, encouraging the students to articulate their thoughts, while the second takes a Socratic approach, pushing them to consider the author's intent. Together, they guide the student toward deeper analysis and evaluation.

"Creating" is the ultimate goal of the BRT as well as writing tutoring. The students are

encouraged to use their knowledge in order to create a new piece of writing or information in general. This means that “students make a new product by mentally reorganizing some elements or parts into a pattern or structure not clearly present before” (Anderson and Krathwohl 84). They divide the creation process into “problem representation,” when a student understands the task and thinks of a solution, “solution planning,” when the student makes a plan for implementing the solution, and “solution execution” when the plan is being carried out (Anderson and Krathwohl 85). This involves generating, planning, and producing (Anderson and Krathwohl).

The cognitive objective of creating was the least visible in the data. Although the nature of writing consultations holds potential for “putting elements together to form a novel, coherent whole” (Raz et al.), instances that overtly invited students to produce new content were few. This shows that though creation is the highest level of thinking in the BRT, it may not be fully attained in short tutoring sessions, especially when time is limited or when students are struggling through lower orders of thinking. But the example that I identified in the data shows how tutors can guide students past understanding and into the act of creating new meaning:

T2: Let’s think, maybe, what else to write here [reads sentence], but then again, what implication does this have?

This question urges the student to generate new content based on what the tutor and tutee discussed during the consultation. The

question was asked towards the end of the session, and it is tempting to think that the tutor was building up towards it, given writing center tutors’ mandate of “further[ing] the cognitive growth of students through individualized, student-centered pedagogies” (Ashton-Jones 30).

Nevertheless, the scarcity of questions aimed at this highest cognitive level in the collected data may be seen as problematic, as the tutor’s role is to help students become independent writers. At the same time, this observation also highlights a limitation in applying the BRT to writing center pedagogy. Tutoring is about dialogue, and not all cognitive progress maps neatly into hierarchical models. Recognizing this is important for using the BRT as a flexible framework rather than a strict evaluative tool.

Creating is a crucial part of the learning process, through which students take ownership of their writing. If a consultation does not reach this stage, one could argue that it has not achieved its aim. However, it is unreasonable to expect that one consultation can compress—as in a time-lapse—the laborious process of writing skills development. Furthermore, it is important to keep in mind the contextual features of the rhetorical situation. The student writers that my participants (Writing Fellows) tutored were, for the most part, first-year multilingual students who were learning how to write about literature in English as their second, or additional language. In such a context, if tutors sense that the student has not yet developed a strong enough foundation, they often return to earlier stages of remembering

or understanding, rather than moving forward. This backtracking, while necessary for reinforcing knowledge, can slow down progress and limit the time available for higher-order thinking tasks. Additionally, tutors may prioritize helping students connect ideas or apply procedures or information to the task at hand. Furthermore, the Writing Fellows themselves were tutors in training at various stages of their practicum. Because the schooling system in this post-Soviet country favors directive methods of instruction, they may have difficulty deploying non-directive techniques like questioning. This explanation is further supported by the final major finding from my study regarding wait time.

THE MISSING LINK BETWEEN QUESTIONING AND LEARNING

While the BRT offers a valuable lens for categorizing the cognitive demands of tutors' questions, it does not fully account for the interactional dynamics of tutoring, especially those that shape whether or not the student engages with the question. My analysis of observational data revealed that some otherwise well-constructed questions were left unanswered. This raises an important issue: what prevents a question aligned with the BRT from becoming an effective learning method in practice? The overlooked factor is the wait time. This happened three times across the six observed consultations and raised an interesting question, especially given the multilingual context in which this study was conducted. Could it be because student writers were given too little time to answer the questions? While oth-

er explanations are possible (e.g., student writers not being able to recall, explain, apply, analyze, or evaluate information), a short "wait time" could compound students' difficulties. Furthermore, a short wait time could explain why tutors do not move on to questions requiring higher-order thinking when the answers to questions prompting writers to recall, explain, apply, or analyze fail to materialize.

"Wait time" is a variable introduced and discussed by Rowe in 1986, who investigated the average time that teachers or mentors give their students to think and answer a question they had just asked. Rowe found that teachers did not provide sufficient time for students to "think about an answer before they repeat[ed] the question, rephrase[d] it, or even answer[ed] it themselves" (Rowe qtd. in King 224). According to Rowe, giving 3 seconds or more after asking a question has shown improvements in the students' "use of language and logic as well as in student and teacher attitudes and expectations" (43).

In my study, instead of calculating the average wait time, I decided to calculate the median because some consultations had unusually long or short wait times, which could affect the mean. The median, however, gives a more accurate picture of what the typical wait time looks like. The median for all six writing consultations observed was 2.9 seconds, with the shortest wait time being 1 second and the longest 9 seconds. As Rowe pointed out, a wait time of under 3 seconds is insufficient for the student writer to think and respond, considering that higher-order thinking operations require more cognitive power, especially if the writer has to

formulate an answer in a second or additional language. As in Rowe's study, tutors tended to rephrase the question or move on to the next issue or even answer their own question when the student remained silent for more than 3 or 4 seconds. This might be because tutors were uncomfortable with the silence or just mindful of time constraints. Either way, students may not have had enough time to think of and formulate an answer of their own, which reduced the efficacy of questioning as a cognitive scaffolding technique. For example:

T6: I guess this is the main topic of your paper, is it? Or is it the main topic of the paper that you read about? [Tutor waits for 4 seconds] Well... anyways...

T6: What are you talking about, and why is it the main problem? The main problem of the [inaudible] and if so, why? [Wait for 3 seconds] Maybe because...

T6 waits 3 to 4 seconds before moving on or answering their own question. Another tutor asked many questions without pausing long enough to suggest that they expected an answer. As a result, their questions, which prompted the student writer to explain or analyze, came across as rhetorical:

T2: "Play unique and great," okay, but unique and great, why then? Why is it unique and great? And is it seen or shown in this article that you are researching, or was it skipped in that article? I mean, again I think that you need to connect it with the article itself, your goal is to move beyond just describing

the article or describing the play, but also show what is the reason behind the article, what the author is trying to convey, what the play is trying to convey, how they interact with each other. I mean, beyond just describing things. Yeah, this is probably my main comment about this. Nora is the person who wrote this article or chapter. I don't know... Oh yeah, it is Nora, okay. Anyways, yeah, I am kind of confused.

T2 kept layering additional questions on top of the initial one without allowing the student time to process or respond. This rapid-fire approach was ineffective, as the student ultimately did not answer any of the questions and likely felt overwhelmed and denied meaningful participation.

In this context, the importance of wait time becomes clear: it is essential for a successful tutoring session, especially when the goal is to prompt students to complete more complex intellectual operations that go beyond mere recall and understanding. Ultimately, this suggests that wait time plays a crucial role in activating higher-order thinking. Questions meant to support deeper learning can lose their power when students are not given the space to think, leading to missed opportunities for collaborative work.

CONCLUSION

This study shows for the first time that Bloom's revised taxonomy can be profitably used to map how questions are used as cognitive scaffolds in writing center tutoring. The findings

indicate that, within the specific institutional and multilingual context examined, lower-order cognitive operations such as remembering and comprehension are common in writing center consultations. However, tutors in this setting infrequently ask students to perform more complex operations such as evaluation and creation. The analysis also suggests that minimal wait times for responses substantially suppresses students' thoughtful replies, therefore constraining deeper learning. The results suggest the value of good questioning and sufficient wait time in encouraging critical thinking and intellectual growth in student writers, especially in multicultural contexts.

The research was not without limitations, however. Analysis of more consultations or inclusion of interviews could have yielded more qualitative insights into the thought processes and intentions of participants. In the absence of such information, it is hard to tell whether the questions posed reflected the tutors' intention to promote higher-order thinking or were ad hoc reactions to what was happening in the session—or both. Furthermore, the post-Soviet setting may pose unique cultural and pedagogical challenges that do not apply in other multilingual writing center contexts.

Future research can build upon the present research by including interviews and a larger, diversified sample. My findings lead me to make some recommendations for tutor training and information gathering. Tutoring

training programs could more emphatically target strategic questioning, for example, how to mindfully use wait time to allow students the space to think and respond. Furthermore, writing centers that work with multilingual learners should research how linguistic and cultural concerns influence the way that students engage with cognitive scaffolds. By prioritizing these areas, we will be more effective in supporting the development of independent, reflective writers with both critical and creative thinking skills.

ACKNOWLEDGMENTS

Behind every set of polished pages is someone who cheered you on through the messy drafts. For me, that person was my adviser, Professor Adina-Camelia Arvatu. More than a professor, she was a mentor and a friend, inspiring me to publish this paper. Her encouragement, genuine care, and invaluable support kept me motivated to begin, persevere, and finally complete this work. I am deeply grateful for her careful reading of every draft and section, as well as the numerous meetings and brainstorming sessions that shaped this work. This paper grew out of my experience at the Nazarbayev University Writing Center, and her guidance was essential to bringing it to completion. Her impact will continue to shape my work long after these pages.

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