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QUESTIONING STRATEGY AS PART OF EFL TEACHER KNOWLEDGE AND EXPERTISE

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The article addresses the problem of questioning as an important intellectual tool central to student learning and developing, as well as an integral part of an EFL teacher knowledge and expertise. An overview of research findings on the subject of classroom questioning has been made. A number of pedagogical implications concerning teacher questioning knowledge and skills relevant for the Ukrainian EFL classroom practices are outlined. The most popular cognitive scaffolds for questioning are discussed. The problem of priority of higher-cognitive questions or lower-cognitive questions in EFL instruction is seen as "one cannot be used without the other", with the teacher's choice depending upon the students' proficiency level, learning stages and classroom communication contexts. The concepts of "thinking routines" and "questioning sequences" are assumed to be efficient in the EFL teacher questioning behaviours. The author comes to the conclusion that TEFL programs at Ukrainian universities should offer a special course or academic modules to give prospective teachers theoretical insights and training to help them develop professional questioning skills.

Keywords: question; questioning strategy; cognitive scaffolds for questioning; Bloom's taxonomy; thinking routines; questioning sequences; questioning skills.

Questioning is central to learning and growing.
Jamie McKenzie, 1999.
Good learning starts with questions, not answers.
Guy Claxton, professor, University of Bristol**.**

Introduction

Questions form an important aspect of effective pedagogy which "supports students' task engagement and serves to provide scaffolds to facilitate student learning" (Alton-Lee, 2003, p. 74). Research findings show that "questioning is only second to lecturing in popularity as a teaching method" and from thirty-five to fifty per cent of instructional time is spent on questioning sessions (Cotton, 1988). With an ongoing trend of developing students' critical thinking skills and inquiring attitudes (Ritchhart, Church & Morrison, 2011), we may assume that in contemporary classrooms questioning is of growing importance. Many researchers consider it to be central to student learning and developing: "question-asking is our most important intellectual tool", as all our knowledge results from questions (Postman, 1979, p. 140).

Classroom questioning is an extensively researched topic in English-speaking scholarly community. A lot of studies focus on questioning taxonomies (Dalton-Puffer, 2007; McTighe & Wiggins, 2013; Tsui, 1992; Wong, 2010), on the relationship between classroom questioning strategies used by the teacher and the students' achievement (McComas & Abraham, 2004; Walsh & Sattes, 2004); another trend is a movement from isolated questions to question sequences and patterns (Marzano & Simms, 2012; Vogler, 2005; Wragg & Brown, 2001); furthermore, textual or text-depended questions have become a recent focus of research (Hathaway, 2017; Housel, 2017; Fisher & Frey, 2012; Wilson & Smetana, 2011). Celebrating this diversity and wealth of research efforts, we have a strong feeling that furnishing teachers with a variety of possible questioning taxonomies would not be enough, pre-service EFL teachers should be given adequate training in developing their questioning strategies which will entail subsequent continuous professional development in this area, as the research exploring new and better questioning schemes is ongoing.

Questioning as a teaching strategy in current TEFL practices in Ukraine needs updating and improvement: most EFL teacher training programs do not offer special course offerings designed to help prospective teachers to hone their questioning strategies; empirical studies of the role of questioning in Ukrainian EFL classrooms are few or virtually non-existent.

This article explores research findings on classroom questioning and offers practical suggestions for EFL teachers in Ukraine who might be interested in upgrading their knowledge and improving questioning techniques. We begin by assuming that there are no ideal instructional recipes, but certain underlying theoretical principles and individual "stories of success how to question" which should be critically evaluated by EFL practitioners and modified for application in their own classrooms.

Definitions

The key notions for the questioning strategy problem include "a question", "a strategy", "a questioning taxonomy", and "questioning skills". By a *question* any speech act aimed at eliciting a verbal response from the listener is understood. The term *questioning strategy* implies the speaker's mental programming (planning) of speech acts aiming at the achievement of a certain communicative goal. The collocation *questioning taxonomy* in this case means an orderly classification of questions according to their certain relationships / functions (Vogler, 2005, p. 98). Another way of defining taxonomies is as "human constructs used to classify questions based on the intellectual behaviour or mental activity needed to formulate an answer" (Morgan & Schreiber, 1969). The term *questioning skills* is used here to cover the teacher questioning of students, while student-generated questions, embedded in cooperative or collaborative learning environments, presently are beyond a comprehensive discussion in this paper and could make a perspective for a separate research.

Cognitive Scaffolds for Questioning

Questioning as a didactic tool has a long history, for example, in the United States, it was first brought up as the subject of debate in 1912 (when Romiett Stevens surveyed teachers' questioning behaviours), and has been in the limelight ever since (Marzano & Simms, 2012, p. 3). But only in the mid-fifties of the last century, researchers started studying effective questioning in earnest. Their primary goal was to find a way to classify questions. One of the most successful attempts of that period was made by Norris Sanders in his book *Classroom Questions: What Kinds?* (Sanders, 1966) who adapted Bloom's taxonomy to questioning types (see Marzano & Simms, 2012, pp. 4-6 for a detailed analysis of Sanders' work). The author's main contribution to the conceptions of effective questioning was his popularising of Bloom's taxonomy (Marzano & Simms, 2006, p. 5) as a cognitive scaffold for questioning. To be exact, Benjamin Bloom developed his taxonomy not for questioning, but as a system for classifying skills and knowledge into educational objectives (1956) to help university examiners design assessment materials (Bloom, 1994). Bloom's taxonomy structured educational objectives into six hierarchical levels: 1) knowledge; 2) comprehension, 3) application; 4) analysis; 5) synthesis, and 6) evaluation. In 2001, the taxonomy underwent revision with a few resulting changes, the first one was semantic: the nouns used in the names of the levels were changed into verbs, and the second change involved the order of the levels: in the revised version, creating is at the top of the taxonomy, and evaluating is placed below it. Currently, the levels look as follows: 1) remember; 2) understand; 3) apply; 4) analyse; 5) evaluate, and 6) create (Wilson, 2016). Intellectual skills involving remembering, understanding, applying are thought to be of lower-cognitive order, while skills involving analysis, evaluation and creation of new knowledge are considered to be of a higher-cognitive order.

Since the mid-sixties of the last century, Bloom's taxonomy has been used as the default cognitive scaffold /framework for questioning hierarchies (Marzano & Simms, 2012, p. 5). In this relation, one of the most thoroughly investigated issues in questioning research is whether it is more effective for teachers to emphasise higher-cognitive questions or lower-cognitive questions in their instruction. Approximately 60 per cent of the questions asked by teachers are lower-cognitive questions (also called *fact, closed, direct, recall,* and *knowledge* questions) which require only memory or the ability to locate information in a textbook or other source. 20 percent are higher cognitive questions (also called *open-ended, interpretative, evaluative, inquiry, inferential*, and *synthesis* questions) usually defined as questions that require students to use such thought processes as analysing, problem-solving, predicting, and evaluating (Cotton, 1988). They can also be called "authentic questions": without a pre-specified answer, they evoke a variety of responses from students (Wilkinson).

In the nineties of the last century and in the first decade of the 2000s, the assertion that higher-cognitive questions are more beneficial for students' learning achievements enjoyed a wider support of educationalists. At present, an overview of studies examining the relationship of question levels to student achievement has not revealed any "clear indication as to the superiority of one versus another" (Marzano & Simms 2012, p. 10) in promoting learning gains. As Kathleen Cotton puts it, "the conventional wisdom that says, "ask a higher level question, get a higher level answer", does not seem to hold (Cotton, 1988). Marzano and Simms (2012) argue that "the current practice of using Bloom's taxonomy to classify individual questions is an ineffective scheme around which to frame teacher questioning" (p. 12).

Ritchhart, Church, and Morrison (2011) are less categorical in their judgement about Bloom's taxonomy, considering it to be useful as "a starting point for thinking about thinking", at the same time they are sceptical of the idea that thinking is sequential or hierarchical (p. 3). Answering the question "What is beyond Bloom?", many educators would argue that understanding is not in any way a lower-order skill; on the contrary, understanding is proclaimed as a primary goal of teaching (Wiggings & McTighe, 1998).

Questioning, thinking, understanding interact "in a dynamic fashion to advance student learning, performance, and achievement" (Walsh and Sattes, 2004, p. 1). Ritchhart, Church, and Morrison who co-authored the book "Making Thinking Visible" consider "understanding to not be a type of thinking but an outcome of thinking" (Ritchhart, Church, & Morrison, 2011, p. 5). They define the following six kinds of thinking particularly essential in helping our understanding, calling them "the understanding map": "Observing Closely and Describing What's There; Building Explanations and Interpretations; Reasoning with Evidence; Making Connections; Considering Different Viewpoints and Perspectives; Capturing the Heart and Forming Conclusions" (Ritchhart, Church, & Morrison, 2011, p. 11), and two additional thinking moves: "Wondering and Asking Questions" and "Uncovering Complexity and Going below the Surface of Things". To make student thinking visible, Ritchhart, Church, and Morrison (2011) suggest using the so-called "thinking routines" or simple protocols for exploring ideas that are used repeatedly to manage and facilitate the accomplishment of specific goals or tasks, for example "What Makes You Say That?" is an *interpretation with justification routine;* "Think, Pair, Share" is a *routine for active reasoning and explanation; "*Circle of Viewpoints" is a *routine for exploring diverse perspectives* (see more on thinking routines at http://www.visiblethinkingpz.org).

The above-given overview clearly indicates that while applying a questioning strategy, teachers should be aware of various patterns of thinking involved.

Questioning Taxonomies

A lot of studies explore the taxonomies of teachers' classroom questions. Morgan and Saxton's three-part taxonomy is based on the classification of general functions for questions: questions primarily serve for *eliciting information* ("on the line"), *shaping understanding* ("between the lines"), and *pressing for reflections* ("beyond the lines") (Morgan & Saxton, 2006, pp.46-51). We see its strong point in the holistic approach in which rationality and objectivity as characteristics of higher *intelligence* (What the student *thinks* and *knows* – the Cognitive Domain) are combined with *feeling* (What the student *feels* about what he thinks and knows – the Affective Domain) and *action* (What the student *does* as a result of his knowledge, thoughts and feelings – the Psychomotor Domain) (Morgan & Saxton, 2006, p. 15). In line with the above said, Morgan and Saxton offer: 1) the taxonomy of knowing (as a guide to generate students' thinking); 2) the taxonomy of feeling/ personal engagement (as a guide to generate students' engagement with learning materials), and 3) the taxonomy of doing.

The taxonomy of knowing incorporates questions that draw upon the students' knowledge (Remembering), e.g. *Who / What/ Where / When/ How?*; questions that test comprehension (Understanding), e.g. *What is meant by it? Can you rephrase / describe? What is the meaning / the main idea?*; questions that require application (Solving), e.g. *What might happen if …? How can…? How would you…?*; questions that encourage analysis (Reasoning), e.g. I *wonder why…? Why do you say that…? What if…*?; questions that promote evaluation (Judging), e.g. *What is your opinion? What would be better…? Would you agree that…*?; questions that invite synthesis (Creating), e.g. *How could we /you …*? *I wonder how…*?

The taxonomy of personal engagement includes questions that draw upon students' involvement in a learning activity which can be of the following degrees: interest, engaging, committing, internalising, interpreting, and evaluating (Morgan & Saxton, 2006, pp. 27-28). Morgan and Saxton caution that, while employing this or that questioning schema, teachers should keep in mind that it can be effective only if it takes into account the students' background, experience and engagement into the learning material (Morgan & Saxton, 2006, p. 25).

McTighe and Wiggins (2013) advocate the importance of *essential questions* (EQs) that are not answerable with finality in a single lesson or a brief sentence, their aim is to stimulate thought, to provoke inquiry, and to spark more questions, including thoughtful student questions. The authors single out seven defining characteristics of good *essential questions* (EQs) which typically are: 1) *open-ended* (EQs will not have a single, and correct answer); 2) *thought-provoking* and *intellectually engaging* (often sparking discussion and debate); 3) calling for *higher-order thinking* (such as analysis, inference, evaluation, prediction); 4) pointing toward *important, transferable ideas* within (and sometimes across) disciplines; 5) leading to further inquiry by *raising additional questions*; 6) requiring *elaboration* and *justification*, not just an answer; 7) *recurring* over time (EQs can and should be revisited).

Jamie McKenzie, the editor of an educational technology journal *From Now On*, has identified a questioning toolkit of 17 types of questions. The researcher claims that the most important thinking requires one of the three prime questions: "*Why?*", *"How?", "Which?"* (McKenzie, 2003). *Why?*" entails analysis of cause-and-effect and the relationship between variables and leads to problem-solving (the "*How"* question) or to decision-making (the "*Which is best*?" question). This author claims that "*Why?*"-question is the tool

for understanding, e.g. "*Why do things happen the way they do*?". *"How?"*-question is the basis for problem-solving and synthesis, e.g. "*How could things be made better*?" It is the inventor's favourite question. *"Which?"* is the question that requires "a reasoned choice based upon clearly stated criteria and evidence", e.g. *"Which do I select?"* (McKenzie, 2003). McKenzie argues that out of the three prime questions said above, "Which?" is most important of all, because it determines thoughtful decision-making. This author recommends that portions of the questioning toolkit should be introduced into the teaching process as early as kindergarten so that students acquire questioning technologies and techniques by the time of their high school.

Questioning Strategy: Pedagogical Implications for EFL Teachers

Recent research clearly indicates that preservice EFL teachers should be taught a practical pedagogy of questioning. They should be given adequate training in developing questioning strategies by focusing on questioning sequences rather than on individual questions. A questioning sequence is "a series of questions or prompts that ask students to articulate details about the content, identify characteristics of content-related categories, generate elaborations about the content, and provide evidence and support for those elaborations" (Marzano & Simms, 2012, p. 12). The questioning sequence concept suggested by Marzano and Simms is explicit and comparatively easy for classroom use: it is designed to guide students through the process of making a claim by collecting information, categorising it, drawing a conclusion, and providing evidence to support it. The authors claim, that "unlike Bloom's taxonomy which is often perceived as a hierarchy applied to individual questions", their questioning sequence "is designed as a series of four phases of questions with a common theme and goal" (Marzano & Simms, 2012, p. 15-20).

Marzano and Simms' (2012) model for questioning sequence involves four phases of questions: 1. Questions about details. 2. Questions about categories. 3. Questions that require students to elaborate on their previous answers. 4. Questions that require students to provide evidence for their elaboration. In short, this sequence can be presented as follows: DETAILS →CATEGORIES →ELABORATION → EVIDENCE. Each phase includes subtypes of questions, e.g. there are three types of category questions the teachers can use 1) asking students to identify examples in a category, 2) asking students to describe the general characteristics in a category, and 3) asking students to make comparisons within and across categories (See more on other subtypes in: Marzano & Simms, 2012).

The detail and category phases activate students' background knowledge about the instructional goal. The focus of the elaboration and evidence phases is argumentation (making and defending claims). During the elaboration and evidence phases, "students engage in critical thinking by elaborating on the information surfaced during the first two phases" (Marzano & Simms, 2012, pp. 24-25).

Conclusion

Questioning strategy is an integral part of an EFL teacher communicative competence. It is a complex verbal skill with an underlying cognitive structure. TEFL programs at Ukrainian universities should offer special course offerings or academic modules to give prospective teachers theoretical insights and training to help them develop professional questioning skills. Recent research findings highlight thinking routines and questioning sequences as effective schemes around which to frame teacher questioning.

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