

Teachers' Questioning to Scaffold Students' Critical Thinking

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ABSTRACT. *Teachers' questioning, an instructional practice, is playing a predominant role in actual teaching process. Much research has expounded that teachers' questioning patterns are crucial to the impact they have on scaffolding second language acquisition. Teachers' questioning serves as a discourse tool and functions as a symbolic linguistic tool to achieve certain instructional goals in contemporary EFL classrooms. Teachers' questioning from the perspective of construction theory is still a new field. The need for a fine-grained analysis of teacher question as scaffolding assistance is felt. This research shed light on the teachers' questioning as a scaffolding strategy through conversation analytic study and attempts to focus on students' critical thinking and higher order thinking skills by boosting teacher questioning strategies.*

KEYWORDS: *teachers' questioning, scaffolding, English teachers, critical thinking*

1. Introduction

Teachers' questioning is an essential element in the process of instruction and facilitation of learning. Effective teachers' questioning and classroom talk can enhance students' cognitive development, higher order thinking, promote imagination and speculation, critical thinking and pitch a suitable challenge level. Teachers tend to utilize questions as part of the formative assessment strategy to determine how they structure, organize and present new learning content. Seminal events that initiated this type of research include Initiation-response-evaluation (IRE) sequence in traditional classrooms and those that focused on teacher's discursive routines, such as revoicing or scaffolding (Norbert, M., 2012:999). Thus, we will frame teachers' questioning as a scaffolding strategy in second language acquisition, which denotes its significance in establishing a foundation of scaffolding teachers' questioning.

Critical conceptualization framework and thinking about the higher order questions require high quality medium. As analysts forge new links between teacher

question and scaffolding instruction, scientific questioning strategies is conducive to scaffold and advance critical thinking.

2. Literature Review

Scaffolding originates from construction industry. The original idea of scaffolding comes from Jerome Bruner, who defines scaffolding as follows: a process of 'setting up' the situation to make the child's entry easy and successful and then gradually pulling back and handing the role to the child as he becomes skilled enough to manage it (Bruner, J., 1983; Walqui, A., 2006). Scaffolding is a sustained interactive process that involves the fading of assistance and gradual task modifications by an expert. From lower level to higher level in scaffolding questions, students can enhance their higher order thinking skills and construct cognitive development as a pyramid.

Historically, teachers are inclined to steer classroom. Teachers are oblivious of the significance of teacher questioning. Additionally, most teachers are employing rote, recitation, instruction or exposition which can provide bedrock for their repertoire of pedagogy. Admittedly, research literature on classroom discourse examines the centrality of teacher question. However, the relative studies abroad on teacher talk are mainly focused on the amount and type of teacher talk, its effects on language comprehension, teacher questions, and feedback and error correction.

3. Theoretical Foundation

Theoretically, scaffolding originates from Vygotsky's concept of zone of proximal development (ZPD) based on sociocultural theory (SCT). The "scaffolding process" is composed of *recruitment, reduction in degrees of freedom, direction maintenance, marking critical features, frustration control, and demonstration* (Wood *et al.*, 1976).

Experienced teachers provide question scaffolding in study situation naturally and contingently. In a certain thematic classroom setting, scaffolding questions are more structural and focuses more on details, validity, reliability and practicality.

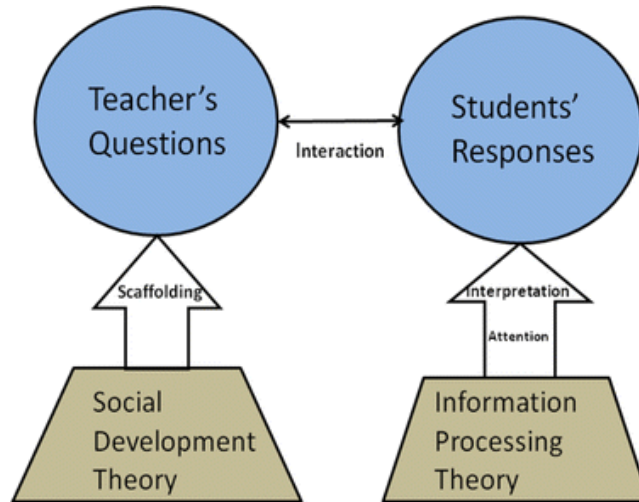


Figure. 1 Foundational theories relevant to teachers' questioning (Lee, Y. & Kinzie, M.B., 2012: 859)

Social development theory provides a fundamental framework for understanding the function of teacher questioning practice (Vygotsky, L.S., 1978) (see Fig. 1).

4. Research Method

This research is a qualitative study that concentrates on teachers' questioning in scaffolding students' critical thinking. Classroom observation is the main source of data. Pre-service teachers (PSTs), in-service teachers (ISTs) and their students are the respondents. The purpose of this research is to investigate: ANOVA will analyze the disparity of ISTs and PSTs in terms of frequencies of question type. Transcription will analyze the disparity of ISTs and PSTs in terms of scaffolding instruction.

5. Conclusion

Statistical results of comparison of PSTs and ISTs for one-way ANOVA on questions ($\text{sig}=.000 < \text{sig}=.001$) shows that the questioning behavior of PSTs and ISTs utilizing knowledge level questions is extremely different. ISTs emphasize more on cognitive level and hierarchical questions. ISTs use more reduction in degrees of freedom, marking critical features and frustration control scaffolding strategies.

Findings show that ISTs are more mature and professional than PSTs in question level and use of scaffolding instruction. The obvious discrepancy of scaffolding

questioning strategies exists between ISTs and PSTs. Teachers adopt questioning strategies to formulate questions to stimulate original thought and uncover individual knowledge deficits about the subject matter. Teachers should emphasize questioning strategy including: wait time, Socratic Method Questioning, pre-planning, rephrasing, prompting and probing. Higher order thinking skills can widen vision and cultivate critical thinkers. If students endeavor to take initiative in probing further in deep-level problems, their mind will be more creative, critical and active. If teachers are capable of anticipating obstacles and difficulties, appropriate design of scaffolding questions are essential and crucial. Scaffolding is context-specific. Scaffolding is a hierarchical approach. It is hard to specify the criterion of effectiveness of scaffolding in teachers' questioning. Through different questions that call for analysis, synthesis, and many other capabilities, students can elevate their higher order thinking skills and critical thinking.

Eventually, this research makes suggestions for enhancing teachers' perception of questioning strategies and scaffolding students' critical thinking in pedagogical improvement.

References

- [1] Bruner, J. (1983). *Child's Talk: Learning to Use Language* [M]. Oxford: Oxford University Press, 1983.
- [2] Lee, Y. & Kinzie, M.B. Teacher question and student response with regard to cognition and language use [J]. *Instr Sci* 40, 2012: 857-874.
- [3] Norbert, M. *Encyclopedia of the Science of Learning* [G]. Springer Science+ Business Media, LLC, 2012.
- [4] Walqui, A. Scaffolding Instruction for English Language Learners: A Conceptual Framework [J]. *International Journal of Bilingual Education and Bilingualism* 9, 2006: 159-180.
- [5] Wood, D., Bruner, J. S., & Ross, G. The role of tutoring in problem solving [J]. *Journal of Child Psychology and Psychiatry* 17, 1976: 89-100.
- [6] Vygotsky, L.S. Interaction between learning and development, In Cole, M. (Eds.), *Mind in society: The development of higher development of higher psychological processes*. Cambridge, MA: Harvard University Press, 1978: 79-91.