

Jurnal Pendidikan

# Bumi Rafflesia

Desember 2013 | ISSN 2301-7414 | Tahun ke-2, No. 2



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
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# Enhancing Students's Higher Order Thinking Skills by Using Scaffolding Strategies in English Classroom Interaction

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## Abstract

*Tiap siswa mempunyai tingkat pemikiran yang berbeda namun gaya berpikir dalam belajar dapat diperbaiki secara bertahap. Salah satu faktor yang dapat menyebabkan siswa berpikir lebih baik adalah guru. Guru memiliki beberapa strategi untuk membangun pola belajar terpusat pada siswa dan menciptakan kerangka kerja untuk berpikir kopratif terhadap pelajaran. Guru juga menyadari strategi-strategi dan metode-metode tersebut dapat digunakan untuk meningkatkan kemampuan berpikir siswa. Tujuan penulisan ini adalah melihat kepada pengembangan strategi-strategi scaffolding untuk berinteraksi di dalam kelas bahasa Inggris.*

*Kata-kata kunci: scaffolding strategies, English classroom interaction, higher order thinking skill*

## Introduction

Enhancing students' order thinking in classroom is considered an important educational goals. Students that move from another level of the class will be asked to do more and more with the information they have stored in their brains. Higher order thinking seems easy for some students but other students think that it is difficult. In the current issue of this term that higher order thinking can be learned and can be increased for all students.

Higher order thinking is thinking on a level that is higher than memorizing facts or telling fact to someone exactly the way it was told to us. When a person memorizes and gives back the information without having to think about it, it called rote memory. Higher order thinking takes thinking to higher levels than restating the facts. Higher order thinking requires people to do something with facts. It should be an understanding, inferring, and connecting them to other facts and concepts, furthermore it should be also categorizing, manipulating, putting them together in a new way and applying them as a new solution.

If the students are given a chance to apply the higher order thinking skills in their lessons they will improve their comprehending and will be more confident in applying those strategies. One factor that can enhances student higher order thinking skill is teacher. Teacher has an important role in English classroom. There are many strategies in English classroom interaction to encourage students' level of thinking.

Scaffolding in a strategy in teaching that gives to the provision of appropriate assistance for them. Scaffolding includes all the things that teachers do already when

they predict the kinds of difficulties that the class or individual students in which it will have a given task.

In scaffolding instruction, a more knowledgeable other provides scaffolds or supports to facilitate the learners' development. Scaffolding strategy can facilitate student abilities to build on prior knowledge and interline new information.

Teacher may also uses question as scaffolds to help students to solve a problem or complete a task. Teacher may increase the level of questioning or specifically until the students is able to provide a correct respons.

From the explanation above it can be assumes that by using scaffolding strategy in teaching will enhance students higher order thinking skill.

## **Discussion**

### **1. Higher Order Thinking**

Shepardson (1993) suggested a link between class activities and development of higher order thinking skills that textbook and supplemental guide activities put more emphasis on information gathering, remembering and organizing skills than on focusing, integrating, evaluating, and analyzing skills.

Higher order thinking is thinking on a level that is higher than memorizing facts or telling something back to someone exactly the way it was told to you. When a person memorizes and gives back the information without having to think about it. For short, Higher Order Thinking takes thinking to higher levels than restating the facts. Higher Order Thinking requires that we do something with the facts.

High Order Thinking are actived when individual encounter unfamiliar problems, uncertainties, questions, or dilemmas. It grounded in lower order skillls such as discriminations, simple application and analysis, and cognitives strategies and are linked to prior knowledge of subject order content.

According to Bloom's taxonomy of educational objectives for designing instruction has also been widely used to distinguish lower and higher order thinking skills. Anderson and Krathwohl (2001) revised this taxonomy by classifying the six cognitive processes according assumes to whether the students is able or learn to remember, understand, apply, analyze, evaluate, and create. From the definition above, it can be concluded that Higher Order Thinking is the way of someone thinking that includes of analysis, critical logical, creative thinking, etc.

The beneficial to teach higher order thinking in middle and high school classrooms is a great deal with the growth, confidence in utilizing and meta cognition. Whereas Atwell (1998) writes using meta cognition by thinking about thinking as they read-kids read more actively and analytically. While Bransford (1999 : 35) stated that Meta cognition is ability to monitor one's current level of understanding and decide when

it is not adequate. It refers to the ways in which students manage their thinking and it includes at least to following four aspects.

Sternberg stated that successful intelligence as mental self-management. According to Sternberg, mental self-management is composed of six steps : (1) know your strength and weaknesses, (2) capitalize on your strength and compensate for your weakness, (3) defy negative expectations, (3) believe in yourself, self efficacy, (4) seek out role models-people from whom you can learn, and (5) seek out an environment where you can make a difference.

## **2. Higher Order Thinking in English Classroom Interaction**

According to Celce and Murcia (2001) Classroom interaction is an essential part of teaching learning process. Interaction has been defined as a process whereby two or more people engaged in reciprocal actions (verbal and non verbal). Moreover, Allwright and Bailey (1991 : 25) stated that through classroom interaction, the plan produces outcomes (input, practise opportunities, and receptivity). They concluded that interaction plays very important role in teaching-learning process.

Teachers have used the part of learning as a resource for instructional strategies, managing the classroom, planning instruction and assessment, making systematic reforms, and defining what students must be able to do in order to solve problems and make decisions in many situations.

Sophisticated understanding and mastery of higher order thinking occur through the use of knowledge in a subject or topic, whether it be consumer decision making, the design of a bridge, or critique of a theater performance (Onosko and Newmann, 1994). Of course a subject can be taught in ways that fail to promote thinking but thinking may not be taught a part of knowledge. Some would assume that the proper teacher of English classroom interaction is equivalent to promote higher order thinking because it demands that students interpret, analyze, and manipulate language to face new challenges within the subject and because it draws the student closer to the thinking of experts in the field. Beyond substantive knowlegde of the topic, students need analytic knowledge (e.g. the stucture of well-reasoned arguments, distinction between emprical, conceptual and normative claims, criteria to judge reliability of evidence) and metacognitive knowledge (e.g. awareness and self monitoring of one's thought processes).

All the people believe that language abilities and thinking competences shape each other (Block, 1993). Both are of equal intensity in fosytering learning. Through the power of language use, the quantity and the quality of students' thoughts can be improved. Through reading, writing, speaking, and listening transitory thoughts can be transformed into lasting principles. This transformation accurs because single ideas

enter the mind as cognitives entries, capable of bounding with collective categories of former thought.

Therefore, since students' thinking abilities and language development are equal value and influence upon the depth of their communication, teachers, should develop both competencies if students' potentials are to be fulfilled. It seems important to understand how the four main components of language instruction: listening, reading, writing, and listening.

Questioning is a way that teacher use overt speech to elicit specific types of thought. Redfield and Rousseau (1981) suggest that higher level questions appear to be instrumental in enhancing student thinking. This lesson involving higher order thinking skill to require particular clarity of communication to reduce ambiguity and confusion and improve student attitudes about thinking tasks. Scaffolding (giving students support at the beginning of the lesson and gradually requiring students to operate independtly) helps students develop higher order thinking skills.

### **3. Scaffolding in Enhancing Higher Order Thinking**

Scaffolding refers to providing contextual supports for meaning through the use of simplified language, teacher modelling, visual and graphics, cooperative learning and hands on learning, (Ovando, Collie, & Comb, 2003). When using scaffolding as an instructional technique, the teacher provides tasks that enable the students to build on prior internalize new concepts.

Herber (1993) defines scaffolds are temporary structures that physically support workers while they complete jobs that would otherwise be impossible. Scaffold also provides workers with both a place to work and the means to reach work areas that they could not access on their own. Besides that According to Wood (1988), scaffolding is tutorial behavior that is contingent, collaborative and interactive. On the other hand Goodman (1978) defines scaffolds are the teacher observes that students capable of handling more on their own responsibility. As follow scaffolding is often carried out between the instructor and one student, it can successfully be used for an entire class (Ellis and Larkin, 1998). Based on McKenzie (1999), scaffolding is provides clear direction and reduces students' confusion – educators anticipate problems that students might encounter and then develop step by step instruction which explain what a student must do to meet expectations.

According to Vygotsky (Byrnes, 2001), adult tutors must act as scaffolds : they must provide just enough guidance to allow the children to advance independently. He noted that children who are just learning a skill make many mistakes and rely a great deal on assistance and feedback from their teachers. Besides that Vygotsky also identifies four phrases of instructional scaffolding (Byrnes, 2001). Those are modeling

with verbal commentary, student imitation of the skills they've, the period when the instructor begins to remove her scaffolding, the students have achieved an expert level of mastery.

In line with Vygotsky's theory, the scaffolding provided by an instructor can elevate a child's understanding of a concept from the native level to the scientific level, (Byrnes, 2001). On the other hand, in line with modern theory effective scaffolding should help students to achieve an expert level of understanding of a subject, characterized by organized and conditionalized knowledge of content, fluent retrieval and positive transfer (Branford et al, 2000). Finally, scaffolding student learning should result in elimination of problems such as disengagement and boredom.

Scaffolding involves giving students support at the beginning of a lesson and then gradually turning over responsibility to the students to operate on their own (Slavin, 1995). This limited temporary support helps students develop higher order thinking skills. It functions in much the same way that scaffolding does when providing safety and access for a window washer or progress on their own (Kauchack & Eggen, 1998). Too much or too little support interfere in the development of higher order thinking skills. For example, when teacher gives a student help even though the student does not ask for it, as reported in a study by Graham cited in Crowl et all (1997).

There are types of scaffolding have been identified as being especially effective for second language learner, it stated by Rico & Weed (2002) that consist of: (1) simplifying the language, the teacher can simplify the language by shortening selections, speaking in the present tense and avoiding the use of idioms, (2) asking the completion, not generation, the teacher can help students choose answer a list or complete a partially finished outline or paragraph, and (3) using visual, the teacher can present information and ask for the students to respond through the use of graphic organizers, table, charts, outlines, and graphs.

Jamie McKenzie suggests that there are eight characteristics of scaffolding instruction. In order to engage in scaffolding effectively, teachers should (1) provide clear direction and reduce students' confusion. Prior to assigning instruction that involves scaffolding, teacher must try to anticipate any problems that might arise and write step by step instructions for how learners must complete the task, (2) clarify the purpose. Scaffolding doesn't leave the learner wondering why they are engaging in activities. The teacher explains the purpose of the lesson and why this important. This type of guided instruction allows learner to understand how they are building on prior knowledge, (3) keep students on task. Students are aware of the direction in which the lesson is heading, and they can make choices about how to proceed with the learning process, (4) offer assessment to clarify expectations. Teacher who creates scaffolded lessons set forth clear expectation from the beginning of the activity using exemplars

and rubrics, (5) point students to worthy sources. Teacher supplies resources of research and learning to decrease confusion, frustration, and wasted time, (6) reduce uncertainty, surprise, and disappointment. A well-prepared activity or lesson is tested or evaluated completely before implementation to reduce problems and maximize learning potential, (7) deliver efficiently. Little time is wasted in scaffolding lesson, and all learning goals are achieved efficiently, and (8) create momentum. The goal of scaffolding is to inspire students to learn more and increase their knowledge and understanding.

Hogan and Pressley (1997) elaborated the following points can be used as guidelines when implementing instructional scaffolding are a) Select suitable tasks that match curriculum goals, course learning objectives and students' needs, b) Allow students to help create instructional goals (this can increase students' motivation and their commitment to learning), c) Consider students' backgrounds and prior knowledge to assess their progress – material that is too easy will quickly bore students and reduce motivation, d) Use a variety of support as students progress through a task (e.g., prompts, questions, hints, stories, models, visual scaffolding “including pointing, representational gestures, diagrams, and other methods of highlighting visual information” (Alibali, M, 2006), e) Provide encouragement and praise as well as ask questions and have students explain their progress to help them stay focused on the goal, f) Monitor student progress through feedback (in addition to instructor feedback, have students summarize what they have accomplished so they are aware of their progress and what they have yet to complete), g) Create welcoming, safe, and supportive learning environment that encourages students to take risks and try alternatives, h) Help students become less dependent on instructional supports as they work on tasks and encourage them to practice the task in different contexts.

While Martha Lakin suggests that teacher often do this terms when developing scaffolded lessons, such as: focus on curriculum goals to develop appropriate task, define a shared goal for all students to achieve through engagement in specific task, identify individual students needs and monitor growth based on those abilities, provide instruction that is modified or adapted to each students' ability, encourage students to remain focused throughout the tasks and activities, provide clear feedback in order for students to monitor their own progress, create an environment where students feel safe taking risks, and promote responsibility for independent learning.

There are some advantages of scaffolding instruction, such as : (a) the learner does not passively listen to information presented instead through teacher prompting the learner builds on knowledge and forms new knowledge, (b) motivates students to that they want to learn, and (c) minimize the level of frustration of the learner.

Besides that it also has biggest disadvantages for teacher since developing the

support and scaffolds lesson of each individual, those are : (a) it would be extremely time-consuming, (b) unless properly trained, a teacher may not properly implement scaffolding instruction and therefore not see the full effect, and (c) teacher gives up some of the control and allows the students to make errors.

### **Conclusion**

The students will learn depend on the teacher, when the first time the students know that they will learn a language (in this case is English), students try to act as if they have to jump from the high mountain. However to erase that feeling, the role of teacher decided all. Scaffolding is a teaching technique that provide contextual supports for meaning through the use of simplified language, teacher modelling, visual and graphics, cooperative learning and hands on learning. All of them is a part of scaffolding which focus on raising the student's knowledge and attract the students to act more in a classroom, avoid the passively and try to create an imagination through study. Scaffolding also creates a good social link between teacher and students by helping the students even they don't ask for it. The most important is teacher doesn't force the student to be correct, but let them to make a mistake and let them learn from the mistake.

Finally scaffolding is the best way to teach English and can be a tool to monitor the student's growth. Even this technique needs a great responsibility, but the results satisfies the students.



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## PENDAHULUAN

Kemampuan berhitung tingkat menengah yang penting yang harus dimiliki oleh para profesional dan para karyawan di era ini. Untuk berbagai kebutuhan tersebut maka perlu adanya belajar bahasa inggris di sekolah-madrasah dimasa depan untuk itu akan lebih banyak siswa yang akan berprestasi dan itu merupakan hal yang penting dan dengan sekolah tersebut maka diharapkan ketuntasan dan keberhasilan yang maksimal yang menjadi harapan yang mulia dari karibatan serta juga dapat dengan mempersiapkan globalisasi dan era kemajemukan ini.

Pembelajaran bahasa Inggris di SMP merupakan upaya kemampuan berhitung yang menyeluruh, berbudaya, memadai dan bermutu. Untuk itu tersebut harus dilakukan dengan cara yang lebih inovatif yang meliputi pembelajaran itu bahasa, pengetahuan yang baik dan yang meliputi aspek-aspek yang lain untuk meningkatkan kemampuan berhitung. Dengan (2002:16) mengatakan "bahwa SMP adalah pembelajaran kepraktisan prinsip-prinsip sebagai alat yang akan belajar" yang dengan demikian guru diharapkan memiliki strategi pembelajaran yang dapat di lakukan dengan efektif dan yang dapat meningkatkan materi yang diajarkan. Dari aspek kemampuan yang telah disebutkan di atas maka kemampuan berhitung akan menjadi faktor yang dapat membantu dalam kehidupan masyarakat. Dalam situasi pembelajaran untuk kelas IX di SMP di Jawa Tengah ini, kemampuan berhitung ini akan menjadi faktor yang sangat penting dalam kehidupan masyarakat.