ENGLISH REVIEW: Journal of English Education *Vol. 3, Issue 1, December 2014*

ISSN 2301-7554 http://journal.uniku.ac.id/index.php/ERJEE

DEVELOPING STUDENTS' KNOWLEDGE FROM THE RESULTS OF SCAFFOLDING IN ENGLISH TEACHING

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APA Citation: Gusrayani, D. (2014). Developing students' knowledge from the results of scaffolding in English teaching. *English Review: Journal of English Education* 3(1), 31-40

Received: 13-10-2014 Accepted: 20-10-2014 Published: 01-12-2014

Abstract: Some issues of the difficulties of teaching English in Indonesia have significantly revealed and analyzed by some researchers (Nurweni, 1997; Moedjito and Harumi, 2008) and the issues have provoked some studies to anchor several solutions for teachers to consider (Supriadi and Hoogenboom, 2004; Thalal, 2010). In Indonesia, the issue has also been thoroughly investigated. This paper attempts to reveal the problems of teaching English experienced by 2 junior high school teachers in Sumedang along with the alternative solution namely scaffolding concept which has been widely investigated and believed as appropriate tool mediation for children to learn English with particular difficulties hampered: culture, teachers' background, quantity and quality of teaching and similar causes (Vygotsky, 1962; Tudge, 1992; Stone, 1998; Kong, 2002; Donovan and Smolkin, 2002). This concept of scaffolding is considered in this research as a bridge to a better understanding of the requirements of curriculum 2013 that students have to possess knowledge (K3) specifically factual, conceptual and procedural knowledge having experienced the learning. As students are conditioned to achieve these skills: remembering, understanding, implementing, analyzing, synthesizing, evaluating and producing, at that pinpoint the presence of scaffolding concept in English teaching is an inevitable strategy to be applied.

Keywords: scaffolding, students' knowledge (K3), curriculum 2013, tool mediation, metacognitive.

INTRODUCTION

Issues of teaching English in a cultural context as a case of Indonesia have been widely investigated by some researcher (Erlenawati, 2002; Bradford, 2007; Cahyono and Widiati, 2008). Same topics have so long been a concern to many researchers all over the world started from the influence of different cultures affect students' mastery of language (Li, 2004; Baker, 2003; Chen, 2006; Englebert, 2004; Nault, 2006; Yanpu, 2004; Darren, 2006 in Faridi, 2008) to the impact of different sociocultural background to different learning strategies and different results in

language learning (Lengkanawati, 2004; Erlenawati, 2004; Astini, et. al, 2002 in Faridi, 2008). These issues reveal not only Indonesian students' difficulties in learning English but also teachers' difficulties in teaching English. The causing factors come from both the teacher and the students. The problems originated from students' characteristics in their learning, that they are often shy, silent and passive (Exely, 2005); unreflective (Pikkert and Foster, 1996); adopt memorization that they tend to adopt what teachers note down in the blackboard (Lengkanawati, 2004); motivated only by immediate needs

(Bradford, 2007). The problems rooted from teacher are various. Socioeconomic factor that teachers are among the underpaid profession in Indonesia (Jalal, et.al, 2009) so that they have to double shift their earnings by doing, too often, low status occupation. This kind of life cycle impact their quality of teachings (Supriadi and Hoogenboom, 2004) and even their attendance at school (Thalal, 2010). English teachers in Indonesia also experienced 'malpractice' as it is in medical term, that they 'did not undertake sufficient educational degree (Firman and Tola, 2008). More than 60 percent of the total 2.78 million teachers did not hold undergraduate degree in education (Thalal, 2010). This has becoming another crucial issue that can hamper English teaching and learning in Indonesia.

Another problem comes from the tasks and learning materials. Meanwhile tasks and learning materials should be carefully thought and selected by teacher as an adult whose assistance is prominently needed in teaching young learners (McDevitt and Ormrod, 2002), many Indonesian teachers ignores the fact (Gusrayani, 2011). The selecting and leveling of the teaching materials, designing the teaching steps and evaluating the whole performance are activities included in the design of lesson plans.

Teachers find students are dissatisfied of their language learning (Li, 2004; Baker, 2003; Chen, 2006 in Faridi, 2008), students master language competence faster and more accurate as they are mingled with sociocultural issues (Englebert, 2004; Nault, 2006; Yanpu, 2004; Darren, 2006 in Faridi, 2008), students with different sociocultural background have different learning strategies and therefore achieve

different results in language learning (Lengkanawati, 2004; Erlenawati, 2004; Astini, et. al, 2002 in Faridi, 2008).

The consideration of choosing the tasks, teaching materials, teaching strategy, teaching tools and many others is one significant factor contributes to what could simply be described as good teaching. Teacher is the most prominent actor in its execution. How teacher could provide adequate support in order to enable students to learn effectively, deals with tasks, strategies, teaching materials that facilitate students to move towards new skills, concept or understandings. But, as Hammond (2001) pointed out that the support and assistance should be also designed to 'help learners to work with increasing independence – to know not only what to think and do, but also how to think and do, so that new skills and understandings can be applied in new contexts.

Knowledge is constructed in the midst of our interaction with others and is shaped by the skills and abilities valued in a particular culture (Vygotsky, 1978). The vivid picture of how knowledge is constructed with the help of others is the illustration of parents and their children. Parents shape the skills and abilities of their children since earlier stage of life by talking to them. Children learn how to do simple thing like producing alphabetical sounds to a more complex one as problem solving, by the assistance of their parents, peer or adults around them. Children solve problems by their speech as appropriate as they do with their hands. They talk aloud indicating the beginning of thinking process. As they grown up, it is internalized as part of their repertoire of strategies for problem solving. Language helps children be strategic in their

approach to complex problems (Vygotsky, 1962).

Hammond et.al (2001) argues that children are influenced by their parents, peers, and adults in developing their language which supports their thinking. The interaction between a child and his parents, peers and/or adults provides feedback and assistance that supports ongoing learning. It finally forms the basis of the understanding that eventually become internalized in the individual. From this point of view, there are 2 main points drawn about how learning occurs. First, learning becomes real when there is assistance from others. Second, interaction between a learner and his surrounding becomes very prominent, so the quality and quantity of the interaction should be assured. The scaffolding concept that will be elaborated below is framed by this twofold.

Since the term scaffolding was coined in 1976 (earlier than ZPD concepts), there has been a great deal of discussion and debate about what the concept of scaffolding actually means. Many experts assume that scaffolding is an operational term for ZPD. ZPD is defined as a distance between two levels of child's performance: the lower level that reflects the tasks the child can perform independently and the higher level reflective of the tasks the same child can do with assistance. ZPD is the distance between students current and potential development. Vygotsky assumes that learning takes place before development.

Connection between learning and development: what develops next (proximally) is what is affected by learning (through formal or informal instruction). Consequently, the concept of ZPD is only applicable to

development only to the degree in which development might be influenced by learning. In the area of ZPD, scaffolding falls into practice. The assistance of adults in children's ZPD awakens and rouses to life the mental capacities of learners of all ages (Tharp and Gallimore, 1991).

Scaffolding is no longer associated with interactions between individuals only. These days, artifacts, resources, and environments themselves are also utilized as scaffolds (Puntabekar & Hubscher, 2005). Put differently, scaffolds can consist of tools, strategies, and guides which support students so that they can achieve a higher level of meaning making; one which would be impossible if students worked on their own (Gale, Stewart, & Steel, 2007; Vygotsky, 1978). Hotlon and Clarke (2006) propose more concrete tools be used as scaffolds. According to them, "scaffolding may also be provided in book form, over the internet, by telephone, and so on" (p. 130). More importantly, scaffolding can be provided through supplying hints, prompts, probes, simplifications or other similar learning supports (Ronen & Langley, 2004).

In terms of practice, some theorists propose ideas of put the concept into practice. Mercer, et.al (2004) proposes to implement scaffolding, teacher should consider this.

- Children can be enabled to use talk more effectively as a tool for reasoning;
- Talk-based activities can have a useful function in scaffolding the development of reasoning and scientific understanding;

Real teaching, according to Tharp and Gallimore (1991) is understood as assisting the learner to perform just beyond his/her current capacity. A teacher who stops by a student's desk to ask questions to determine her progress and then provide hints, subtle suggestions, and guidance to move the students along, that is instructional scaffolding (Hogan, 1997).

Meanwhile, Roehler and Cantlon (1997) argue that scaffolding can also be performed as teacher offer explanations, invite students' participation, verify and clarify students' understandings and model desired behaviors. Learners are given the opportunities to act like they know how to complete a task before they actually do (Rommetveit, 1978). Scaffolding developed to help students internalize information and it best occurs where the learners have opportunities to communicate their thoughts. Teacher should converse the students and vice versa. Martin (1985) suggests that a good conversation is neither a fight nor a contest. Circular in form, cooperative in manner, and constructive in intent. It is an interchange of ideas by those who see themselves not as adversaries but as human beings come together to talk and listen and learn from one another.

The knowledge required from the students covers three domains: process, object and subject. Students are urged to have these specific competences: know, understand, apply, analyze, and evaluate. The range of knowledge students has to mingle in such a way that represents their competence is: factual, conceptual, procedural, and metacognitive. For the level of elementary school and junior high school, the level of knowledge students should acquire is factual, conceptual and procedural.

Curriculum 2013 with its scientific approach urges teachers to create

students' self-strategy in learning by facilitating them with various real life experiences. Teacher demonstrates many actions instead of merely explaining. At this pinpoint, teacher hold significant role in creating assistance to the students meanwhile at the same time teacher is obliged to establish students' individual initiative to learn many things so that at the end they can analyze, synthesize and evaluate their learning. Teacher should ensure that students are significantly assisted so that they can continuously grow and make progress even one step from what they have already known. This is called scaffolding. Teacher should think of any possibilities that create movement of the students from their assisted performance to their individual one. An important aspect to effective scaffolding is that teacher should understand and develop the timely support. Teacher needs to plan and provide support at the point of need. No need to be excessive yet it can scaffold students in the knowledge that they have already seen factually, achieved conceptually, performed procedurally and analyzed in a metacognitive way. This is how students are urged to be leveled in 2013 curriculum.

The research is specifically designed to answer the questions: (1) How teachers understand and perceive the concept of scaffolding?; (2) How is the scaffolding concept reflected in their teaching? (3) In what way does the scaffolding concept help or hinder students from their language mastery?

METHOD

Considering the objective of this study that is to reveal teacher's understanding and perception on scaffolding concepts and the reflection of

the concept in their English teaching as teacher builds students' knowledge I decide to conduct a mixed method studies where the qualitative component had priority and the researchers identified themselves primarily as qualitative researchers (Brannen, 2005). Creswell (1998: 15) argues that qualitative research needs interpretive and naturalistic approaches to the subject matter and multiple sources of information. This research will be a case study because the characteristics of genre are embedded in a certain community communication. Since the research will typically describe an entity and the entity's action, the how and why the entity acts as it does, this research took case studies as the method qualitatively (Thomas, 2003). The entities investigated are the teaching (process and product).

A case study in qualitative research requires a natural setting and purposeful sampling (Creswell, 1998:14, 62; Maxwell, 1996: 70-71; Miles and Huberman, 1994: 27). The general aim of this study is to explore and describe the reflection of scaffolding concepts in the teachings of English in junior high schools in Sumedang along with their teaching practices. Investigation were drawn upon teachers in terms of their understanding on the concept, how they implement it in their classroom teaching and how they perceive it. The results were framed and discussed in the light of curriculum 2013. Given this objective, it is imperative to find junior high schools in Sumedang that has implemented or trained the teachers with curriculum 2013.

It is critical also to consider that the schools have facilitated the teaching with supportive teaching materials sufficient and relevant to the subject matters to support the English teaching activities to their students. It is considerable also – to certain amount – to involve teachers who have been actively participated in some improvement programs in teaching English for Sumedang district at least. Having considered above reasoning, the participants of this study are two teachers who have been reviewed thus far based on the requirements. They were interviewed, observed, and requested to be engaging and mingling into the establishment of the new model of scaffolding teaching. Their opinion, assumption and teaching practices were triangulated with interview, questionnaires, observation, focus ground discussion and other necessary instruments. They interviewed purposely and had their English teaching observed thoroughly. The process were carefully recorded and documented.

Mixed method and qualitative research needs multiple techniques to collect data from multiple sources (Creswell, 1998). In general, the data were taken from the following techniques. The data were collected through both questionnaires and interview. The questions asked were about scaffolding concepts: how far teacher understands the concept, apply and perceive it in curriculum 2013? Questionnaires were given first, and interview was served as the confirmation and elaboration of what had been sounded in the questionnaire.

The data to answer this question were collected from classroom observation, field note and interviewing teachers and students. The data were triangulated and collected thoroughly and continuously guided by some purposively designed formats. The

interview was targeted to teachers and students and structure of interview is subject to change accordingly. The points to which teachers reflect scaffolding in particular ways were deeply elaborated.

The data were gathered from classroom observation triangulated with interview and test results. The interviews were conducted both to the teachers and the students. Having observed the teaching, the teacher was asked about the scaffolding they have planned and implemented and how significant it is to help students' mastery. The framing of the questionnaire was: does the concept help the students in acquiring new skills or the opposite? How far and significant does the help or hinder created? How can it help or hinder students and why? What is the reasoning? The interviews were continued with discussion. Interview to students was in regard to their impression during the teaching. Whether or not they were helped by the teaching were elaborated. Test results were also analyzed to support the opinions.

RESULTS AND DISCUSSION

Teacher's understanding and perception about scaffolding

Both teachers were interviewed with several open questions regarding their understanding about scaffolding and whether they perceive the concept empowering or the opposite. Teacher A explained that he heard the scaffolding term written in many scientific books. It is written mostly in a positive encouragement, as in the title of the book. Nevertheless, he admitted that he did not aware about the meaning and the 'magical effect' it has on the teaching.

He thinks that that scaffolding might be associated with a good teaching. This is relevant to what Hammond (2001) says that assume scaffolding as good teaching is common among teachers. Teacher B is the opposite of teacher A. She understood the concept, believed it as a good teaching strategy and even was able to mention the theorists. Teacher B thinks scaffolding is what a teacher should learn and apply.

Reflection of scaffolding in the teaching Teacher A

The observation was conducted twice for two meeting schedules, each of which has 2x35 minutes. The very prominent artifact used by the teacher as the scaffold is the slides projected contain some pictures which were very attractive and familiar to the students. Explaining the date and time, the teacher brought the real birthday date of the famous celebrities students were well recognized. Students were very enthusiastic and they tried hard to answer each of the question proposed by the teacher, as their eyes were glued to the pictures. Even one student which is firstly failed on answering correctly, tried to re-answer by requesting the teacher to play on the picture of the celebrities she likes. The slide has successfully attracted their attention and forced them to think harder. This kind of assistance falls into students' mental capacity (Tharp and Gallimore, 1991, Gale et. al, 2007). Unfortunately, there is rarely framed another meaning-making strategy used by the teacher as it should be able to work with, as to teacherstudent talk (Merceret.al, 2004). The students have not given enough time and space to use the tool for reasoning, that is, a talk. Teacher provides almost all answers if they failed to point it

correctly. Meanwhile, students' participation whether they are answering or correcting others, that is a crucial thing teacher need to boost and invite, as it is a 'useful function in scaffolding the development of reasoning and scientific understanding (Ronen and Langley, 2004). Teacher rarely used understandable hints, probes or simplification. He often showed hints by nodding his head or pausing. Students were less directed to understand the 'subtle suggestions and guidance to move along' (Hogan and Pressley, 1997) and 'frame the intended meaning'. After explanation in the first 10 minutes, students were not provided by 'point in need scaffolding' as suggested by Hammond (2001) that students were not only prompted to their mistakes but also invited to clarify themselves of what they are thinking at that time being and guide those thinking into the correct path. For example, one student mispronounce the date and month in reverse, the teacher reacted only by shaking his head instead of guiding by sentences like: 'what did you say again? Which one is the date? Are you sure? Is month more than 12 in a year? So 15 means? A month or a day? This is what Martin (1985) argues as 'conversation'. Teacher should converse his student. Circular in form, cooperative in manner, and constructive in intent; this is a desired model of explaining things or examples. If students do not 'talk' his mind 'aloud', it would be difficult to measure the beginning of the thinking process because no correction, assimilation, or accommodation of the new learning (Vygotsky, 1978).

Teacher B

The teacher also performed two teachings in different days, with the same minutes. She applies task division in teaching reading. She selected two different reading texts. As I interviewed before she started the class, she argued that the two texts has different level of difficulties. The first one is easy; the second one is a bit difficult. It is performed in purpose so that the students ranging from lower to upper level of competencies can be measured and appropriately treated. This assistance reflect 'contingency' in scaffolding (Hammond, 2001) in which teacher assures students' recent capability in order to move along to one step higher. Teacher tried to give an anchor for all the students by giving them the easier one to depart on students Zone of Proximal Development (ZPD) and later on landed on students farthest ZPD (Brunner, 1984). At this point, teacher made simplification as her teaching support (Ronen and Langley 2004) and provided the students with something to trigger their potential development.

Teacher also communicates well; performed a lot of interactional scaffolding by providing many teaching media beside the textbook. The media are then successfully played the role as teaching catalyst (Tharp and Gallimore, 1991). The interaction between teacher and students were clearly patterned as the teacher seized the students' answer and used them to develop their higher thinking ability. The teacher used point in need scaffolding (Hammond, 2001). For example, as the teacher asked: T: so why she (the main character) felt so

- I: so why she (the main character) felt so sad?
- S: because she lost her earrings (pausing)..err..and..but..

- T: yes? But what?
- S: but also her husband did not care about that...
- T: about her? About her earring? Or what?
- S: about her lost. Not the earring. The lost. Her lost. Her husband ignore.
- T: her husband ignored the fact that she lost her earrings? That what makes her so sad do you think?

S: yes.

The effect to students' understanding

Teacher A and B can actually move along the path of students' further distance of their ZPD by the scaffolding applied. Teacher A, with the interactivity built by the slides, the pictures, the vivid explanations (Roehler and Canton, 1997), his stopping in each student's desk (Tharp and Gallimore, 1991) has already succeeded in building students' mental capacity (Gale, 2007) as students were attached and concerned. Students moved from remembering to understanding level of conceptual knowledge. They rarely moved from their chair, yet their mind moved the higher point. Nevertheless, the level of knowledge the students reach was still in conceptual phase. Teacher B, with her skillful interactional scaffolding and teacher's talk has also succeeded in developing students' internalized and strategic way of thinking. She has also created a conducive learning atmosphere. She brought the students from the level of remembering to applying. Teacher moved around and mingled with the students, the interaction gave meaningful contribution to the mastery of the learning. Students reached procedural knowledge level as they are asked to make their own text and successfully

made it with significant themes and development of the themes.

CONCLUSIONS

In the class where teacher A taught, students are mostly less capable of answering questions from the textbook and the teacher. Even if they can answer, the level of understanding measured is in the point of remembering the fact and understanding the issue. Those who are able to analyze further were only five persons. But some of the students, who were initially shown less interest and understanding, were able to catch their outstanding students finally. Class tended to be quiet, even if the teacher asked, they looked very reluctant to answer. The hesitation of the teacher to give sufficient assistance or to lead the path for the students to move along create the hesitation for the students to answer almost all questions. Some of the students were scaffold, but most of the rest were only stayed there, in their previous condition. In teacher B's class, the atmosphere tended to be pleasurable. Even though not all of them can answer the questions correctly, they looked distressed, they learned happily. Students who were initially given the easier task can also finish the more difficult ones at last. Teacher knew when to scaffold and when to let them go. But still, both of them were applied scaffolding techniques in their teaching and succeeded in lengthen their students' ZPD.

REFERENCES

Bradford, A. (2007). Motivational orientations in under-researched FLL contexts: findings from Indonesia. *RELC Journal*, *38*, 302-323.

Bruner, J. (1984). Vygotsky's zone of proximal development: the hidden agenda. In B. Rogoff, & Wertsh, J. (Eds),

- Children's learning in the 'zone of proximal development'. San Francisco: Jossey-Bass.
- Cahyono, B. Y., & Widiati, U. (2008). The teaching of EFL vocabulary in Indonesian context: The state of art. *TEFLIN Journal*, 19(1), 1-17.
- Creswell, J. W. (1998). *Qualitative inquiry and research design*. California: SAGE Publications.
- Donovan, C. & Smolkin, L. (2002) Children's genre knowledge: An examination of K-5 students performance on multiple tasks providing differing levels of scaffolding. *Reading Research Quarterly Newark*. 37 (4), 428-465
- Erlenawati. (2002). Belief about language learning: Indonesian Learners' perspectives, and some implication for classroom practices. *Australian Journal of Education*, 46(3), 323-337.
- Exely, B. (2005). Learner Characteristics of 'Asian' EFL Students: Exceptions to the 'Norm'. Paper presented at the Proceedings Pleasure Passion Provocation. Joint National Conference AATE & ALEA 2005.
- Faridi, A. (2008). Pengembangan Model Materi Ajar Muatan Lokal Bahasa Inggris di Sekolah Dasar Jawa Tengah yang Berwawasan Sosiokultural. Disertasi Program Pascasarjana Universitas Negeri Semarang
- Firman, H., & Tola, B. (2008), The future of schooling in Indonesia. *Journal of International Cooperation in Education* 11(1), 71 84.
- Gallimore, R. & Tharp, R.G. (1989) Rousing minds to life: Teaching, learning, and schooling in social context. Cambridge: Cambridge University Press.
- Gallimore, R. & Tharp, R. G. (1990). Teaching mind and society: A theory of education and schooling. In L. Moll (Ed.), *Vygotsky and Education: Instructional implications and applications of sociohistorical psychology.* (pp. 175-205). Cambridge: Cambridge University Press.
- Gallimore, R. & Tharp, R. (1991). A theory of teaching as assisted performance. In: *Learning to think: Child development in*

- social context, Vol. 2.; Paul Light, Sue Sheldon, & Martin Woodhead, (Eds.) pp. 42-61. Routledge: London.
- Hammond, J. (2001). *Scaffolding: teaching and learning in language and literacy education*. Australia: PETA
- Hogan, K., and Pressley, M. (1997).

 Scaffolding student learning: Instructional approaches and issues. Cambridge, MA:
 Brookline Books
- Holton, D., & Clarke, D. (2006). Scaffolding and metacognition. *International Journal of Mathematical Education in Science and Technology*, 37(2), 127-143.
- Kong, A. (2002) Scaffolding in a learning community of practice: A case study of a gradual release of responsibility from the teacher to the students. 47th Annual International Reading Association Convention, San Francisco.
- Lengkanawati, N. S. (2004). How learners from different cultural backgrounds learn a foreign language. *Asian EFL Journal*, *6*(1).
- Life, J. (2011). Motivation and EFL University Students in North-East Asia. Asian EFL Journal, 13(3).
- Linn, R.L., Baker, E.L., & Dunbar, S.B. (1991). Complex, performance-based assessment. *Educational Researcher*, 20(8), 15-21.
- Martin, J. (1985) Factual writing: Exploring and challenging social reality Oxford: Oxford University Press.
- Maxwell, J. (1996). *Qualitative research design*. Thousand Oaks, CA: SAGE.
- McDevitt, T.M. & Ormrod, J.E. (2002). *Child development and education*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Miles, MB. & Huberman, AM. (1994). *Qualitative data analysis (2nd edition)*.

 Thousand Oaks, CA: Sage Publications.
- Moedjito, & Harumi, I. (2008). Perceptions of the seriousness of mispronunciation of English speech sounds. *TEFLIN Journal*, 19(1), 70-90.
- Nurweni, A. (1997). How many words do Senior High School students acquire per week. *TEFLIN Journal*, 8(1), 103-115
- Pikkert, J. J. J., & Foster, L. (1996). Critical thinking skills among third year

- Indonesian English students. *RELC Journal*, 27, 56-64.
- Ronen, M. & Langley, D. (2004). Scaffolding complex tasks by open online submission: Emerging patterns and profiles. *Journal of Asynchronous Learning Networks (JALN)*, 8(4), 39-52
- Roehler, L. R., & Cantlon, D.J. (1997).

 Scaffolding: A powerful tool in social constructivist classrooms. In K. Hogan & M. Pressley (Eds.), Scaffolding student learning: Instructional approaches and issues (pp. 6-42). Cambridge, MA: Brookline.
- Rommetveit, R. (1978). 'On negative rationalism in scholarly studies of verbal communication and dynamic residuals in the construction of human intersubjectivity', in *Michael Brenner*, *P. Marsh and Marilyn Brenner* (*eds*), *The Social Contexts of Method*, London: Croom Helm, pp/ 16-32.
- Stewart, T.M., MacIntyre, W.R., Galea, V.J., & Steel, C.H. (2007). Enhancing problem-based learning designs with a single e-learning scaffolding tool: Two case studies using Challenge FRAP. *Interactive Learning Environments*, 15(1), 77–91.
- Stone, A. (1998) The metaphor of scaffolding: Its utility for the field of learning

- disabilities. *Journal of Learning Disabilities*, 3(4), 344-364
- Supriadi, & Hoogenboom. (2004). Teachers in Indonesia: Their education, training, and struggle since colonial era until the reformation era. Jakarta: Ministry of Education, Indonesian Republic.
- Thalal, M. (2010). *New insights into teaching of English language to Indonesian* students.
 Retrieved from
 http://www.lkas.org/pendidikan/det
 ail/15/new_insights_into_teaching_of_
 english_language_to_indonesian_stude
 nts.html
- Tudge, J. (1992) Vygotsky, the zone of proximal development, and peer collaboration: implications for classroom practice. In Moll, L.C. (Ed.) Vygotsky and education: Instructional implications and applications of sociohistorical psychology. Cambridge: Cambridge University Press.
- Vygotsky, L. S. (1962). *Thought and language*. Cambridge, MA: MIT Press
- development of higher psychological processes (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.)
 Cambridge, MA: Harvard University Press