The Effectiveness of Scaffolding Model in Teaching Reading at Senior High Schools

Efektivitas Penggunaan Model Scaffolding dalam Pembelajaran Membaca di Sekolah Menengah

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Abstract
This research is aimed at identifying the students’ ability in reading by using scaffolding teaching model. This is an experimental research that was carried out at senior high school. Three senior high schools in Padang became the location of the research, namely SMAN 1, SMAN 7 and SMAN 8 Padang. The population for this research consisted of the students studying at grade X at the three schools respectively. Meanwhile, the sample was taken by using cluster random sampling technique. The whole sample was 192 students, namely, 64 students studying at each school. The research instrument used in this research was a reading test consisting of 30 items. After carrying the research for about three months the researcher found the result as follows. The findings of the research indicated that the students’ reading achievement taught by scaffolding model was better than those who were taught by conventional model. To prove it, the researcher used t-test formula. The result showed that scaffolding model gave significant effect towards the students reading ability compared to the conventional one.

Keywords: scaffolding, model, conventional, ability, achievement

Abstrak
Introduction

Nowadays, in reading class, a teacher should be able to find a model that can help the students to solve complex reading tasks. This model is designed to provide the students with a strategy that is useful for them to read three levels of meanings, that is, literal, inferential, and critical. To do complex-reading tasks is actually not an easy thing because the students should use a high-order thinking process. For this reason, they are trained to utilize three cognitive levels, namely, analysis, evaluation, and creation. In this case, the reading teacher can try scaffolding model.

Based on the writers’ experience and observation, the students did not find difficulties in understanding literal information because they just focus their mind to the facts that are given directly by a writer in the reading selection. On the other hand, when they were asked about the information behind the facts, it was hard for them to do it. This is of course a problem that should be solved by the reading teacher.

The teacher should be responsible to help the students in reading all levels of meanings. For this purpose, the teacher is asked to provide the students with a teaching model that is interesting and helpful. This is important because reading is not only about written facts and information but also about unstated facts. Besides, a reader is also required to be able to evaluate about a writer’s ideas. Evaluating the writer’s ideas will help the reader to know and recognize all information and as a result, the reader will get thorough comprehension.

In this paper, the writer tries to share with the reader about the scaffolding reading model that can make reading class more interesting and challenging. It is hoped that all ideas given here will be useful for teaching reading in the future.

In teaching reading teachers or students should first know the concept of this language skill. This is crucial so that the teachers can teach it well and the students can learn it easily. Alderson (2005:13) states that reading involves perceiving the written form of language either visually or kinesthetically. It is not just looking at words. Reading is a complex, diverse process. The reading process, like many other processes, involves a number of distinct, yet connected, stages. An often overlooked stage in the reading process is preparing to read, preparing...
both your mind and your surroundings, so that you are able to concentrate on the material. Another stage in reading process involves your eyes (looking at the page) working together with your memory.

Meanwhile, Grabe and Stoller (2002:9) say that reading is the ability to draw meaning from the printed page and interpret this information appropriately. The ability to use the reading process skillfully takes concentration and self-discipline. Before you start a reading session, seek out places where, and times of day when, you’ll not be interrupted or distracted by people or noise. Never mislead yourself into thinking you can concentrate adequately when you’re in a room where people are talking, or the TV is on, or music is playing loudly, or when you’re expecting phone calls. If you are uncomfortable with silence, as some people tend to be, experiment honestly with what gives your comfort: soft, non distracting music, a clock that ticks reassuringly, or other options. If there’s little private time where you live, schedule yourself to read in a quiet corner of the library or a spot in a park or public building with minimum human traffic. Check out which college classrooms are empty during off-peak class hours.

According to Andie and Shagoury (2006:36), in teaching reading teachers often start with the strategy of making connections. This is not surprising, since reading researchers believe that schema theory, or the idea that learners must connect the new to the known, is the basis for all comprehension instruction. Schema theory comes to life in classrooms when students experiment with making text-to-self, text-to-text, and text-to-world connections as they read. Typically in comprehension strategy work, educators use the term “text-to-self” to talk about how texts connect to our lives. Mickulecky (1996:21) states that comprehension is part of life. Every waking minute, your brain is busy making sense of your world. It could be compared, in fact, to a very complicated computer. Messages are constantly coming in about what you see, hear, smell, touch, or taste. Your brain receives these messages, interprets them, sorts them, and save them.

Furthermore, McNamara (2007:3-4) states that reading is an extraordinary achievement when one considers the number of levels and components that must be mastered. Consider what it takes to read a simple story. The words contain graphemes, phonemes, and morphemes. Sentences have syntactic composition, propositions, and stylistic features. Deep comprehension of the sentences requires the construction of referents of nouns, a discourse focus, presuppositions, and plausible inferences.

The reader needs to distinguish given versus new information in the text and implicitly acknowledge what is shared among most readers in a community (called the common ground). At more global levels, the reader needs to identify the genre, rhetorical structure, plot, and perspective of different characters, narrator, theme, story point, and sometimes the attitude of the author. The
coding, interpretation, and construction of all of these levels are effortlessly achieved at a rate of 250 to 400 words per minute by a proficient adult reader.

Comprehension is not always effortless and fast, of course. When beginning readers struggle over individual words, reading is slowed to a near halt and deeper levels of comprehension are seriously compromised. This happens when proficient adult readers struggle with technical expository text on unfamiliar arcane topics, such as a mortgage on a house or the schematics of computer’s operating system. Cognitive strategies are particularly important when there is a breakdown at any level of comprehension. A successful reader implements deliberate, conscious, effortful, time-consuming strategies to repair or circumvent a reading component that is not intact. Reading teachers and programs explicitly teach such reading strategies to handle the challenges of reading obstacles.

One could argue that reading strategies are also important for many adults who consider as skilled readers. There are basically three arguments to bolster this claim. First, many readers do not know whether they are adequately comprehending text. Second, many readers have an illusion of comprehension when they read the text because they settle for shallow levels of analysis as a criterion for adequate comprehension Shallow readers believe they have adequately comprehended text if they can recognize the content words and can understand most of the sentences. However, deep comprehension requires inferences, linking ideas coherently, scrutinizing the validity of claims with a critical stance, and sometimes understanding the motives of authors. Shallow readers believe they are comprehending text when in fact they are missing the majority of contradictions and false claims.

Acquisition of better reading strategies is apparently needed to crack the illusion of comprehension in readers who are settling for low standards of comprehension. They need to acquire and implement strategies to facilitate deeper levels of comprehension. Third, nearly all adults have trouble comprehending technical expository text at deep levels even though they are skilled readers. Deep comprehension of technical text is a difficult challenge, because the reader has minimal knowledge of the technical terms, key conceptualizations, mental models, and other forms of background knowledge. Even those with high relevant background knowledge and general reading skills can struggle.

Blachowicz (2008: 33-34) states that a great deal of research has explored and supported the notion that comprehension is a process demanding strategic approaches. Good comprehenders have learned that they have control of the reading process. They actively construct meaning as they read, and they also direct their comprehending by using basic strategies and by monitoring their own understanding. They know how reading works because they have knowledge about how sounds, letters, and print work (declarative knowledge); they know what strategies to use to help them understand (procedural
knowledge); and they know when to use which strategies (conditional”
knowledge).

Ostrov (2002:33) says that if you find any confusing words stop and look
them up, or else you may end up "reading" something different than what the
author wrote. This is a great cause of poor comprehension. It’s not that you
totally don’t understand the author, but that what you think he is saying is
different than what he is saying. This can happen because what you think a word
means may be different from what the author thinks it means. When you speak
with someone, you can always check to make sure that each of you understands
the other. This is a two-way flow of communication. When you read, this
opportunity doesn’t exist; there is a one-way flow of written symbols from the
author to the reader.

The written symbols represent spoken words. The spoken words
themselves represent other things in the real world. Since you learned to speak
as a child, your vocabulary is partially based on what your parents and others
around you thought words meant and how they should be used. These meanings
may not be correct, complete or applicable even though you have used them
your entire life. No one is "to blame" for this. They just passed them along.
Luckily for us all, there is a collection of word rules and meanings we can check
against — this is the dictionary.

Unfortunately, the dictionary is not used enough. What often happens is
the reader guesses at the word and continues. Then, what the reader thought
the author meant is not quite what the author actually intended. Again, this
stems from the fact that what the reader thinks a particular word means is not
the same meaning that the author used. It might be close, then again it might
not, but the dictionary is the place to find out for sure.

Suppose for a minute we consider each word to be a brick. The author
has a building in his mind which he takes apart brick-by-brick and passes one-by-
one (via printed or written words) to the reader. The reader then reconstructs
them in his own mind, brick-by-brick (or word-by-word). Thus, if the reader
exactly and correctly rebuilds the structure, he will correctly perceive what the
author had in his mind.

In applying scaffolding model in teaching reading, a teacher should follow
some steps, that is, preparation, real reading, language analysis and scaffold
writing. For the steps, look at the following diagram. At first, the teacher does
preparation for his/her teaching, namely, selecting the text, making orientation
toward the text, doing oral orientation and considering the language used by the
writer. When all preparations are ready, the teacher then does activities in while-
reading to lead the students toward fluent reading. During fluent reading
activities, the teacher makes language analysis. The reading class will be ended
by writing and speaking session. In this case, the teacher also apply scaffolding
model because writing is regarded as hard skill to get.
In making preparation, the teacher follows some steps that is text selection, text orientation, aural orientation, language orientation and ended by fluent scaffolding reading. The process of preparation can be seen in the following diagram.

Reading has been described as the central foundation for both learning and achievement. Difficulties with reading typically begin in the primary grades and become more profound by the time a child reaches high school. Poor reading ability can significantly impact an individual throughout their life.

Educators have debated for decades about the best way to teach reading. Scaffolding reading instruction models have been proven to work for children who have demonstrated difficulties in reading comprehension and can involve a variety of teaching methods depending on the needs of the students and available resources. The phrase itself originates with the image of physical scaffolding - supportive structures designed to assist in the construction of a building. Similarly, scaffolding reading instruction is a means by which teachers can support a student as they develop fundamental reading skills, one by one.

When teachers scaffold reading instruction, they break the reading activity down into smaller parts in order to facilitate comprehension. This can be done by focusing on context-based vocabulary, using graphic organizers, small group instruction, or by introducing background information.

In applying scaffolding strategy, the teacher can do the following activities.

a. Word Study
The importance of word study has long since been recognized as a required component when developing foundational reading skills. Further, explicit instruction also requires that the meanings of words be directly taught and practiced so that they are accessible when children are reading text. It is important to pre-teach unknown vocabulary prior to reading a selection. This will prevent students from stumbling over words they do not know or miss the overall meaning of a text because of an unfamiliar word.

b. Introducing Background Information
Since the goal of reading instruction is to develop comprehension, it is useful to spend some time introducing background information. There may be subject matter with which students are not familiar, which could prevent them
from understanding what they are reading. Giving them information ahead of the reading assignment will allow them build a foundation for the subject.

c. Using Graphic Organizers
Visual aids, including graphic organizers, can be used throughout the reading of a passage or story. 'Visuals' is a term often used for students who learn better by seeing things in action rather than simply reading them. Graphic organizers are also good tools to use to keep students engaged in the reading and assess their comprehension as they navigate through the text.

d. Read Aloud/Think Aloud
This strategy is done by reading portions of the text to the students loudly and stopping every couple of sentences to ask the class for feedback.

The teacher should initially use shorter passages and gradually build towards longer pieces of text, so the students will keep engaging in the reading and not becoming frustrated by the number of words or length of text. Each student should have a copy of the text to follow along with the teacher.

e. Modeling/Gestures
Modeling and gestures help bring your words to life. Couple this with the use of supportive visuals. This effort will inspire the students to comprehend the writer’s message.

Sentence Structures/Starters
Sentence structures can be a great support for English Language Learners. In this case, the students are provided with various sentence constructions found in the reading text. They should be made aware that different construction of sentence will have different message.

f. Intentional Small Group/Partner Work
To support students during independent work time, you can consider small group or partner work. Pairing two students just because one is a “high” reader and the other is a less sophisticated reader can quickly backfire if you haven’t considered how their personalities/work styles might pair up.

g. Use of First Language
If a student’s first language is available to you, then by all means make use of it as a scaffold. However, if you can translate important words, make connections between concepts presented, or translate specific instructions.

h. Show and Tell
How many of us say that we learn best by seeing something rather than hearing about it? Modeling for students is a cornerstone of scaffolding. Have you ever interrupted someone with "just show me!" while they were in the middle of explaining to you how to do something? Every chance you have, show or demonstrate to students exactly what they are expected to do.

i. Give Time to Talk
All learners need time to process new ideas and information. They also need time to verbally make sense of and articulate their learning with the community of learners who are also engaged in the same experience and
journey. As we all know, structured discussions really work best with children regardless of their level of maturation.

j. Pause, Ask Questions, Pause, Review

This is a wonderful way to check for understanding while students read a chunk of difficult text or learn a new concept or content. Here's how this strategy works: a new idea from discussion or the reading is shared, then pause (providing think time), then ask a strategic question, pausing again.

**Method**

This is an experimental research that was carried out at senior high school. Three senior high schools in Padang became the location of the research, namely SMAN 1, SMAN 7 and SMAN 8 Padang. The population for this research consisted of the students studying at grade X at the three schools respectively. Meanwhile, the sample was taken by using cluster random sampling technique. The whole number of sample was 192 students, namely, 64 students studying at each school. The research instrument used in this research was reading test consisting of 30 items.

This research procedure in teaching reading class by using scaffolding model. In Pre Teaching Phase a teacher does all activities which are commonly done in daily teaching. The activities that might be done are greeting, praying to God, checking students’ readiness for learning, checking learning environment, motivating students to learn, doing apperception and informing instructional objectives.

In Whilst Teaching Phase, Before reading class, a teacher does text selection as follows: (a) The teacher considers text difficulties, (b) The teacher considers students’ interest, (c) The teacher considers students’ characteristics, (d) The teacher prepares tasks for integration. The detail of teaching activities can be seen in the appendix.

Then, for post reading, the teacher gives the students another text to read. They are asked to do exercises on that text, such as, answering text questions, writing genre, summarizing, retelling, debating on certain key words, and other tasks related to the reading text..

In Post Teaching Phase, the teacher does three main activities, that is, doing reflection, making a summary and planning follow up activities. In reflection the teacher tries to feel and think what he/she have already done during the teaching and learning process. For this purpose, the teacher asks the students whether they already understand the lesson, in what part they do not understand, and so on. After that, the teacher summarizes the lesson together with the students. Finally, the teacher gives the students homework like a project or field observation as follow-up task.

**Results and Discussion**

The research was done towards the students from three senior high schools in Padang, namely, SMAN 1, SMAN 7 and SMAN 8 Padang. These three
schools were taken as locations for this research under consideration that the inputs of the schools were different viewed from entrance ability. That is why; the researcher classifies them towards high, middle and low.

In getting data at each senior high school, that is SMA 1, SMA 7 and SMA 8, the researcher took the students of grade ten as sample. For this purpose, one class was for scaffolding model and the other was for conventional one. The scaffolding model was used at experimental group and conventional model was used at control group. That is why, there were 6 classes taken as research sample.

After doing teaching about six meetings, the students were given reading test consisting of 25 items. All students at three SMAs got the same test items. The test items were taken from genres that the students already learned. It meant that all test items were in accordance with syllabus. Besides, the researcher also considered level of difficulty and discrimination power.

To test hypothesis, the researcher used t-test. In addition, to identify the normality and homogeneity, the researcher used the normality and homogeneity testing. All of these were done to guarantee the result of the test. It also helped the researcher to draw conclusion about the effectiveness of scaffolding model in teaching reading.

Based on the result of test at the three SMA’s, it was found that the students’ scores taught by using scaffolding model showed better results than those who were taught by conventional model. Even though the mean scores varied from school to school, the results indicated a consistency. It meant that all students of experimental classes got better scores than control classes. The students of SMAN 1 got average score of mean 85,25 in experimental class and 79,4 in control one. Meanwhile, the students of SMAN 7 got 83,06 score average in experimental group and 77 in control group. Finally, the students of SMAN 8 got 79,06 mean score for experimental class and 73,6 for control group.

Conclusion

Based on the findings, it can be concluded that scaffolding model gives more effective result compared to conventional model. The students’ achievements in three senior high schools, that is SMAN 1, SMAN 7 and SMAN 8 Padang taught by scaffolding model were much better than the students’ achievements taught by conventional one. The students’ scores showed constant results in the three schools. Even though there were some different scores among the three schools, the students’ achievements indicated consistency, that is, better results in experimental classes.

That is why, scaffolding model is considered to be the right one in helping students to comprehend reading text. This happened because the teacher gives a lot of helps in the reading class. The students get helps at any difficulty they find in reading. It is started from vocabulary management until the culture of the text. As it is known, there are four barriers in reading, namely, vocabulary
barrier, grammar barrier, discourse barrier and cultural barrier. All of these barriers are overcome by the teacher in teaching reading.

Based on the conclusion above, the researcher suggests the following points. First, it is suggested that in applying the scaffolding model the teacher really gives full attention to the teaching and learning process. The teacher should move around the class to do scaffolding. Second, the researcher suggests that the reading materials should be chosen by the teacher beforehand under tight consideration. Finally, it is suggested that the teacher should divide carefully teaching activities between preparation and implementation of the scaffolding model.

References
Appendix 1

TEACHING PROCEDURE IN READING CLASS BY USING SCAFFOLDING MODEL

A. Pre Teaching Phase
In this phase a teacher does all activities which are commonly done in daily teaching. The activities that might be done are greeting, praying to God, checking students’ readiness for learning, checking learning environment, motivating students to learn, doing apperception and informing instructional objectives.

B. Whilst Teaching Phase

a. Before Reading Session
Before reading class, a teacher does text selection as follows:

a) The teacher considers text difficulties
b) The teacher considers students’ interest
c) The teacher considers students’ characteristics
d) The teacher prepares tasks for integration.

b. During Reading Session

1) Pre Reading Activities
Text Orientation
1. The teacher activates students’ background knowledge making three types of connections.
2. The teacher discusses all illustrations and graphical aids in the text.
3. If there is no illustration or graphical aid, the teacher explains briefly the contents of the text.

2) While-Reading Activities
Aural Orientation Activities:
1. The teacher reads loudly the text as a model for pronunciation and intonation.
2. The teacher gives the chance to the students to read the text as being modeled.

Language Orientation Activities:
1. The teacher does word analysis that is, meaning analysis, derivation analysis and context analysis.
2. The teacher does grammar analysis, such as, sentence construction, tense forms and word choice.
3. The teacher does discourse and culture analysis by using the following techniques like reformulation, reconceptualization, reiteration and literacy work.
4. The teacher does reformulation. Here, the teacher formulates back the students’ answer toward the questions given.
5. The teacher does reconceptualization. The teacher accepts and confirms whatever answer the learner makes to the question and, where appropriate, restates (reconceptualises) the answer in a way that more fully answers the question.
6. The teacher does reiterate activities. For this purpose, the teacher explains the students’ answer by referring to the text.
7. The teacher does literacy analysis. In this case, the teacher takes a little time to discuss the answer given by the students.
8. The teacher does fluent reading activities as follows:
   1) Prompting strategy. In this case, the teacher motivates the students to use all potentials that they have before getting help from the teacher. For this reason, the teacher does these points:
   2) Wait for some seconds before the teacher helps the students in solving reading problem.
   3) Ask the students to work on reading questions by saying: try again, go on reading, does the text make sense for you?
   4) Avoid unnecessary interruption. Not each mistake made by the students should be interrupted by the teacher.
   5) Use first language to help students to understand hard concepts and meaning.
   6) Pause, ask questions, pause, and review. Here, the teacher discusses the text part by part or paragraph by paragraph.
   7) Providing feedback and praise for good jobs done by the students.
   8) Reading along with the students that is, by sitting side by side with them and discuss together the text.
   9) Doing text marking. Here the teacher shows the students a marked text and they
learn from it.

10) Showing and telling. In this case the teacher shows or demonstrates to the students something related to the text.

11) Using think aloud. In this activity, the teacher provides the students with a task to be solved in the form of a problem or project. Remember that students’ cognitive abilities are still in development, so opportunities for them are essential.

3) After Reading Activities
   For post reading, the teacher gives the students another text to read. They are asked to do exercises on that text, such as, answering text questions, writing genre, summarizing, retelling, debating on certain key words, and other tasks related to the reading text.

C. Post Teaching Phase
   In this phase, the teacher does three main activities, that is, doing reflection, making summary and planning follow up activities. In reflection the teacher tries to feel and think what he/she has done already done during the teaching and learning process. For this purpose, the teacher asks the students whether they already understand the lesson, in what part they do not understand, and so on. After that, the teacher summarizes the lesson together with the students. Finally, the teacher gives the students homework like a project or field observation as follow up task.