

Effective Strategies for Improving Reading Skills of the First-Year Engineering Students

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Abstract

Since English is used as a medium of teaching, reading skill is very important for engineering students to study their respective subjects. However, most of the first-year engineering students got low test scores on reading and they are suffered from reading for their failure in the achievement of reading comprehension. For these reasons, it is necessary to find out the students' needs and wants about the reading skill and to support them. As to the research methodology, a questionnaire including nine questions is responded by fifty students of first-year engineering students. The results were analysed through descriptive statistic and the findings show that most of the students need more help from their teacher and their teacher needs to support effective strategies to improve their reading skills. So, the aim of this research paper is to improve first-year engineering students' reading skills through effective strategies.

Keywords: Scores, failures, help, effective, strategies

1. Introduction

Reading is a skill that enables people to get a message, to understand the meaning, and to grasp information from texts. It is a complicated activity that involves both perceiving and thinking.

In the educational system, most of the students always struggle and find reading comprehension as a problematic issue. For these students with lower reading skills, reading strategies are useful and beneficial (Mc Namara et al 2009).

To improve the students' abilities of reading, some various effective strategies are mentioned in this paper. Following, a sample lesson plan with useful activities based on effective strategies is provided. Then, this sample lesson is used in the real class and the researcher can show the effectiveness of the using strategies. So, this paper will be helpful for the students to make good use of reading strategies and to handle them in the most effective way throughout their studies.

2. Literature Review

Some of the significant findings in reading research come from studies. According to Harvey and Goudvis (2007), research shows that explicit instruction of reading strategies improves students' understanding.

Zwiers (2008) said that the teacher is able to show students the invisible thinking that goes on in a good reader's mind when he or she is reading and he promotes "think aloud" when teaching strategies in the lessons. Besides, Teele (2004) declares that the goal of all readers should be to understand what they read and the teacher needs to help improve students' comprehension through reading strategies. So, the important factor is to teach the strategies by naming them and how they should be used (Duke and Pearson, 2002).

3. Reading Strategies

In the area of reading strategies studies, many researchers have used different types of strategies. Among them, predicting, skimming, scanning, guessing the meaning of new words, and summarizing are used in this research paper for improving students' reading skills.

3.1. Predicting

Predicting is an important reading strategy. In this strategy, students can use information from the titles, headings, pictures, and diagrams of the text to guess what will happen in the story. It encourages students to actively think ahead and ask questions. It also allows them to understand the story better, make a connection to what they are reading, and interact with the text.

3.2. Skimming

Skimming is the process of reading the text very quickly to get the text's general ideas without looking for specific information. In the skimming activity, students should note any bold print and graphics. They need to start at the beginning of the reading by gliding their eyes over the text very quickly and need to read a few words of each paragraph, perhaps the first and last sentences. They should always familiarize themselves with the reading material by skimming before reading in detail.

3.3. Scanning

Scanning is another essential reading strategy that teachers should make sure their students understand how to do. In scanning activity, the students should start scanning the text by allowing their eyes or finger to

move quickly over a page. As soon as their eye catches an important word or phrase, they need to stop reading. When they can locate information that requires for getting attention, they should slow down to read the relevant section more thoroughly. Scanning assists students in finding specific information they search in a text.

3.4. Guessing the Meaning of New Words

Guessing the meaning of new words from the context is an important strategy that will improve students' reading skills and the speed with which they can read. If the students come across an unfamiliar word in the exam, they cannot spend a lot of time working out its meaning. Thus, they need to work out what it means from the words that are around it and from the topic of the paragraph. Therefore, this is a necessary strategy for improving reading skills.

3.5. Summarizing

Summarizing teaches students how to take notes from a large selection of text and reduce it to the main points for a more concise understanding. Upon reading passage, summarizing helps students to determine what are the essential ideas and group together the important details that support them. Summarizing builds comprehension by helping to reduce misunderstanding the text.

3.6. Lesson Plan for Reading

This lesson is planned based on the previous reading strategies.

Topic : Malala Yousafzai

Previous knowledge: Predicting, skimming, scanning, guessing the meaning of the new words from the context and summarizing

Time : 60 minutes

Materials : Worksheets, pencil, a piece of paper

Objective: To be able to read and understand the text in detail, to use reading strategies that had been known from the previous lecture, and to write about the students' opinions.

Procedure:

Pre-reading activity: 10 minutes

- The students need to think about the topic and tell their partners what the topic will be by making a prediction.

While-reading activity: 45 minutes

- The teacher has to give worksheets for reading exercises to the students. The students need to match the pictures with the underlined words.
- Then, they need to answer what kind of the text and match the ideas with the paragraphs in the text by using a skimming strategy. So, they have to read the text quickly to gain the text's general idea.

- After that, they need to answer the questions by using the scanning strategy. So, they need to find specific information in the text.
- Next, they need to match the words in bold with the meaning by guessing the meaning of new words from the context.
- Finally, they have to choose true or false by understanding the text in detail.

Post-reading activity: 5 minutes

- The teacher has to give a piece of paper for each student. Then, the students need to write down what they had learned about Malala on a piece of paper in this summarizing activity and to share their ideas in the next class time.

Read the paragraph and do the following activities.



Figure 1. Malala Yousafzai

Malala Yousafzai is a Pakistani activist for feminine education and also the youngest-ever Noble Prize laureate. On 10 October 2014, Yousafzai was declared as the co-recipient of the 2014 Nobel Peace Prize for her **struggle against** the suppression of children and youth and for the **right** of all children to education. Having received the prize at the age of seventeen, Yousafzai is the youngest Noble laureate. Yousafzai shared the prize with Kailash Satyarthi, a children's rights activist from the Republic of India.

On 9 October 2012, a Taliban gunman shot Yousafzai as she was on a bus to go back home after she had taken an exam in Pakistan's Swat Valley. The masked gunman shouted "Who is Malala in all of you? Speak up, otherwise, I will be able to **shoot** you all", and, on her being known, shot at her. She was hit with one **bullet** that went through her head, neck, and ended on her shoulder. Two other girls were also wounded within the shooting. Kainat Riaz and Shazia Ramzan were stable enough to talk to reporters and provide details of the attack.

On 12 July 2015, her eighteen birthday, Yousafzai opened a school in the Bekaa Valley, Lebanon, closed to the Syrian border, for Syrian refugees. The school, **funded** by the not-for-profit Malala Fund, offers education and training to girls aged fourteen to eighteen years. Yousafzai called on world leaders to **invest** in "books, not bullets".

Activity I: Prediction

Think about the topic and tell your partners what the topic will be by making a prediction.

Key to Activity I

The answer can vary according to the students' ideas.

Activity II: Keywords to understand the text

Match the pictures with the underlined words.



1. ----- 2. ----- 3. ----- organization
 4. ----- 5. ----- 6. -----

Figure 2. Pictures for Activity II

Key to Activity II

1. gunman 2. wounded 3. not-for-profit
 4. masked 5. against 6. border

Activity III : Skimming

1. What kind of text is this?
 a. An article b. An essay c. A biography

Match the next ideas with the paragraphs in the text.

2. Malala created a school for refugees. 1st paragraph
 3. Malala received an important award for her activism. 2nd paragraph
 4. A gunman shot Malala and her friends. 3rd paragraph

Key to Activity III

1. c 2. 3rd paragraph
 3. 1st paragraph 4. 2nd paragraph

Activity IV: Scanning

Answer the followings.

1. The age Malala received the noble prize.
 2. The number of people who survived to the attack.
 3. Malala's nationality.
 4. The gunman nationality.
 5. The year Malala opened the new schools.

Key to Activity IV

1. The age of seventeen 2. Three 3. Pakistanis
 4. Afghans 5. 2015

Activity V: Context clues

Match the bold words in the text with the following meanings.

1. A fight or battle
 2. A moral, ethical, or legal principle considered universal.
 3. A small piece of metal fired from a gun
 4. To create
 5. To put or spend money on something
 6. To be fired with a gun

Key to Activity V

1. straggle 2. right 3. bullet
 4. fund 5. invest 6. Shoot

Activity VI: Understanding details

Choose true or false.

1. Only Malala received the Nobel Peace prize in 2014. True False

2. Malala fights against children's rights. True False
 3. Malal and her friends didn't see the attacker. True False
 4. Malala's friends were hurt. True False
 5. Malala opened a school in Syria. True False

Key to Activity VI

1. False 2. False 3. True 4. True 5. False

Activity VII: Summarizing

Write down what you had learned about Malala on a piece of paper by using a summarizing strategy and share your ideas in the next class time.

Key to Activity VII

The answer can vary according to the students' ideas.

4. Methodology

This study was based on a survey of first-year engineering students who got low test scores on reading comprehension.

4.1. Participants

The subjects in this study were fifty first-year engineering students attending in Technological University (Monywa). Their ages went from 16 to 18 years old. The population of the study consists of twenty-five females and twenty-five males.

4.2. Research Questions

The study aims to find out answers to the research questions that are as follows:

- i. Is reading skill very important to be improved in language learning?
- ii. Are you at ease during reading tests?
- iii. Do you feel confident when you read the passages?
- iv. Do you feel tense and nervous while reading passages?
- v. Do you need more help from your teacher?
- vi. Do you need more practice to improve your reading skill?
- vii. Do you have difficulty in understanding the reading passage?
- viii. Does your teacher need to support effective strategies?
- ix. Is practice with reading activities based on the effective strategies important for you?

4.3. Instrument

A questionnaire is prepared as an instrument for this study. The questionnaire consists of nine yes/no questions that were used to find out students' needs and wants. Then, questions (ii), (iii), (iv), and (vii) were used to collect the data again and compare the results before and after using the reading strategies.

4.4. Analysis of the Data

Data were analyzed utilizing descriptive statistics to find answers to each research question (see below).

Table 1. Students' responses to questions 1-9

Questions	Frequency (Yes)	Percentage
Q1	47	94%
Q2	5	10%
Q3	7	14%
Q4	45	90%
Q5	48	96%
Q6	46	92%
Q7	48	96%
Q8	47	94%
Q9	49	98%

Table 1 shows that most of the students (94%) consider reading skill as a very important skill to be improved in language learning. However, the majority of the students are not at ease during reading tests because only 10 % of the students state that they are at ease during reading tests. 86% of the students do not feel confident when they read the passages and 90% of the students feel tense and nervous while reading passages. 96 % of the students have difficulties in reading passage and they think they need more help from their teachers. 92% of the students think that they need more practice to improve their reading skills and 94 % of the students agree that their teacher needs to support effective strategies. 98% of the students consider that they need to practice with the reading activities based on these strategies for improving their reading skills. So, the teacher used the sample lesson based on effective reading strategies and practices them in the real classroom. Then, she conducts a survey based on the four questions to compare results before and after using these strategies (see below).

Table 2. Before and after comparison

The results before using reading strategies	The results after using reading strategies
Only five students (10%) are at ease during reading tests.	Thirty-eight students (76%) are at ease during reading tests.
Only seven students (14%) feel confident when they read the passages.	Forty-six students (92%) feel confident when they read the passages.
Forty-five students (90%) feel tense and nervous while reading passages.	Only four students (8%) feel tense and nervous while reading passages.
Forty-eight students (96%) have difficulty in understanding the reading passage.	Only six students (12%) have difficulty in understanding the reading passage.

Table 2 shows that students can overcome their difficulties, problematic issues, and feelings of anxiety about reading. Then, they can build their confidence in reading after using reading strategies. So, it can be

concluded that using reading strategies in the teaching and learning situation is very effective.

5. Conclusion

This research paper is intended to highlight effective strategies for improving the reading skills of first-year engineering students. So, reading strategies are suggested after doing need analysis. Then, a sample lesson is planned by using these strategies. It was used in the real classroom and a survey was conducted to compare the results before and after using reading strategies. Through the comparison, it is known that using reading strategies is very useful and effective for the students. After using these strategies, students can build their confidence in reading and they can overcome the reading barriers.

So, the students should be trained to read themselves by using reading strategies in teaching reading. Teachers have to encourage the students to read a lot and create more interesting activities based on the reading strategies to draw attention to reading. The more time is spent on the actual activity of reading, the more reading achievement the students gain. Therefore, the effective strategies and lesson plan with different activities suggested in this paper will improve the students' reading skills to some extent and this research paper will fulfill the needs of the students.

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