

# Utilizing an Integrative Strategy Based on Generative Learning Model to Develop EFL Secondary School Students' Critical Reading Skills and Self-Regulation

<sup>1</sup>Aml Rizk Lutfi Youssef Rizk, <sup>2</sup>Dr. Azza Ahmed Hamdy El Marsafy

## **Abstract:**

*The main purpose of the study was to develop secondary stage students' EFL critical reading skills and self-regulation through using an Integrative Strategy Based on Generative Learning Model. To accomplish this purpose, the present study followed the pre-post, quasi- experimental-control group design. Towards this, the researcher used two groups: experimental and control groups. Conducting the current treatment, a number of eighty-four EFL first secondary stage students from the Martyr Muhammad Ibrahim Al-Baqash Secondary School, Diarb-Negm Directorate, Sharkia Governorate, Egypt, were allocated in two groups, twenty-four students for the experimental group and twenty-four for the control one. Characteristically managed a pre – and post- testing technique for the purpose of data gathering and analyzing. The researcher designed an EFL critical reading skills test and to measure EFL critical reading skills before and after the treatment, a five-point likert scale was designed for measuring the effect of the integrative strategy based on GLM on the students' self-regulation. Generally, the current study was conducted over a period of five weeks; each task took about 90 minutes to be fully implemented through the second term of the academic year 2019-2020. Finally, the results of the study showed that the Integrative Strategy Based on Generative Learning Model had a positive effect on developing the EFL critical reading skills and self-regulation of First-year SecondaryStudents.*

**Keywords:** EFL critical reading skills, Generative Learning Model, SecondaryStudents.

## **I. Introduction:**

In the scope of teaching English as a foreign language (TEFL), the ultimate aim is to enable learners to use it for authentic communication. More recently, the increasing growth of knowledge and communication technologies have made critical reading more essential. Logging onto the varied digital resources and keeping into contact with others via e-mail and other social communication sites have increasingly become an important activity of everyday life. Hence, more emphasis should be given to

---

<sup>1</sup> EFL Researcher at Faculty of Education, Zagazig University, Egypt. University

<sup>2</sup> Prof. of TEFL, Department of Curriculum, Instruction and Technology of Education, Faculty of Education, Zagazig University, Egypt.

teaching those skills that enable learners to become more experienced and critical when interacting with any media.

To Gukturk (1997), it is very important for the social and academic achievement of students to gain reading habits after learning how to read and write, and then to start reading from a critical point of view. Par (2018: 79) defined critical reading as “an active process of constructing meaning from the texts by involving interpretation, making inference, analysis, giving judgment, and evaluation”. In Wallace’s view (2003), reading is a social, critical and interpretative process rather than a skill or a set of skills. He also stated that a critical reader carries out a mental action on the word-form and makes connections between the context and his personal knowledge to conclude the word meaning.

In this area, Mc Craw (2013) maintained the value of having the ability to absorb the underlying theory of the text, and to interpret and critique what is read deeply rather than being a passive recipient and consumer of language and ideas. According to Ahuja and Ahuja (1999), reading demands recognizing the printed symbols, phrases and lines but critical reading goes one step further and deals with reading between and beyond the lines. It demands an interpretative, attentive and creative mind. Critical reading skills are necessary if learners are to make intelligent decisions based upon the material which they read. Critical reading involves judging the quality, accuracy and truth of what is read. It does not end with just reading the lines and getting their implied meanings but involves in itself an intelligent judgment of the stated facts.

There has lately been an urgent demand to adopt critical thinking and integrate this approach into the language classes and the instructional practices. Critical reading can’t be separated from critical thinking. According to Kincheloe and Weil (2004), reading critically includes thinking critically. They mentioned that reading critically is an action where a silent discussion is actively engaged by the reader with the author as an alert questioning participant in the interpretation’s process. Therefore, practicing higher- order thinking skills while reading is a basic standard.

Helping learners at the secondary stage to become active participants in their own learning rather than passive recipients of instruction is necessary for self-regulation of learning which can be traced back to the social cognitive theory authored by Bandura (1986) who stated that learners’ own actions and choices regarding their learning is central to learning as a whole. Since that idea was adopted, students have been seen as more involved/active participants in their own learning, and are encouraged to do more than just what an instructor introduces to them.

According to Ramdas and Zimmerman (2011:198), Self-regulated learning (SRL) is a process, which is proactive, and in this process, individuals are expected to organize and manage their thoughts, emotions, behaviors, and their environment to fulfill their academic objectives. Self-regulation operates

through three areas of psychological functioning that are essential in learning: cognitive (e.g., learning strategies), motivational (e.g., self-efficacy, task value), and metacognitive (e.g., self-monitoring and self-reflection).

Andrade and Evans (2012) also declared that learners who demonstrate good management skills in time are aware of deadlines, begin working on assignments early, set priorities, and accurately evaluate both the complexity of tasks and the period of time required to accomplish them. As Zimmerman (2002:65) defined self-regulation as "a self-directive process through which learners' mental abilities are converted into academic skills".

To Zimmerman (2002: 167), self-regulated students are those who are able to set their goals, select and use strategies, monitor performance, repeatedly reflect on their learning outcomes over a long period of time. To Pintrich (2000:452), Self-regulation is described as "an active, positive process by which learners set targets/goals for their learning. Subsequently, learners try to track, regulate and monitor their awareness, motivation and behavior, driven and restricted by their expectations and environmental context."

After reviewing the associated literature that tackled critical reading and self-regulation and ensured their importance, the necessity to search for recent models and strategies is to be highlighted. In this respect, generative learning can be implemented to develop EFL secondary school students' critical reading skills and their self-regulation.

The term GLM was first used by Osborne & Wittrock (1985). It refers to a model in which a teacher gives learners a prompt or series of prompts to perform activities that require the active generation of:

- 1) meaning connections between new information and previous knowledge and,
- 2) meaningful relationships among newly learned concepts. Wittrock (1992).

Generative learning is one of the most principles of the constructivist learning approach based on the works of Vygotsky and others. Wittrock (1992:531) defined generative model as "a functional model of learning from instruction that builds upon knowledge about the processes of the brain and upon cognitive research on comprehension, knowledge acquisition, motivation, and transition". Harlen and Osborne (1985) (cited in Lee, Lim and Grabowski, 2008: 112) called it, "learning through the person".

Wittrock (2010) found out that even though a student does not understand the sentences that the instructor has expressed to him/her, it is extremely likely that a student would understand the sentences that he generates himself. Lee, Lim and Grabowski (2008:112) also stated that GLM is "student-centric learning with specified activities for actively constructing meaning".

In this model of generative learning, Wittrock stressed one very critical and simple assumption: the learner is not a passive receiver of knowledge; instead, he or she is an involved participant in the learning process, seeking to create a meaningful interpretation of the material contained in the classroom. Also, the brain is a model builder. It doesn't transform input into output. Instead, it actively controls the process of generating meaning and plans of actions that make sense of experience and that respond to perceived realities. With this framework, learning becomes the process of leading to construct meaning and plan of action.

According to yang & Wilson (2006), learning through constructing meaningful understanding of the text empowers readers to place themselves as partners in making sense together and be critical with the texts and their authors, instead of being passive observers of the reading process. It also develops students' metacognitive thinking skills. After generating understanding of the text for the learner, this understanding is used for higher order thinking and critical reading, and self-regulated learning skill.

As Fiorella and Mayer (2016:718) stated, learning is a generative operation. In essence, generative thinking is the process of transforming incoming information (e.g. words and images) into functional/usable knowledge (e.g. mental models, schemas). As such, generative learning depends not only on how information is delivered to learners (i.e. instructional methods or what the instructor can do to promote learning) but also on how learners seek to make sense of it (i.e. learning strategies or what the learner can do to foster generative learning).

According to this model, learners use their background knowledge of the world as a frame for relating new information. Then, cognitive methods are used as tools to help build meaning from the new information and from their background knowledge. GLM has some strategies such as (summarizing, mapping, drawing, questioning, imagining, self-testing, self-explaining, teaching, and enacting). These strategies are called generative as they help inspire learners to consciously make use of the knowledge they have acquired by mentally reorganizing and integrating it with their previous experience, and enabling them to adapt what is learned in new situations.

Therefore, the researcher would adopt the following strategies (Summarizing, and Mapping) as they match well the study variables (EFL secondary stage students' critical reading and self-regulated skills) to come up with an integrative strategy.

#### **Purpose of the study:**

Basically, the current study aimed at developing EFL critical reading skills and self-regulation of the secondary stage students through utilizing an Integrative Strategy Based on Generative Learning Model.

### **Study problem:**

The problem of this study could be stated that a great number of 1<sup>st</sup> year secondary school students lack some EFL critical reading skills and self-regulation, the results of the pilot study which was conducted by the researcher shows that; therefore, this study is an attempt to develop the necessary critical reading skills and self-regulation for the EFL first year secondary students through the Integrative Strategy Based on Generative Learning Model.

### **Questions of the study**

The current study was an attempt to answer the following main question:

What is the effect of utilizing an integrative strategy based on generative learning model on developing EFL secondary school students' critical reading skills and self-regulation?

The following sub-questions could be derived from the above main one:

1. What are the critical reading skills targeted for the first-year secondary school students?
2. To what extent do secondary students perform EFL critical reading skills?
3. What are the self-regulation skills suitable to the first-year secondary school students?
4. To what extent do secondary students perform the self-regulation skills?
5. What are the features of the integrative strategy based on generative learning model that may help develop EFL first year secondary school students' critical reading skills and self-regulation?
6. What is the effect of this integrative strategy based on generative learning model on developing EFL first year secondary school students' critical reading skills?
7. What is the effect of this integrative strategy based on generative learning model on developing EFL first year secondary school students' self-regulation?

## **II. Significance of the study:**

The present study was hopefully to be useful to the following categories:

- a) EFL learners, helping them to develop their EFL critical reading skills as well as their self-regulation through the integrative strategy based on GLM.
- b) EFL teachers, providing them with an update list of EFL critical reading skills necessary for the first-year secondary students, also providing them with a list of the most important self-regulation skills fit for the secondary stage students.
- c) Curriculum developers and designers, providing them with the integrative strategy based on GLM as a new strategy in the field of teaching and learning English, providing them of curriculum with generative learning strategies or activities that could enrich the curriculum content.
- d) EFL researchers, guiding other researchers to conduct further studies on developing the instruction of EFL through integration between different teaching strategies of generative learning model.

### **Instruments of the study:**

To achieve the main goal of the current study the researcher used:

- a) A pre-post EFL critical reading Skills test, to measure the students' proficiency of EFL critical reading skills before and after the experiment.
- b) A five-point Likert scale to measure the students' self-regulation before and after the experiments to illustrate the effect of the integrative strategy based on GLM on the students' self-regulation.

### **Delimitations of the study:**

The present study was delimited to:

- a) Developing EFL critical reading skills and their self-regulation which are suitable for first year secondary stage students.
- b) Forty-eight students drawn from 1<sup>st</sup> year secondary students at the Martyr Muhammad Ibrahim Al-Baqash Secondary School, Diarb-Negm Directorate, Sharkia Governorate, Egypt, twenty-four students for the experimental group, and twenty-four students for control group.
- c) Using the integrative strategy based on GLM that is suitable for 1<sup>st</sup> year secondary stage students.

## **III. Procedures of the study:**

**To answer the study questions, the following procedures were conducted:**

1. Reviewing the relevant literature and previous studies related to critical reading skills, self-regulation and generative learning model.
2. Designing a list of the most important critical reading skills for 1<sup>st</sup> year secondary school students and submitting it to the jury members to validate it.
3. Designing the pre-post critical reading test and submitting it to the jury members to validate it.
4. Designing a questionnaire of the motivated strategies for learning self-regulation and submitting it to the jury members to validate it.
5. Designing the integrative strategy based on generative learning model through determining its: (aims, objectives, instructional procedures, activities and evaluation) and submitting it to the jury members for validation.
6. Selecting the study participants of EFL 1<sup>st</sup> year secondary school students at the Martyr Muhammad Ibrahim Al-Baqash Secondary School, Diarb-Negm Directorate, Egypt and dividing them into two groups: the control group and the experimental one.
7. Pre-administering the critical reading test to both groups.
8. Pre-administering the self-regulation scale to both groups.
9. Teaching the experimental group only using the integrative strategy based on generative learning model; while the control one receives the regular instruction.

10. Post-administering the critical reading test to both groups.
11. Post-administering the self-regulation scale to both groups.
12. Comparing the pre to the post results of both instruments statistically.
13. Treating and analysing the obtained results statistically using the appropriate methods to trace if there is any enhancement for EFL students' critical reading skills and self-regulation.
14. Discussing and interpreting the results.
15. Drawing conclusion, providing recommendations and suggestions for further research.

#### **IV. Results of the study:**

1. The experimental group outperformed the control one in the post-test of overall EFL critical reading skills test.
2. The post administration exceeded the pre one in the mean scores of EFL critical reading skills test.
3. The experimental group was better than the control one of EFL self-regulation scale.
4. The post administration exceeded the pre one in the mean scores of EFL self-regulation scale.
5. The integrative strategy has a positive effect on improving the EFL secondary school students' critical reading skills.
6. The integrative strategy has a great effect on improving the EFL secondary school students' self-regulation.

#### **V. Conclusion:**

Based on the results and discussions, it can be concluded that:

1. The use of the integrative strategy based on Generative Learning Model (GLM) helps the secondary stage students overcome some of their problems and increase their achievement on their critical reading skills (Identifying the main idea of the text, identifying causes and effects, identifying the author's purpose, distinguishing facts from opinions, distinguishing relevant and irrelevant information, making comparisons and contrasts, making predictions and making a good summary).
2. As visual scaffolds, the integrative strategy based on GLM is beneficial on assisting the secondary stage students in activating their prior knowledge, gaining an insight into text structure, identifying as well as connecting the main ideas of the text resulting thus in better recall and retention of information and developing their critical thinking skills.
3. The integrative strategy based on GLM helps the secondary stage students become independent and self-regulated learners. They gain more confidence during participating and discussing ideas among them and are able to plan their learning, activate their prior knowledge, regulate, monitor their understanding of the topic and improve their use of the integrative strategy's activities and techniques.

4. Teaching can be made learner-centered with more emphasis on the learning process.
5. The integrative strategy based on GLM is an efficient strategy that can be used in different contexts.
6. A collaborative, an encouraging and a positive environment can be offered throughout the integrative strategy based on GLM which makes the secondary stage students so excited and eager to work.
7. The integrative strategy based on GLM is an efficient strategy that can boost the secondary stage students' attention, effort and positive attitude.

## References

1. Gokturk, A. (1997). Reading activity.
2. Par, L. (2018). THE EFL STUDENTS' CRITICAL READING SKILLS ACROSS COGNITIVE STYLES. *JEELS (Journal of English Education and Linguistics Studies)*, 5(1), 73-96.
3. Wallace, C. (2003). *Critical reading in language education*. Springer.
4. McCaw, N. (2013). *How to read texts: A student guide to critical approaches and skills*. Bloomsbury Publishing.
5. Ahuja, G. C., & Ahuja, P. (1999). *How to read effectively and efficiently*. Sterling Publishers Pvt. Ltd.
6. Kincheloe, J. L., & Weil, D. K. (2004). *Critical thinking and learning: An encyclopedia for parents and teachers*. Greenwood Publishing Group.
7. Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, 1986, 23-28.
8. Ramdass, D., & Zimmerman, B. J. (2011). Developing self-regulation skills: The important role of homework. *Journal of advanced academics*, 22(2), 194-218.
9. Andrade, M. S., & Evans, N. W. (2013). *Principles and practices for response in second language writing: Developing self-regulated learners*. Routledge.
10. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, 41(2), 64-70.
11. Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In *Handbook of self-regulation* (pp. 451-502). Academic Press.
12. Osborne, R., & Wittrock, M. (1985). The generative learning model and its implications for science education.

13. Wittrock, M. C. (1992). Generative learning processes of the brain. *Educational Psychologist*, 27(4), 531-541.
14. Lee, H. W., Lim, K. Y., & Grabowski, B. L. (2008). Generative learning: Principles and implications for making meaning. *Handbook of research on educational communications and technology*, 3, 111-124.
15. Wittrock, M. C. (2010). Learning as a generative process. *Educational Psychologist*, 45(1), 40-45.
16. Yang, L., & Wilson, K. (2006). Second language classroom reading: A social constructivist approach. *The reading matrix*, 6(3).
17. Fiorella, L., & Mayer, R. E. (2016). Eight ways to promote generative learning. *Educational Psychology Review*, 28(4), 717-741.