



## LEARNING CYCLE: AN ALTERNATIVE MODEL TO TEFL IN INDONESIA WITH THE 2013 CURRICULUM

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### Abstract

The implementation of the new curriculum in Indonesia, that is the 2013 Curriculum, entails some changes, one of which is the approach in teaching. As it has been stated in the 2013 Curriculum, the teaching and learning activities would be more fruitful when done using scientific and inquiry approaches where students experience things in order to get new knowledge. One of the models in inquiry-based approaches is Learning Cycle which is also based on the theory of constructivism. Though it may seem that the Learning Cycle model is solely intended for science classes, this paper attempts to propose and discuss the application of Learning Cycle with its five phases as one alternative model to teach English in Indonesia.

**Keywords:** learning cycle, model of teaching, constructivism theory, TEFL, the 2013 curriculum

### INTRODUCTION

The implementation of the new 2013 Curriculum that began in the school year 2013/2014 requires a teaching and learning process which should provide the opportunity for students to observe, ask, analyze, test, and communicate. Here, Curriculum of 2013 is done through a process of constructivism, which is different from the verbalistic curriculum which simply relies on one-way communication and memorization. The 2013 curriculum is actually based on constructivism, which means building a child's soul. Constructivism means an students are invited to participate in the learning it self. This year curriculum in 2013 will be applied for grade 1, 2, 4, 5 of elementary school or equivalent; grade VII, VIII of junior high school or equivalent; and grade X, XI of senior high school or vocational high school or equivalent.

Each turn of the curriculum there lies a problem here and there; ranging from the availability of books, teacher readiness, and maturity of students in facing of the new curriculum. Let's take one small point to consider, the teacher. Whether teachers are ready to teach the 2013 curriculum? Do the teachers have been socialized to the 2013 Curriculum? Do teachers understand the concept of the 2013 curriculum? Do teachers have enough motivation and high creativity and hands-on activities and real materials to teach with the 2013 curriculum? Are they well acquainted enough with the scientific approaches so that they could lead the students to experience the learning?

Teachers, as the agents of change in this case, should be empowered to be able to apply this process of teaching in that the students will benefit from the activities provided by the teacher. One of the elements of good teaching is the ability to vary the models of teaching to accommodate students' learning styles. Such learning model discussed in this paper is Learning Cycle which is believed to be in harmony with the demand of applying the new curriculum in Indonesia.

### The Concept of Learning Cycle

The idea of Learning Cycle was originally conceptualized based on the work of Piaget (Atkin & Karplus, 1962, Karplus, 1974). Initially, there were only three phases of learning consisting of

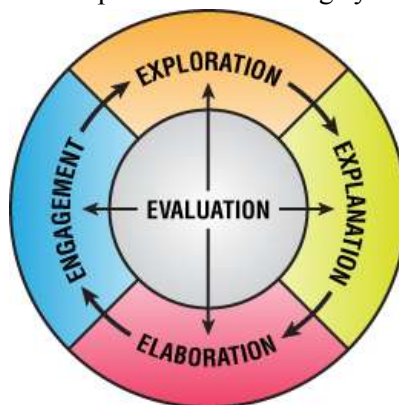
*Exploration, Invention, and Application.* Later, the phases in this instructional model have expanded and become five phases.

Bybee (1997) asserted that the learning cycle rests on constructivism as its theoretical foundation. "Constructivism is a dynamic and interactive model of how humans learn." A constructivist perspective assumes students must be actively involved in their learning and concepts are not transmitted from teacher to student but constructed by the student. In the early 1960's, Robert Karplus and his colleagues proposed and used an instructional model based on the work of Piaget. This model would eventually be called the Learning Cycle (Atkin & Karplus, 1962 quoted in Fuller, 2003). Bybee(1997) also claimed that numerous studies have shown that the learning cycle as a model of instruction is far superior to transmission models in which students are passive receivers of knowledge from their teacher. As an instructional model, the learning cycle provides the active learning experiences recommended by the National Science Education Standards (National Research Council, 1996) in America. This is in line with the demand of our MoNE in that the teaching and learning should be student-centered. In this way, students are given a chance to experience things and henceforth deepen their reasoning and later could communicate their thinking.

The Learning Cycle allows students the opportunity to get more readily engaged in interactive and in hands-on activities, preferably with real materials and sometimes even in real-life situations. When their teachers use the Learning Cycle, the students become involved with exploration of ideas, materials, and the human directed and natural world first, before becoming "entangled" in--what at first--may seem to be irrelevant and excessive vocabulary and factual knowledge. This strategy involves the students in the learning immediately, even before they are introduced to new terminology, ideas and concepts. Learning Cycle, learning events provide students the opportunity to apply knowledge and concepts directly, thus creating meaningful long-term learning experiences.

### Phases of Learning Cycles

The learning cycle discussed in this paper follows Bybee's (1997) five steps of *Engagement, Exploration, Explanation, Elaboration, and Evaluation*. As in any cycle, there is really no end to the process. After elaboration ends, the engagement of the next learning cycle begins. Evaluation is not the last step. Evaluation occurs in all four parts of the learning cycle.



### **Engagement:**

Engagement is a time when the teacher is on center stage. The teacher poses the problem, pre-assesses the students, helps students make connections, and informs students about where they are heading.



The purpose of engagement is to:

- Focus students' attention on the topic.
- Pre-assess what students' prior knowledge.
- Inform the students about the lesson's objective(s).
- Remind students of what they already know that they will need to apply to learning the topic at hand.
- Pose a problem for the students to explore in the next phase of the learning cycle.

Evaluation of Engagement: Evaluation's role in engagement revolves around the pre-assessment. Find out what the students already know about the topic at hand. The teacher could ask questions and have the students respond orally and/or in writing.

***Exploration:***

Now the students are at the center of the action as they collect data to solve the problem. The teacher makes sure the students collect and organize their data in order to solve the problem. The students need to be active. The purpose of exploration is to have students collect data that they can use to solve the problem that was posed.

Evaluation of Exploration: In this portion of the learning cycle the evaluation should primarily focus on process, i.e., on the students' data collection, rather than the product of the students' data collection. Teachers ask themselves questions such as the following:

- How well are the students collecting data?
- Are they carrying out the procedures correctly?
- How do they record the data?
- Is it in a logical form or is it haphazard?

***Explanation:***

In this phase of the process, students use the data they have collected to solve the problem and report what they did and try to figure out the answer to the problem that was presented. The teacher also introduces new vocabulary, phrases or sentences to label what the students have already figured out.

Evaluation of Explanation: Evaluation here focuses on the process the students are using -- how well can students use the information they've collected, plus what they already knew to come up with new ideas? Using questions, the teacher can assess the students' comprehension of the new vocabulary and new concepts.

***Elaboration:***

The teacher gives students new information that extends what they have been learning in the earlier parts of the learning cycle. At this stage the teacher also poses problems that students solve by applying what they have learned. The problems include both examples and non-examples.

Evaluation of Elaboration: The evaluation that occurs during elaboration is what teachers usually think of as evaluation. Sometimes teachers equate evaluation with "the test at the end of the chapter." When teachers have the students do the application problems as part of elaboration, these application problems are "the test."



From what is described above, it could be concluded that each phase is not an end in itself. Instead, each phase is continuous and evaluated. Therefore, it is called a cycle. Teachers are demanded to plan hands-on activities which could be conducted in several meetings.

### **Teaching English Using Learning Cycle**

English is the first foreign language to be taught to students in Indonesia, starting from elementary level of study as a local content to university. English is composed of four language skills namely, listening, reading, speaking, and writing and three language aspects that are vocabulary, grammar, and pronunciation.

The following is the excerpt of teaching Writing to college students by Campbell & Fuller (1982).

### **English Learning Cycle Example**

This learning activity is designed for a freshman English course stressing writing by students. The cycle described for the study of *Pride and Prejudice* requires at least three weeks of class time.

#### ***Instructional Objectives:***

To appreciate the interaction of plot, character, and theme in causing us as readers to respond strongly as we read good fiction. We are not read *P and P* to learn about plot, character and theme. Rather, in order to enhance awareness of what Jane Austen has put into the novel to engage our interest, we talk about specific actions, characters, and ideas found in this novel.

#### ***Exploration Activity***

1. Two students take the roles of Mr. and Mrs. Bennet and read aloud the conversation in Chapter 1. Students react to Jane Austen's language. Ask students to state what the novel will be about, judging by this chapter.
2. Ask for three volunteers to write papers to be duplicated and discussed in group sessions the following Monday. (Regular paper-writing is required and students readily volunteer, since by now they have learned the value of lots of criticism of their papers, before they hand in the final version for teacher evaluation.) Topic of papers: Late in Volume One, Bingley, who had seemed to be falling in love with Jane, leaves Netherfield along with his party, apparently not to return. We do not at this point in the novel know what Bingley's motives are for leaving, so we can only speculate. How do you as a reader react to this development: when you look back through the chapters of the novel leading up to it, what do you find that might influence your reaction?
3. Have students read aloud the letter from Mr. Collins to Mr. Bennet, and the reactions of members of the Bennet family that follow. Lead a discussion exploring what students think of the various characters and the way these characters are talked about. As students mention various traits of character, list them on the blackboard.
4. Since it was established in discussing the first chapter that the novel will be about courtship and marriage, students may now be asked to discuss what they think the characterizations and the comments characters make about each other have to do with marriage. To stimulate the discussion, ask students to help make a list of the couples in the book and to try to give a reason why a list of the couples in the book and to try to give a reason why Jane Austen has included each couple. Ask



what the different charactersthink is important in a marriage. (On blackboard, write the list of couples and suggested reason forinclusion.)

### **Invention Activity**

Monday, divide into three groups. Each group discusses one of the papers with the writer, the studentsmaking written comments on their copies, suggesting to the writer what the strong and weak points of thepaper are and how it can be improved. End session by asking students to mention something they learnedduring the session. It will typically emerge that 1) the writers claimed to have been caught by surprisewhen Bingley left, and 2) on reviewing the chapters leading up to his departure they found all sorts ofhints, that they had missed, that should have prepared them for this possibility. They will have foundthese hints in the conversations that show the importance in a marriage of property, family and personalcompatibility; in the occasions that permit the Bennet family members to display their silliness and "lackof breeding"; and in the traits of Bingley and Jane that could lead Bingley to take the action he takes.They will thus have become aware of the complex interaction of plot, character, and theme in shaping theresponse of an attentive reader, for they will either have been attentive readers themselves or have seenhow much an attentive reader among them has observed.

### **Application Activity**

1. Ask for three volunteers to write papers for class discussion on the following Monday. Topic: AfterElizabeth has though over Carcy's letter (following her refusal of his marriage proposal) she exclaims,"Till this moment, I never knew myself." How do you react to this declaration, and what do you find inthe book to this point that has conditioned you to react as you do?
2. Proceed as with first papers.
3. Repeat with a discussion of papers on a similar topic based on an incident in Volume Three.It is, of course, understood that because reading a novel is a very complex activity, from which differentreaders carry away different impressions, the direction by the teacher toward a specific learning objectivemust be tactful and flexible. While students are learning to distinguish elements that contribute to creatingnovelistic effects, they are also learning to complicate their observations and their consequent judgmentsby identifying the variety of features of the novel, the variety within each feature, and the impingement ofAusten's fictional world upon what they know of the historical period and place as well as upon their owntime and place.

### **CONCLUSION**

To sum up, the 2013 Curriculum could be better applied if teachers as one component of change are ready and understand the concepts of scientific or discovery approaches. Learning Cycle as one of the instructional models which possess constructivism and inquiry characteristics could be considered good choice in enabling students to experience learning in optimum way. Each phase of the Learning Cycle does not stand by itself, and each is evaluated and possibly combined with other approaches such as connecting and judging, especially during the exploration phase. By applying the Learning Cycle, it is believed that students' ability of reasoning and communicating could be enhanced.



## REFERENCES

- Atkins, J.M., & Karplus, R. (1962). Discovery or invention?. *The Science Teacher*, 29 (5): 45.
- Bybee, R.W. (1997-2010). In Learning cycle. (<http://books.google.com/books?>, retrieved September 6<sup>th</sup>, 2010)
- Campbell, T.C. and Fuller, R., Chapter 4: A TEACHER'S GUIDE TO THE LEARNING CYCLE (1982). *Essays from and about the ADAPT Program*. Paper 11, (Online) (<http://digitalcommons.unl.edu/adaptessays/11>)
- Fuller, R., “Don’t Tell Me, I’ll Find Out”: Robert Karplus—A Science Education Pioneer. Robert G. Fuller Publications andn Presentations. Paper 22, (Online) (<http://digitalcommons.unl.edu/physicsfuller/22>)
- Karplus, R. (1974). *Science Curriculum Improvement Study*. Berkeley: University of California.