

# Study of the Knowledge-internalized Mechanism In College English Flipped Teaching

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**Abstract.** By making a data-orienting and objective analysis of comprehensive prospects of the flipped teaching model applied in college English teaching course, the thesis aims to figure out how to give full play to information technology and hence ameliorating the knowledge internalization, while most of the investigations and researches are focused on the knowledge transference.

## 1 Introduction

In the past twenty years, the academic circles have done massive research on college education organizational reform to update and fresh up our teaching method and models to achieve the maximum efficiency of each student, especially for college English teaching which has been attached great importance. Experts and scholars have done their utmost to innovate teaching models and has achieved a lot through hard work. The most important is that, in recent years, there springs up a new teaching model—the Flipped Classroom which has become the focus in the field of education once being posed. In brief, it is a kind of new teaching model that achieves the procedure of teaching before class.

## 2. The present situation of research

### 2.1 The achievements acquired in the flipped teaching

Most of the researchers and experts like Dr. Rozinah Jamaludin who has published “The Use of a Flipped Classroom to Enhance Engagement and Promote Active Learning” and Stacy M.P. Schmidt who has published “The Flipped Classroom: A Twist On Teaching”, are prone to focus on the knowledge transference in English teaching, including the concrete design of every step of the teaching practice but neglect the underlying mechanism that drives the students who get flipped teaching towards a better studying condition, especially for teachers in practice.

### 2.2 The challenges confronting in the knowledge internalization

Compared to the efforts made in the knowledge transference, however, it is not that easy to find some quantitative and qualitative essays related to the field of the knowledge-internalized mechanism in college English teaching due to the fact that massive researches have been carried on the knowledge transference. Therefore, it is absolutely necessary for us to do research on this part.

Instead of being forced to obtain what should be obtained passively, the knowledge internalization of a learner is a positive activity of great subjectivity. During the teaching procedures, the teachers are supposed to instruct learners to build up the correct internal relationship between what they are going to learn and what they have learned before in order to shape a new cognitive structure and abandon the old ones. However, there are some challenges confronting in the knowledge internalization. First, teaching materials which are involved in the college English flipped teaching should be logical, that is to say, students should learn something which is consistent with his or her own cognitive accumulation or standards. Before beginning a class, students should construct their own basic cognitive structures which are similar to “common sense”. But it’s really difficult to

find an agreed line to define it. Different individuals have different degrees of abilities. Also, when involved in the knowledge internalization, students are required to internalize what they should master willingly and actively. They should motivate themselves to study and to explore.

Where there is challenge, there is success. Actually, the knowledge-internalized mechanism applied in the teaching processes should be focused more and investigated more. And we cannot deny that the knowledge-internalized play a significant part in the whole procedures, including knowledge construction, knowledge reconstruction, a shift from teacher-centered to student-centered.

### 3. Knowledge-internalized Mechanism of flipped teaching

#### 3.1 Overview of knowledge-internalized mechanism of flipped teaching

As mentioned above, the flipped classroom puts emphasis on the “place” where learners use online video to acquire knowledge in the international context. However, the change of learning place has not been enough to influence the real interactive process of classroom learning and teaching and the relationship between learning and teaching in nature.

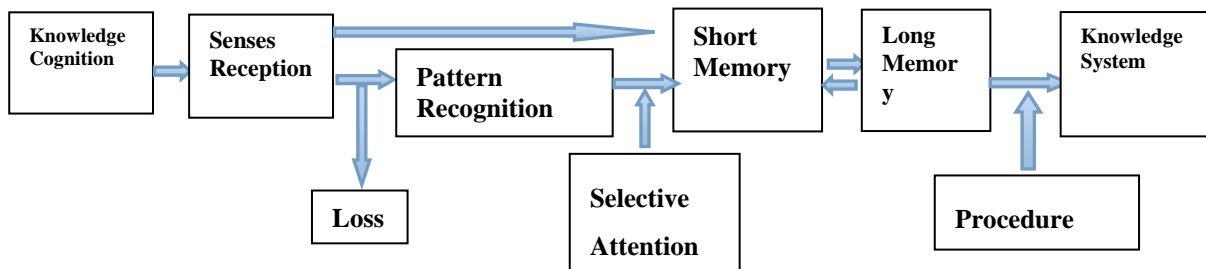


Fig.1. Knowledge-internalized mechanism of flipped teaching

Fundamental principles of flipped classroom are knowledge transference in advance and optimal knowledge internalization (also called knowledge construction) which are caused by the flow reform of classroom learning and teaching. In this sense, flow is just one of the important elements, and technical elements and environmental elements would be added in defining flipped classroom. Flipped classroom should be renamed “flipped teaching and learning”, which have changed the relationship, position and role between teachers and students. Learners acquire knowledge in flipped classroom mainly through flipping teaching and learning flow which reduces the difficulty and increases chances of knowledge construction.

When designing instructional system, macro and micro levels could be considered according to the gradual knowledge construction and fundamental principles so that learners have no additional burden and get corresponding support from instructional media, training and learning environment. In the process of implementation, teachers should follow basic principles of knowledge construction and select appropriate strategies according to class types and learner characteristics.

#### 3.2 Applications of knowledge-internalized mechanism in flipped teaching

There are several types of applications of knowledge-internalized mechanism in flipped teaching as follows:

*Individualized learning:* The flipped classroom allows lectures to be self-paced and student-guided. As students watch a video lecture individually, they can start/stop and replay sections as needed to facilitate understanding. They can pause to reflect on information and how it connects to other material. Students are supposed to control the whole studying process.

*Active learning:* Lectures constitute a passive learning format in which students recall only 20%

of what they have heard. The flipped classroom requires active student participation because the classroom time is entirely structured around a learning activity that engages students. Modeling by the instructor or other students further enhances learning in the classroom activity.

*Application of knowledge:* Lecture transmit factual knowledge from the teacher to the student. With a flipped classroom, the learner arrives to class prepared with knowledge about the topic, and the classroom activity requires application of that knowledge through discussion, case analysis, debates or problem solving with new scenarios.

*Student-centeredness:* The flipped classroom is student-centered rather than teacher-centered. Student motivation can be enhanced due to accountability to peers in the classroom and the application of concepts to relevant problems.

*Self-directed learning:* The flipped classroom promotes self-directed learning skills and behaviors by granting students autonomy as they decide how and when to watch videos, and how much time to devote to review content they feel they need to learn. Classroom activities are also designed to allow student-directed decisions about how to accomplish the task. Students thus feel more in control than in traditional lecture, and gain skills in independent learning and managing personal learning through reflection and decision making, which are metacognitive skills important for lifelong learning.

## **4. Teaching practice of flipped classroom**

### **4.1 Teaching background**

One of the difficulties for the freshmen of non-English majors can be college English writing. According to the experiences of correction of their writing tasks, one of the most common mistakes is to choose which kind of part of speech they should use. Here this teaching practice take the topic of *the verbalization of nouns* as an example, combining the model of flipped teaching with the goal of helping the students to construct their own ideas about word class.

### **4.2 Teaching principle**

*Put academic achievement into teaching practice.* When preparing for the lesson, the teacher collects lots of research literatures and sorts out the applicable model expressions for teaching, which updates the inputs in class and benefits the students to the utmost.

*Pay attention to students' cognitive disposition and learning interest.* It is required that the instructors should design the teaching practice by obeying the principle that “from the easier to the more advanced” and “from the mother tongue to transitional words”.

### **4.3 Teaching design**

Here we design a teaching micro-video which is aimed at assisting students in self-study. On the one hand, this teaching design can help to complete the knowledge transference. On the other hand, the design includes those factors which are of great benefits for students to internalize what they have learned like ways of presenting, teaching sequence, the density of the information and so on.

	Teaching Procedures	Teaching contents	Teaching Activities	Duration
1	Lead-in	Use the wrong examples as a lead-in.	Discussion-based teaching	00:00:35
2	Analysis	Analyze the wrong cognition transfer and stress the word class.	Dialogue-based teaching	00:01:35
3	Concept Instruction	Pose the concept of the verbalization of nouns	Expository method	00:02:50
4	Deepening	Introduce another word formation-verbalization by zero focus with some details	Examples and discussion-based teaching	00:04:00
5	Examples	Use many examples to help students to master this word formation	Examples and discussion-based teaching	00:06:48
6	Application	Instruct students to use the verbalization of nouns when writing in English	Examples and discussion-based teaching	00:08:05
7	Performance	Give full play to students' applications of the word formation	Heuristic method and interactive teaching	00:08:46

Fig.2. Teaching design of Flipped Classroom

#### 4.4. Teaching reflection

“As access is more readily available and more data is available to support the improved learning and student engagement, more teachers will be willing to implement a flipped classroom” (Stacy M.P. Schmidt, 2014). This teaching practice can be a transition to the flipped classroom, a fresh model mixed with various methods. Micro-lesson combines the traditional ways with the emerging teaching methods, including the features of recording videos, teachers and the discussion-based models, which creates an ideal atmosphere for students to study. Also, it enables students to strengthen what they have acquired and provide the evaluations and reflections as well as have better class interactions.

### 5. Facilitators applied to optimize the knowledge internalization

#### 5.1 PASS (Peer Assisted Study Sessions)

PASS, started in 2009, provides a facilitated, group learning opportunity that uses the experiences of higher year volunteer students (PASS Leaders) to support the learning of lower year peers in finding solutions to their problems themselves, through facilitated discussion and guided questioning. This supplements existing teaching and learning activity and enables active learning in an informal, friendly and fun environment. Applied in flipped teaching, PASS strengthens ways of knowledge of internalization.

#### 5.2 IT-based innovations applied in teaching

The rapid rise of online learning and related technologies presents a tremendous opportunity for educators to design courses that engage students through the use of information technology. When used appropriately, information technology can foster student engagement in the learning process especially for the knowledge internalization in flipped teaching, which many students find benefits.

**MediaSite**, a kind of presentation tool that allows creation of live digital recordings of lectures

or presentations, helps students view presentations over the internet in real-time and access for viewing at a later date.

**Moodle**, one of the emerging learning platform, can be applied to carrying out mode of flipped teaching. Besides, it can give students access to those related information immediately and maintain the central status of students. Also, it can collect necessary data aimed at evaluating the studying motivation, studying style and methods.

**MOOC**, a massive open online course that is a model for delivering learning content online to any person who wants to take a course, with no limit on attendance, can ensure the teaching effects if joined together with flipped teaching and learning to promote which solve the problem of knowledge of internalization.

## **6.Summary**

The thesis aims to illustrate the significant role of knowledge-internalized mechanism based on the previous research achievements and experiments with a specific topic in implementation of flipped teaching. For the next step, more teaching practices are needed to collect reflections and evaluations from students and teachers in various aspects to show all-sided comprehensions of whether strengthening the knowledge-internalized mechanism has led to obvious improvements of English teaching through flipped teaching.

## **References**

- [1] Gaughan Judy E, The Flipped Classroom in World History. History Teacher, 2014.
- [2] J.B.Heaton, Writing English Language Tests. Beijing: Foreign Language Teaching and Research Press, 2000.
- [3] Gregory Mason. Inverting (Flipping) Classrooms – Advantages and Challenges, 2013.
- [4] Gerald C. Gannod .Using the inverted classroom to teach software engineering. 2008.
- [5] Sams, Aaron; Bergmann, Jonathan. Flip Your Classroom: Reach Every Student in Every Class Every Day. International Society for Technology in Education. 2012.
- [6] Lisa Nielsen. (October 8, 2011) . Five Reasons I'm Not Flipping Over The Flipped Classroom. [Blog]. Retrieved on March 28, 2013.
- [7]Information on [http: // theinnovativeeducator.blogspot.com](http://theinnovativeeducator.blogspot.com)