

## CLIL: SUGGESTED ENGLISH MATERIALS FOR CURRICULUM 2013

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### ABSTRACT

Teaching approaches always change from time to time. The change of teaching approaches is followed by the change of materials. The new materials in secondary level are Content and Language Integrated Learning (CLIL). From these materials, the students are expected to be able to understand other subjects which are written in English. In secondary level, the subjects are science and mathematics. Thus, this paper provides materials, teaching procedures of CLIL and SWOT analysis. The materials are related to the science theme. There are three topics under science theme: digestive system, laboratory equipments and symbols, and light. The teaching procedure of CLIL is Presenting, Practicing and Producing (PPP). Firstly, the teacher presents the material. Secondly, the students practice to retell the material. Lastly, the students produce wall-magazine, posters and experiment report. In conclusion, CLIL materials can be explored more by English teachers because it is new and interesting.

**Keywords:** CLIL materials, PPP

### INTRODUCTION

Teachers are often confronted by changes. Teachers should be able to adapt themselves toward the changes including teaching approaches, curriculum and materials changes. Teaching approaches, curriculum and materials are entities. One will influence the other. If teaching approach is changed, it will influence curriculum change. The curriculum change will influence the materials change.

Teaching approaches have been changing over the years. The first method is GTM. Grammar Translation Method (GTM) is the oldest method which focuses on linguistic knowledge. Brown (2001) states that the method focus on

grammatical rules as a basis for translating. The next method is Audiolingual Method. Audio-lingual Method (ALM) believe that learning is a Stimulus-Response-Reinforcement (Fachrurrazy, 2011). Teaching and learning activity is only drilling. Eclectic method is one which utilize the best part of existing methods (Fachrurrazy 2011). Communicative competence included five components, namely discourse competence, linguistic competence, actional competence, socio-cultural competence, and strategic competence (Celce-Murcia, et.al. 1995).

Richards (2001) states that it is important to recognize that method is not only about the process of instruction but also what to be taught. It means that

method influences curriculum and curriculum influence the materials to be taught. Those approach changes influenced the curriculum in Indonesia. Indonesia has changed the curriculum many times.

The curriculum change is followed by the materials change. Curriculum 1968 adopted Audiolingual method in teaching learning activity. Mechanical drills were the focus of learning. Thus, the materials were only substituting vocabulary or pattern. When teacher introduces a new pattern, use the known vocabulary and when introducing new vocabulary, use the known pattern (Fachrurazy, 2011). Curriculum 1975 had an objective to emphasize on reading skill with more stress on grammar (Cahyono and Widiati, 2011). The learning materials were focus on grammar. Curriculum 1984 had an objective on the development of communicative competence (Cahyono and Widiati, 2011). The 1994 curriculum was developed. The objective of this curriculum is to develop reading, listening, speaking and writing skills (Cahyono and Widiati, 2011). The teaching materials were theme and topic based (Huda, 1999 in Cahyono and Widiati 2011). The topics and themes were chosen on the basis of students' interest and stages of development. In 2006, school based curriculum was developed. School based curriculum offered flexibility for school to develop their own curriculum (Cahyono and Widiati, 2011).

The last curriculum is the 2013 curriculum. In this curriculum, there are four core competences (*Kompetensi Inti*) should be achieved, namely religious, social, knowledge and applied knowledge (Kemendikbud, 2013). The basic competences are organized vertically and horizontally (Kemendikbud, 2013). Organized vertically means that the basic competence is the continuity of the content with the higher level of education. Organized horizontally means that the basic competence is related to other subjects.

The 2013 curriculum shows that a certain subject can be integrated to other subject. It is possible that English is integrated to social science, natural science or mathematics. The bridge which can connect these two subjects is through CLIL materials. Thus, CLIL is the new English materials in which the materials can be integrated with other subject. This paper aims to provide teaching guidelines and CLIL materials on three topics: digestive system, laboratory equipments and symbols, and light.

#### **DEFINITION OF CLIL**

The term Content and Language Integrated Learning (CLIL) was coined in Europe. CLIL serves as an umbrella term embracing all scenarios and combination of heritage, regional, minority, immigrant and/or foreign languages they involve: providing a highly diversified language curriculum (Lorenzo, et.al. 2009). The

European Commission refers CLIL as teaching subject through the medium of foreign language. The European Commission asked all Europeans to gain proficiency in more than one language (mother tongue) to enable better understanding and communicating among European countries. Smala (2009) states that many bilingual immersion programs in Europe are now in English because of the importance of English as a lingua franca.

Marsh (2002) refers CLIL as dual-focused learning, language and content. Learning activity focused on the subject and the language. It is possible for the learners to practice what they learned whilst they are learning. The learners practice their language while they are learning the subject. Indonesia government ever applied this concept in RSBI (*Rintisan Sekolah Berstandar Internasional*) school. In RSBI school, the teacher taught subjects such as biology, mathematics, physics, etc using English.

Claudiocol (2010) states that there are three kinds of CLIL, namely hard, mid and soft CLIL. Hard CLIL is the way some schools teach half of the curriculum immersed in a target language (Content led). This type of CLIL focus more on content. The learners are taught the content/subject by using the target language. Mid CLIL is some schools teach some CLIL modules, where a subject is taught for a limited amount of hours. Soft CLIL is the topic is a part of the language ELT course curriculum (Language led

course). The focus of this type is language. The learners are taught English by using different topic materials. The topics are taken from the content/subjects such as biology, physics, chemistry, etc. Meyer (2011) states that soft CLIL is a more EFL version of CLIL.

In EFL context, CLIL can be defined as teaching English by using topics related to other subjects in school. The topics can be natural science, social science or mathematics. The topics support the learning of English. The learners can learn the technical terms of science topics. And also the learner can practice their English when they do experiment in laboratory by giving the instruction of doing the experiment. Ball (2008) states that thematic content can be a vehicle for the illustration of language use.

The CLIL materials should cover the topics of natural science, social science or mathematics. Those topics are the topics which the learners need for their higher level of education. In secondary level, the students have a major in natural science, social science and language. The topics given are based on the students' major. If the students major in natural science, the students should have topics in natural science. The topics should be popular science in order to attract students' attention.

The content of the materials covers linguistics and technical terms of the topic. The materials still need linguistics because it deals with English. The materials taught

are four skills and grammar. Besides, technical terms are also presented in the materials because it deals with content/subject. The students can learn some definition related to the topic.

### **THE RESULT OF OBSERVATION**

The writer did school visit in Malang regency. From the school visit that the writer did and also the interview with two English teachers showed three aspects, namely, the facility, the teacher and the teaching materials.

The facilities available in the school are classroom, basket court, teacher's room, principle room, guest room, computer laboratory. The classroom consists of 21 rooms: seven rooms for each grade. There is no specific facility for the teaching of English, except LCD and tape recorder. The number of students in a class is around 36-40. There is no extracurricular related to English. There is no notices in English.

Mr. Jupri has been teaching English for 15 years. His undergraduate degree obtained from both English and Arabic. Then, he got scholarship at Graduate program UIN Maliki in Arabic Language. Another teacher, Mrs. Mariani has been teaching for 14 years. She tried to browse the internet to find a good teaching technique. Meanwhile, those two teachers did not have any idea about post method, blended learning, CLIL. They never joined seminar or teacher training during in that school. Moreover, teacher's willingness to

join seminar is low because they do not want to join the seminar by themselves, they just waited to be pointed by the principle. In addition, they do not know about the 2013 curriculum.

The learning materials used is textbook and LKS. The textbook adopt GBA (Genre Based Approach). The textbook is organized based on the genre consisting of spoken and written cycles. The textbook still follow KTSP curriculum.

### **SWOT ANALYSIS**

The following section presents the SWOT analysis of CLIL. SWOT stands for Strength, Weakness, Opportunity and Threat. The analysis come from the observation when the writer did school visit and also the theory.

#### **The Reasons of Using CLIL Materials (Strengths)**

There are some reasons English materials using CLIL. First of all is that the unavailability of certain technical terms (vocabulary). There are some vocabularies which daily English can not cover, such as vocabulary in mathematics, physics, chemistry, economy, etc. For example in physics, the word *gaya*, it can not be translated into *fashion or style* because it has technical term, *force*.

Another example is in mathematics, the word *sudut tumpul*, it cannot be translated into *blunt corner* which derived from *corner* means *sudut*, *blunt* means *tumpul*. The technical term for *sudut*

*tumpul* is *obtuse angle*. And there are many others. The students must know not only daily English but also the technical terms. The technical term and daily English are different. Ball (2008) states that the differences exist on both a lexical and a structural basis.

The second reason is that CLIL has some advantages. Based on Lorenzo et.al.'s study (2009) showed that CLIL learners outperformed non-CLIL learner on the result of linguistics evaluation. It shows us that CLIL can improve the students' linguistic competence.

Calvino (2012) states some advantages of CLIL. First, students motivation increase because the language is used to fulfil the real purpose to learn substantive materials. Second, developing a positive 'can do' attitude towards learning languages because the students learn not only grammar but also practicing the language through the topic of materials. It can lower the affective factors. Third, knowing subject specific terminology. The students can learn technical terms in the topic of subject such as physics, mathematics, etc.

### **Don't Use CLIL Materials (Weakness)**

CLIL materials is integration of language and content. Teacher is the key component in teaching and learning. Sulisty (2007) states that teacher is the source of teaching and learning in classroom. It means that the teacher should teach the language and the

content. The quality of the teacher competence can be shown by the teacher's certification or diploma. European Comission (2005) states that teachers are generally fully qualified for the one or more educational levels at which they work. In most cases, they are specialists in one or more non-language subjects or have two areas of specialisation, one in a language subject and the other in a non-language subject. In addition, Marsh (2002) states that "teachers can handle CLIL/EMILE methodologically in terms of language and non-language content and application, through use of optimal linguistic target language skills". The result of the observation showed that the teacher's qualification is only English. The teacher cannot teach subject. Moreover, the education background of the teacher, one of them, is Arabic. The weakness of CLIL is that it needs a teacher with double qualification, the language and the content or subject. In Indonesia, there is no university which provide the students with those two qualification.

CLIL need rich learning environment. Yin et.al. (2012) states that "the core features of CLIL methodology are to scaffold students cognition development by promoting active learning utilizing authentic materials to enhance content and language learning simultaneously in a safe and enriching learning environment". In line with Sulisty (2007) states that facility is one of aspect to support education. The

facility supports the teaching and learning. A good environment can boost the students' learning because the students can actively involve in learning where ever they are in school, not only in the classroom, by reading notices or independent study in language laboratory. The result of observation showed that the school has minimal facility. There is no notices in English and language laboratory. It is not suggested to implement the CLIL. The weakness of CLIL is that it needs a good facility which most of school in Indonesia have limited facility (see Sulisty 2007).

### **The CLIL Opportunity in The Future (Opportunity)**

CLIL provides students with content and language. Thus, students can compete with other countries in 21st century because the students have the knowledge of the content and also are fluent in English. Ananiadou and Claro (2009) states that OECD countries' curriculum integrate several subjects. By using CLIL, the students can compete in global world.

### **The Curriculum Change (Threat)**

The 2013 curriculum can support the use of CLIL because the curriculum integrate several subjects or the term is organized horizontally, it can integrate the content and English (language). However, the threat toward CLIL is that if the curriculum is not implemented. The curriculum can be postponed or even cancelled when

majority of the teacher do not understand the new curriculum because the socialisation of the curriculum is not sufficient. It means that the government is not ready. The result of observation showed that the two English teachers do not know the 2013 curriculum. It is possible that the implementation of the new curriculum will be postponed. As result, it gives a threat to CLIL implementation.

### **TEACHING PROCEDURES**

Teaching and learning activity is not only about the materials but also the teaching procedures. The teaching procedures consist of the steps how the teacher can teach English using CLIL materials

One of the teaching procedures which can be used for CLIL materials is Presentation, Practice and Production (PPP). Harmer (2007) states that PPP is teaching procedure by introducing a contextualised situation. Firstly, the teacher presents the material. Secondly, the students practice to retell the material. Lastly, the students produce wall-magazine, posters and/or experiment report. The detail procedures are as follow:  
Presentation

- Students pay attention to the slide
- Students answer teacher's question about what the picture is (the picture is digestive system)
- Students read the text given by teacher. The text is about digestive system (see appendix 1)

Practice

- Students find the technical terms in the text
- Students practice how to pronounce the technical words
- Students work together to find the meaning of technical term in order they understand the text
- Students practice to retell the process of digestive system by using their own language Production
- Students can make wall magazine about digestive system

In the teaching procedures above, the writer used digestive system topic. However, other teacher can use other topic (see appendix 2 and 3) with those guidelines. The teacher must make sure that in production, students should create or make something which trigger students' creativity.

## CONCLUSION

English materials have been always changing over the years following the curriculum. The basic competences of the 2013 curriculum can be integrated with other subjects. CLIL can be the bridge for English materials to integrate with other subjects. CLIL materials are still new for some teachers even they are strange for mostly teachers in Indonesia. CLIL materials are interesting because both the students and the English teachers can learn technical terms in certain topics. CLIL materials are new and they need to be explored by English teachers.

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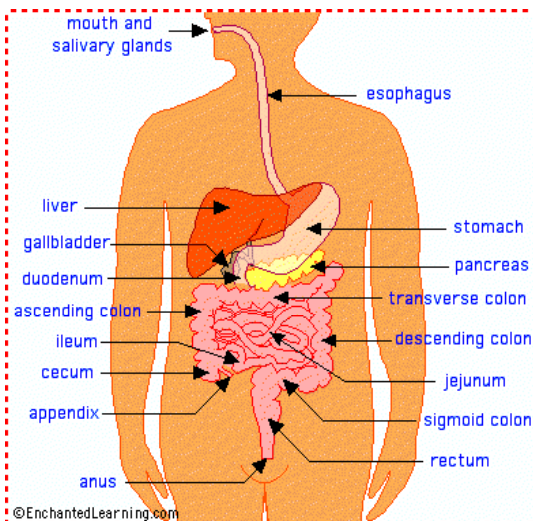


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[http://images.tutorvista.com/content/feed/tv/cs/light\\_dispersion1.gif](http://images.tutorvista.com/content/feed/tv/cs/light_dispersion1.gif)

## Appendix 1 Human Digestive System



The human digestive system is a complex series of organs and glands that processes food. In order to use the food we eat, our body has to break the food down into smaller molecules that it can process; it also has to excrete waste.

Most of the digestive organs (like the stomach and intestines) are tube-like and contain the food as it makes its way through the body. The digestive system is essentially a long, twisting tube that runs from the mouth to the anus, plus a few other organs (like the liver and pancreas) that produce or store digestive

chemicals.

### The Digestive Process:

**The start of the process - the mouth:** The digestive process begins in the mouth. Food is partly broken down by the process of chewing and by the chemical action of salivary enzymes (these enzymes are produced by the salivary glands and break down starches into smaller molecules).

**On the way to the stomach: the esophagus -** After being chewed and swallowed, the food enters the esophagus. The esophagus is a long tube that runs from the mouth to the stomach. It uses rhythmic, wave-like muscle movements (called peristalsis) to force food from the throat into the stomach. This muscle movement gives us the ability to eat or drink even when we're upside-down.

**In the stomach -** The stomach is a large, sack-like organ that churns the food and bathes it in a very strong acid (gastric acid). Food in the stomach that is partly digested and mixed with stomach acids is called chyme.

**In the small intestine -** After being in the stomach, food enters the duodenum, the first part of the small intestine. It then enters the jejunum and then the ileum (the final part of the small intestine). In the small intestine, bile (produced in the liver and stored in the gall bladder), pancreatic enzymes, and other digestive enzymes produced by the inner wall of the small intestine help in the breakdown of food.

In the large intestine - After passing through the small intestine, food passes into the large intestine. In the large intestine, some of the water and electrolytes (chemicals like sodium) are removed from the food. Many microbes (bacteria like *Bacteroides*, *Lactobacillus acidophilus*, *Escherichia coli*, and *Klebsiella*) in the large intestine help in the digestion process. The first part of the large intestine is called the cecum (the appendix is connected to the cecum). Food then travels upward in the ascending colon. The food travels across the abdomen in the transverse colon, goes back down the other side of the body in the descending colon, and then through the sigmoid colon.

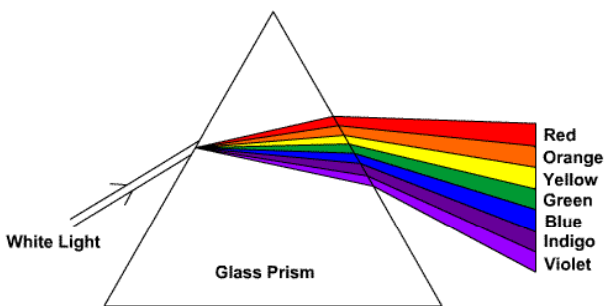
The end of the process - Solid waste is then stored in the rectum until it is excreted via the anus.

(taken from: <http://www.enchantedlearning.com/subjects/anatomy/digestive/>)

Task 1: find out the technical terms and find the definition

Task 2: retell the text in your own language

## Appendix 2



### The Nature of Color

Why is the sky blue and the grass green? Why isn't the sky green and the grass blue? And why is a rose red instead of purple? What we see as color is the way our brain respond to the different wavelength of light

Light is a form of electromagnetic energy that travels very quickly on different frequencies or wavelength, which we see as different colors. For example, a wavelength of 400 nanometers causes us to see violet. A wavelength of 660 nanometers causes us to see red. The color brown is induced by the mixing of wavelengths. Yellow can be produced by either its own wavelength or a mixture of the wavelengths for red and green. Our sky looks blue because molecules of oxygen and nitrogen in the air scatter more blue wavelength than any other color.

White light results from a mixing of the wavelengths of all colors. Sir Isaac Newton discovered that when sunlight passed through a glass prism, the white light dispersed into a spectrum of colored light. Newton then allowed the spectrum to pass through a second prism and the colors recombined, producing a beam of white light. This simple experiment demonstrated that white light contains all the colors of the spectrum. A beautiful and dramatic example of this occurs when sunlight falls on drops of water in the air after a rain. The beam of white sunlight spatters into a rainbow of colors.

Certain colors are invisible to human eyes. Wavelengths shorter than that of violet produce ultraviolet light that can damage skin cells. Wavelengths longer than that of the color red produce infrared light, radio waves, x-rays and gamma rays. We cannot see colors produced by these wavelengths, but we can measure and use their energy.

(taken from: English for Science)

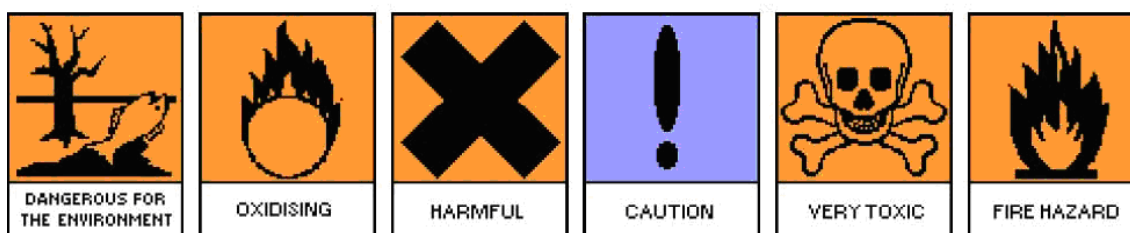
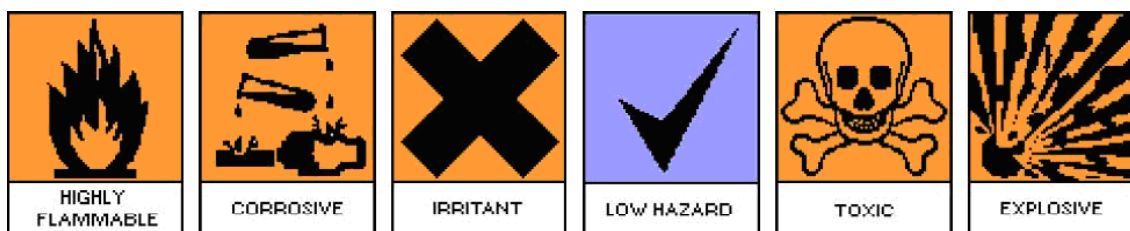
Task 1: find out the technical terms and find the definition

Task 2: find out the cause-effect sentences in the text

Task 3: retell the text using your own language

### Appendix 3

#### Hazardous symbols



task 1: where do you possibly find each of symbols above?

task 2: what do you do if you see each of symbols above?

#### Laboratory equipments



magnet



Test tube



thermometer



Stands and clamps



Tuning fork

Task 3: find out the function of each laboratory equipments above

Task 4: draw a poster about laboratory equipments and their function