# The Implementation Of Scientific Approach As Innovation In English Learning

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Abstract, As international language, English is needed by all people in the world to develop their knowledge. For students, especially in Indonesia English is categorized as the foreign language. And because of that, there is always come out a problem. The problems in teaching English come from not only the material but also the teachers and teaching methods. This paper aims at giving more explanation of scientific approach as one of innovations in learning English, particularly for Indonesians' students. The principle of scientific approach lines to the Indonesian national education idea, in which the education sector must develop all students' competences. This study used descriptive method by observation and interview of teaching techniques, learning models, and material using scientific approach in learning English. Besides, it uses library method, and the data thus analyzed several steps, namely data reduction, performing, interpretation, and taking conclusion. The scientific approach functions to urge and inspirate the students to think critically, analitically, and appropriately in identifying, understanding, solving problem, and apply the learning material. Through scientific approach, the students can express theirselves in flexible without boiler or pressure. It emphasizes to student centred learning. In applying the scientific approach, the teacher has a significant role. The teachers must be able to decrease the students' mistakes and give feedback without decreasing the students' motivation. Therefore, it is a recommended approach since it can help to improve the students' English competence, particularly for Indonesians' students.

KeyWords: education innovation; English, scientific approach; competence

### 1 Introduction

English is a important language in the world. It can be said that a country will be developed well, particularly for its education when the people or its students master the English language. Like other languages, English has certain difficulty to be learnt. To master English, the students need to improve their skills in term of learning the language. Besides, English is as the first foreign language in Indonesia taught from elementary school to university level. It means that mastering English is very needed by students, especially in Indonesian.

In learning English, there are four English aspects which should be mastered, namely listening, speaking, reading, and writing competencies. Listening and reading are called input of language learning because the students can get more knowledge by reading and listening. Speaking and writing are called output because they can perform their knowledge by speaking and writing. Those skills are really needed in mastering English. In this case, each skill supports each other. Besides, all of the skills should be integrated in order to produce good language speaker and writer.

Based on the writer's interview, one of the weaknesses of most students in Indonesian is communicating English orally. They sometime understand their English teacher, but it is very difficult to reply her/him. One of the factors is the students are very rarely trained to speak English. Most students are just taught to read and write in English. Even do, several students often leave out the English class since they think that learning English is not interesting and boring. Besides, most of Indonesian's students are very hesitated and afraid to speak in English. They think English is a very difficult subject. They are really pressured when the time of speaking part of English subject. Through scientific approach, the students can express theirselves in flexible and freely without any pressure. It help them to speak English fluently and accurately. It then motivates them to learn english continously. It means that, learning speaking English through scientific approach can help students to speak English well and solve the problems faced in learning English. In other words, scientific approach can improve students's English speaking ability.

Further, scientific approach refers to constructivism learning theory, in which the students have own different talent and need several facilities or activities to develop it in creating meaningful skills. It thus implementation of scientific approach is very needed in English learning process, particularly in learning speaking.

Based on the illustration above, this paper discusses innovation and management in learning technology, scientific approach, learning activities in scientific approach implementation, and teacher's role in scientific approach.

# 2 Material Studied and Method

The present study deals with the use of scientific approach in English learning. It includes teaching techniques, learning models, material, and students' perception in scientific approach implementation. The design of this study is descriptive qualitative. It is more conceptual framework or library study and the data thus most come from observation of teaching techniques, learning models, and material used in scientific approach, and some come from the result of freely interveiw about students' perception in scientific approach implementation. The writer took thirty five English students at English Study Program of Halu Oleo University in Kendari as the participants of this study. Moreover, the writer used purposive random sampling to take the subject or participants. This study used observation notes to take the data about scientific approach implementation and freely interview to know the students' perception toward the approach at English Study Program of Halu Oleo University in Kendari.

This study used descriptive method by observation, interview, and literature review or library study of teaching techniques, learning models, and material that use scientific approach in learning English. It aims at obtaining more information or primary data concerning the use of scientific approach in English learning, belong to English students' perception toward scientific approach. Data analysis procedure performed and analyzed in descriptive qualitative

continuously during the study conducting through three flows of activities, namely (1) data reduction, (2) the presentation of the data, and (3) the interpretation of the data and drawing conclusions (Miles and Habermas, 1992: 89).

#### 3 Result and Discussion

# 3.1. Innovation and Management in Learning Technology

Innovation and management are very closed relation, particularly in education sector. Without innovation, the education quality is cosntant or decreased. Likewise, the bad management will cause the education failure. Huff and Mark Jenkins (2002: 36) state that the failure of organization caused by several factors, one of them is the bad management. Besides, Huff and Mark Jenkins (2002: 36) point out that the routine factor affect the organization significantly. The routine factor is very related to innovation to create the new one and improve the old one..

Hanover's research (2014) concludes that the development of a country depends on its education aspect, like the online learning. Online learning is one of innovations in education. Kaomi (2006: 1-8) explains the important of technology implementation in improving the students' competence, such as the use of learning video to increase the competence of cognitive and pedagogic for both students and teachers. Learning technology has important role for education development. To add and develop the learning technology role needed an innovation and good management of education as have benn done by Kaomi (2006) and Simkins, et al. (2002).

The good innovation and management, the function and role of education will be clear. The education sector can develop the students' competence both individual and organization/social competences. Both academic and non-academic societies can get the education through appropriately education technology. Even, the innovation in learning technology will create wide education environment in various sectors or subjects.

# 3.2. Theory of Scientific Approach

Scientific is one of approaches implemented in Curriculum of 2013 (Education and Culture Ministry, 2013: 13). It involves several procedures are observing, asking, trying, associating, performing, analyzing, and creating (Education and Culture Ministry, 2013: 13). Learning process based on scientific approach should be guided by scientific principles. It focuses on aspects of observation, analyzing, finding, legality, and explanation of truth.

The scientifc approach as authentic assessment covers three domains as mentioned in taxonomy bloom, the lecturers measure not only cognitive students' development but also affective and psychomotoric aspects. It thus, the students to be more aware with their all competencies. It relates to one of taxanomy of popular learning objective, bloom taxanomy that involves three domains, namely cognitive, affective, and psychomotoric (Ahiri, 2008: 54). Thus, the teacher or lecturer should comprehend competencies of affective, cognitive, and psychomotoric. Amri (2013: 31-32) states that a teacher or lecturer should be professional and master at least three competencies that is cognitive, affective, and psychomotoric. It helps the students to master not only theories of English but also comprehend English practically. In other words, the students hoped can use their knowledge of English maximally when they have graduated from studying English.

Scientific approach is very challenging and it thus motivates the students to keep on their English learning. Besides, it increases their awareness of English learning objectives and practice what they have learnt. Thus, the learning objectives given by lecturers are comprehended well by students. It really helps students to study English well. Besides, scientific approach creates curious students. Since it emphasizes the students to be more aware with English and their competencies, they then always keep studying English.

### 3.3. Learning Activities in Scientific Approach Implementation

Learning process in Curriculum of 2013 in Indonesian for all levels done by using scientific approach. Learning process must cover three domains, affective, cognitive, and psychomotoric. In scientific approach, affective refers to attitude to answer the questions "why"; cognitive refers to knowledge to answer the question, "what"; and psychomotoric refers to skill to answer the question, "how". Those items can balance the all competencies, among affective, cognitive, and psychomotoric.

There are several activities implemented in teaching English based on scientific approach, namely observation, asking, trying, associating, analyzing, and commnicating. The lecturers have implemented the scientific approach in teaching speaking following the activities. It was done by lecturers well and consistent in English learning process, as illustration below.

Observation is the first activity used in scientific approach. The lecturers asked the students to do observation toward the certain objects around them. After observation, the students are asked several questions of it. Those activities were done by using speaking English. The asking activity is the main strategy used in learning process to be more communicative. Through asking questions, the lectures can encourage, guide, and train the students' competency. The systematic question activity motivates the students to respond and give relevant answers. In this activity, the students were very enthusiastic in English learning process, particularly for speaking English. Besides, they perform good or positive attitude.

The students' answer developed through the questions about the observed object. They were taught to find by theirselves about the object or something related to the material given. The role of lecturers are guiding and giving new ideas or knowledge for students. The lecturers' asking activity creates good learning atmosphere, and it then creates student's curiosity in learning English. Besides, the lecturers sometime encourage students to ask the difficult or interesting topics to increase their knowledge and experiences. After asking activity, the students do trying activity or trying strategy. In the activity, the lecturers encourage students to express their idea without hesitation. In this case, the lecturers provide several facilities and strategies for students in expressing their idea in English. Shortly, the students always try to speak English either in or out of class.

The next activity is associating. In the activity, the lecturers stimulate the students to create and associate good relationship or understanding between the material learnt and their environment. Analyzing is the next activity needed in this approach. In which, the students should find out by theirselves about the problems faced in the field or during learning process. The last activity is communicating. The lecturers need to develop the communicating strategy in improving students' English ability. The students were asked to explain the meanings of their expressions used in speaking English. In this case, the students identify the words used in the expression. In this activity, the students also asked to find out the answers by theirselves alone. It was done in group discussion. The learning activities through group aims at training the students to work with others and do not rely on theirselves competency.

After doing all activities, the lecturers and students do reflection of the material that have been learnt. In this step as the post activity of leaning process, they evaluate both learning process and result of learning, and then take the conclusions. The purpose is to know the students' uderstanding level of the material. It used to improve the learning process and arrange or determine what the next best ways in teaching English.

Before implementation of scientific approah, most students are very afraid speaking English. They have low self confidence to speak English, and it thus most students were very passive or silent on speaking class. In other words, it was lecturers centred learning. After implementation of scientific approach, the students' motivation to speak English was increasing. They then can speak English fluently without any hesitation, and just a few students who were still afraid to speak English.

## 3.4. The Role of Teacher in Scientific Approach

One of the crucial things in scientific approach is the teacher's role. The teacher has a significant role in learning success through scientific approach. The teachers must be able to decrease the students' mistakes and give feedback without decreasing the students' motivation. Besides, the teacher should be able to arrange the learnin strategies, in order the students' mistake is not done by other students. Therefore, the students should control and keep the learning process through scientific approach, and take a note about the students English competence development, and other important events. So, the students are not pressure to the implementation of scientific approach. The students ar not afraid to make mistakes, and their motivation is always increasing.

If the teacher can control well of the implementation of scientific approach, the students English competence will increase or improve significantly. The use of scientific approach not only bring the students to be more active in learning English, but also urge the students to convey or express their idea well and fluently. The ability to manage idea well and fluently has big contribution toward the fluency and accuracy of speaking English.

## 4 Conclusion

Scientific approach makes the students to be more enthusiastic in learning English. Through scientific approach, the students learn frequently English both in and out of class. Besides, the students can express their idea in flexible without boiler or pressure. It emphasizes to student centred learning. In scientific approach, the students to be more aware with their all competencies, namely cognitive, affective, and psychomotoric. It helps the students to master not only theories of English but also comprehend English practically. In applying the scientific approach, the teacher has a significant role in English learning success. The teachers must be able to decrease the students' mistakes and give feedback without decreasing the students' motivation. Learning process must cover three domains, affective, cognitive, and psychomotoric. There are several activities implemented in teaching English based on scientific approach, namely obsrvation, asking, trying, associating, analyzing, and commnicating. Those activities increase students' motivation in learning English. The students are really interested on the activities used or implemented in scientific approach.

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