THE IMPLEMENTATION OF SCIENTIFIC APPROACH TO TEACH SPEAKING TO JUNIOR HIGH SCHOOL STUDENTS

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Abstract
Scientific Approach, employed in 2013 Curriculum, comprises of six steps: observing, questioning, experimenting, associating, communicating, and creating (OQEACC). This case study research article is about Scientific Approach implementation to teach speaking, in which the participants are two English teachers and seventh grade students in a junior high school in Surakarta, Central Java. The instruments used are documentations, observation, interview, and questionnaire. The data was analyzed through Interactive Model of Data Analysis. The findings include: (1) the teaching documents, consisting of syllabus, lesson plan, materials, and evaluation are made appropriately according to the rules of constructing scientific approach based teaching documents set by the government; (2) the steps of scientific approach in the classroom are not always completely implemented and do not always run in the order of OQEACC, moreover the questioning step does not happen in the class; (3) types of teacher-student interaction are imitative, intensive, responsive, transactional, and interpersonal; while types of student-student interaction are intensive, transactional, interpersonal, and extensive; (4) the difficulties found are: making students ask question in questioning step; the condition that students are not courageous enough to speak, having low inquiry skill, and limited knowledge in English makes them not able to produce spoken English well; and the limitation of the course book content (5) the students’ achievement on speaking shows that 87.93% of 116 students have scores which are above the passing grade determined by the school, which is 67. From the finding, it is known that there are some points to notice toward scientific approach implementation, such as the completeness and the sequence of scientific approach steps, the difficulties, and the materials.

Keywords: Scientific Approach, 2013 Curriculum, speaking, junior high school, case study.

INTRODUCTION
Curriculum is a significant component in education system. It is used as the main reference to undergo teaching and learning process. English learning in Indonesia has been developed from time to time. Previous curricula, such as School-based Curriculum and Competency-based Curriculum, had been developed and implemented in Indonesia for the betterment of education in Indonesia. Then, The 2013 Curriculum is implemented and expected to be the best curriculum as it employs and develops students’ inquiry skill in learning language by employing scientific approach as its tool.

Research conducted by Tuenter, Biemans, Tobi, and Mulder (2013: 23) cited the definition of inquiry-based learning stated by National Research Council that is a multifaceted activity that involves observations; posing questions, examining books and other resources of information to see what is already known; planning investigations; reviewing what is already known in the light of experimental evidence; using tools to gather, analyse and interpret data; proposing answers, explanations, and predictions; and communicating the results. The scientific approach take important part in students’ learning as it helps them to think critically and acquaint to problem solving skill. Moreover, in their future job, critical thinking and problem solving skill are incredibly needed. Lane (2000: 606) highlights the need of student’ job-career plan and see high schools as ‘the bridge between the home and the work place or college’. In other words,
the statement means that junior high school and senior high school are the place where students prepare for their job-career plan. In line with this, scientific approach which employs ‘critical thinking, decision making, problem solving, and planning models’ (Lane: 607) skill are needed in prepare them for their future professional career.

In 2013 Curriculum, the stages of scientific approach employed in the teaching and learning process are simplified into observing, experimenting, questioning, associating, and communicating. These stages of activity are pedagogical device that will encourage students to activate their cognitive, affective, and psychomotor in integrative way. The implementation of scientific approach in education is intended to make students learn the factual things happening in universe, and to avoid them from untruthfulness that is often been taught before in teaching and learning process. 2013 Curriculum is however a challenge for educators to implement it. They are not suggested to merely give material to students without bringing them into a process of inquiry.

Different from the previous curricula, in 2013 Curriculum speaking skill have equal portion compared to three other skills in English. On The students’ handbook based on 2013 Curriculum composed by the government, the assessment given to students is more to enhance students’ speaking skill. A lot of examples on conversation to be practiced by students are provided. In this students’ handbook, discourse on speaking is mostly found. Accordingly, the realization of the speaking learning needs to be observed, particularly, the implementation of scientific approach on speaking activity in English lesson. 2013 Curriculum, the latest trend in curriculum implementation, has its significance and drawback which are not yet explored. Specifically on its interactive process in speaking activities during the English lesson. Scientific approach which is interrelated with the newest curriculum is hoped to make betterment in students’ learning development.

Curriculum stated by Richards (2001: 2) is a specification on the content of a course of instruction and list what will be taught and tested. While a syllabus describes the elements that will be used in planning a language course and provides the basis for its instructional; focus and content (2001: 152).

Discussing about scientific approach means relating to several terms like discovery learning, inquiry-based learning, problem-based learning, inductive learning, and so forth. 2013 Curriculum use scientific approach in its learning. The approach is believed as a virtuous way to grow and develop behaviour, skill and knowledge of the students. In applying scientific way, inductive reasoning is used more rather than deductive reasoning. Based on Stevens (1983: 1-2) inductive approach is defined as a teaching approach which moves from specific to general things. The inductive reasoning is seeing phenomenon, or specific situation and then making conclusion entirely. This approach help students to think critically, actively, and theoretically.

Based on the Minister of Education Regulation Number 81 A/2013 in the 4th Enclosure (Peraturan Menteri Pendidikan dan Kebudayaan Nomor 81 A tahun 2013 lampiran IV) The stages of instruction in scientific approach are elaborated into 5 steps. They are observing, questioning, experimenting, associating, and communicating. However, according to Direktorat Pembinaan SMP (Junior High School Training Director) (2013) and Priyana (2014) as cited in Priyana (2014: 291), the five steps of scientific approach are completed with a step, the creating step, learning language does not end when the students already learn the features of the targeted text. Their knowledge about the text should be used to comprehend and create texts. Learners must be given a lot of opportunity to communicate thoughts using the newly-learned knowledge. The messages they obtain from texts and the texts they create can be further communicated to others orally and/or in writing.
Speaking is one of skills in English that is essential in communicating someone’s thoughts or idea. Hornby (1994: 398) said that speaking is expressing ideas or feelings using language. Furthermore according to Brown (1994: 116), speaking is an interactive process of constructing meaning that involves producing and receiving and processing information. Another explanation stated by Harmer (2008: 269) is that speaking is the ability to speak fluently presupposes not only a knowledge of language features, but also the ability to process the information and language. Based on the definitions above, it can be summed up that speaking is communicating someone’s thought, ideas, or feeling which is done in an interactive process that presupposes the ability to process information and language.

While learning to speak, students deal with several problems. According to Ur (1996: 121), the problems faced by students in speaking are: (1) inhibition, in speaking students deal with inhibition as they are required to express “real-time exposure” to others. When they have to perform spoken language to audience, they are worried of making mistake, fearful of making criticism or losing face, or simply shy of the attention that their speech attract other’s attention; (2) nothing to say, students can also deal with the problem of not having anything to be said. Besides guilty feeling of the requirement to say something, they do not have reason to express themselves; (3) low or uneven participation, some students talk dominantly in class and the others only take little time to express themselves. In group that is larger, this condition makes students who are not dominant only have little time. As a result, they speak very little or not at all; (4) mother-tongue use, condition that commonly happens is that students incline to use mother tongue, which is more familiar and comfortable to use it and they feel ‘less exposed’ whenever they use it. It is quite hard to make the students keep to the target language when they are in group.

According to Brown (2000: 271), interaction that happens among students in the classroom is classified in some types: (1) imitative, it is the ability to simply repeat a word, phrases or a sentence; (2) intensive, students are expected to demonstrate their comprehension of semantic properties as well as prosodic elements: for example, directed response tasks; reading aloud; sentence and dialogue completion; and limited picture-cued tasks; (3) responsive, it refers to a kind of speaking which requires interaction and test comprehension, and are limited in very short conversations; (4) transactional (dialogue), transactional is an extended form of responsive language. Conversations, for example, may have more of negotiated nature to them than responsive speech does; (5) interpersonal (dialogue), it is carried out more for the purpose of maintaining social relationships than for the transmission of facts and information. These conversations are a little trickier for learners because they may involve some or all the factors, such casual register, colloquial language, emotionally charged language, and slang; (6) extensive (monologue), students at immediate to advance levels are called on to give extended monologues in the form of oral reports, summaries, or perhaps short speeches. Extensive oral production tasks (i.e., monologue) include speech, oral presentation, and storytelling.

Based on the background of study above, the research questions are formulated to be the direction of the extent of the research: (1) How do the teaching documents (syllabus, lesson plan, materials, and students’ assessment) in accordance with the ones set by the government which are scientific approach based?; (2) How do the stages of the teaching English particularly speaking in accordance with the ones set by the government which are scientific approach based? (3) How does the interaction go? (interaction among students and interaction between teacher and students)? (4) What are difficulties experienced by the teacher when implementing 2013 Curriculum in teaching English,
especially speaking skill and what solution is used by the teacher to solve the problems?; (5) How is the students’ speaking achievement like in 2013 Curriculum?

RESEARCH METHOD

Research was conducted by using case study method. Case study as defined by Silverman (2005: 126) and (Heigham & Croker, 2009: 68) is a study which the phenomenon is studied in detail. Merriam (1999: 78) states that case study attempts to shed light on a phenomena by studying in depth a single case example of the phenomena. Another explanation stated by Yin (2003: 13) is that case study research as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.

The sample used to conduct the research is purposive sampling as the researcher chooses a junior high school in Surakarta, Central Java school which has been piloting 2013 Curriculum. The research was conducted in term 2 of 2014/2015 academic year, on May and June. It was conducted in two meetings in each of four classes. In each meeting, the observation lasted for 80 minutes. The agreement of 2 times observation in each class was decided by both teachers. Thus there were 8 meetings of the observation. The subjects of the research are grade 7 students and two English teachers in that school. According to the list of National Examination result rank in 2014, students in that school are classified as students with low rank. Based on that fact, the researcher observed how scientific approach was implemented to students with relatively low rank. The data were obtained through 2 informants, the teachers and the students. The researcher observed two English teachers. Whereas two students from each class were interviewed. The data collected were the teaching documents by using data documentations technique; the field note of the stages of scientific approach implementation by using observation; interaction among students and teachers by using observation; teacher’s difficulties by using interview and questionnaire; the background information of the teachers by using questionnaire; students’ activities in class by using interview; and the students’ achievement by using data documentations. The kinds of triangulation used in this research are source triangulation and method triangulation. The data analysis was done by using interactive model of data analysis (Miles & Huberman, 1992) which means data is done continually and repeatedly in which data reduction, data display, and conclusion are series of analysis that come afterward from one to another (p.17).

RESEARCH FINDINGS AND DISCUSSIONS

The findings are summarized and elaborated in sequence based on the research objectives in table 1.

Table 1. Summary of Findings

<table>
<thead>
<tr>
<th>Points of the Research</th>
<th>Summary of Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teaching documents</td>
<td>a. The teaching documents which include the syllabus, lesson plans, materials, and evaluation were organized in accordance to the regulations set by the government which is scientific approach based. Keyword: syllabus, lesson plan, teaching material, evaluation, systematic, complete.</td>
</tr>
<tr>
<td>(syllabus, lesson plan, materials, and students’ assessment)</td>
<td>b. Classroom activities in each step of scientific approach are elaborated in both syllabus and lesson plan. Keyword: lesson plan, Scientific Approach steps, learning procedure.</td>
</tr>
<tr>
<td></td>
<td>c. The syllabus and lesson plan included 5 steps of scientific</td>
</tr>
</tbody>
</table>
1. The Accordance of the Teaching Documents (syllabus, lesson plan, materials, and students’ assessment) with the Scientific Approach Based Teaching Documents Set by the Government

Both teachers have compiled documents which are complete and systematic according to the standard documents regulated by the government which is scientific approach based. However, the teacher compiled syllabus and lesson plan by using the previous syllabus and lesson plan standardized by government, which only encloses 5 steps of scientific approach without creating step. The creating step is the step that is used

| 2. The Scientific Approach stages in teaching speaking. | a. Characteristically, the scientific approach steps in each meeting were not done in the order of OQEACC. Keyword: scientific approach steps, observing, questioning, experimenting, associating, communicating, creating.  
| b. Not all steps were done in the lessons. A step, The ‘questioning’ step did not happen in class. Keyword: scientific approach steps, observing, questioning, experimenting, associating, communicating, creating.  
| c. The most difficult step to implement was the ‘questioning’ step. Keyword: scientific approach steps, observing, questioning, experimenting, associating, communicating, creating. |
| 3. The interaction (teacher-student interaction and student-student interaction) | a. Types of teacher-student interaction in class are imitative, intensive, responsive, transactional, and interpersonal.  
| b. Types of student-student interaction in class are intensive, transactional, interpersonal, and extensive type. |
| 4. The difficulties experienced by the teacher in teaching speaking skill and the solution | a. The teachers deal with the inadequacy of the course book issued by the government, When English Rings The Bells (WERB). Keywords: difficulty, teaching documents, course book, teaching materials, supplementary materials.  
| b. It is not an easy work for teacher to cause student to ask question in questioning step. Keyword: difficulty, Scientific Approach, Scientific Approach steps, questioning step.  
| c. Teacher deal with students who were not courageous and not able to speak using English, and have inadequate knowledge in English. Keyword: difficulty, difficulty in speaking students’ difficulties. |
| 5. The students’ speaking achievement in 2013 Curriculum | There are 87.93% of 116 students whose speaking grade are above the passing grade determined by the government, which is 67. Keyword: students’ achievement, speaking |

approach. They were observing, questioning, experimenting, associating, and communicating step. Keyword: syllabus, lesson plan, Scientific Approach steps, learning procedure.  

They were observing, questioning, experimenting, associating, and communicating step. Keyword: syllabus, lesson plan, Scientific Approach steps, learning procedure.  

d. Teachers mainly used When English Rings the Bell (WERB) course book in delivering the lesson and also add materials from other sources. Keyword: teaching materials, coursebook, When English Rings the Bell (WERB).  
e. The evaluation covered the assessment on cognitive, psychomotoric, and affective domain. Keyword: evaluation, assessment, cognitive, psychomotoric, affective.  

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in real life. Thus it will be more beneficial when teacher compose a lesson plan by
arranging the creating step in the procedure of teaching and learning process.

Regarding to the materials used in class, both teachers use coursebook issued by
the government. In fact, students have their own prerequisite in learning which can not be
simply accomodated by the coursebook. The materials in this book is insufficient,
according to both teachers. In some meetings, the book was taken for granted. Ur
(1996:184) stated that a coursebook should provide texts which are likely to be of an
appropriate level for most of the class. Similar to what Teacher W and Teacher U said
about the inadequacy of the materials in the WERB coursebook, Ur (1996: 185) affirmed
that every class (in fact, every learner) has their own learning need: no one coursebook
can possibly supply these satisfactorily. Because of the inadequate materials in the book,
the teachers look for supplementary materials. Teacher W and Teacher U provided
materials which were appropriate to the condition of students in this school.

2. The Accordance of the Stages of Teaching and Learning in the Classroom with the
Order of Scientific Approach

The observing step is done by doing several activities such as reading, listening,
scrutinizing, and watching. According to teacher’s handout issued in the teacher training
of 2013 Curriculum, what is needed to prepare by students and teacher in observing step,
tool or instrument that is used may be in the form of checklist, rating scale, anecdotal
record, periodic record, and mechanical device.

In questioning step, typically students in Teacher W and Teacher U’s classes
did not have any questions. The fact that students do not ask any questions might be simply
because “they cannot think anything to say” (Ur, 1996:121). They might really do not
have questions in their mind. However, when they dealt with assignment, they had to
know English vocabularies quite much and know how to express their idea in English.
Thus they frequently asked about English vocabularies and how to say their Indonesian
sentences in English.

In experiment step, students do a practice to implement what they have observed
before. This step can be done by acting out what the students learn in a video, doing
something what the teacher asks them to do, imitating what they hear from teacher,
describing something by looking the text they have read before. In this step, students can
also spontaneously express what they think and feel toward a certain picture spokenly.
The idea of experimenting step is that students internalize the knowledge they have just
acquired. This step is aimed to make students obtain not only knowledge but also
authentic result of learning.

The concept of associating step in scientific approach is that students can classify
data that they get from several sources and associate some events to become a memory
in their thoughts. For example, to enhance students’ learning toward a particular kind of
text, students learn the linguistic features used in a the text, that is by reading various
adjectives, imperative verb, etc. Students can also be given several examples of text with
the same genre. First they read a text and then they read the second text and check what is
missed in the second text compared to the first one. Comparing several text with the same
genres makes students get additional knowledge. Those additional knowledge makes
students have complete understanding of certain theme.

After students do several steps, observing, questioning, experimenting, and
associating, they are expected to have enough understanding and can obtain a work that
can be presented in class. Communicating step occur not only spokenly but also writtenly.

The creating step is done not only after students have their attempt of performance
in front of their teacher and friends, but it can also be after students read and scrutinize to
a particular kind of text. Creating step is flexible to be done in class or outside the class. For example, students in Teacher W’s class were asked to make instructional sentences at home that is to be presented later in front of the class. Creating step can also be done with preparation or spontaneously, and is not limited to a personal involvement activity. The step can be done by collaboration in group or by discussing with one another.

Based on the findings, it can also be concluded that the steps implemented are incomplete and do not always in order. When the steps happened not in order, then the process of scientific thinking does not go well. In fact the scientific approach steps are integrated and should be done in order. All of the steps can not be separated one another since the sequential integration will make a process which is called scientific process. Moreover, the finding also reveals that students did not know and even did not ever hear about scientific approach before. As a result, students do not know what they should do in 2013 Curriculum, especially in implementing scientific approach.

3. The Interaction (Teacher-Student Interaction and Student-Student interaction)

Types of teacher-student interaction in class are imitative, intensive, responsive, transactional, and interpersonal. While types of student-student interaction in class are intensive, transactional, interpersonal, and extensive type. In imitative type, teacher mostly read simple phrases or sentences in a dialogue and then the students repeated after the teacher. In doing this, students learn the pronunciation and the intonation of each word. This type of interaction is limited in the way the interlocutor does not share their own idea. However, it is easy and possible for teacher to check and correct students’ pronunciation directly. The imitative interaction can be done by using video which show native speaker’s speech, whom learners can learn the accurate pronunciation.

While intensive interaction, as Brown (2004: 147) defined, it is ‘no more than a sentence’ and mostly in the form of ‘cued tasks’ which directs the interlocutor into ‘a narrow band of possibilities.’ Based on the observation in the classroom, students practiced intensive interaction by uttering imperative sentence to their peers. In another meeting, the intensive oral production occured when students read aloud a certain text. Though it was more than a sentence, but the idea of intensive interaction here is that what the students’ oral production is ‘controlled.’

The responsive type of interaction was done when teacher gave simple questions and the students gave relatively short answer. This kind of interactive is in line with what Brown (2001: 165) said,

“...the theories of communicative competence emphasize the importance of interaction as human beings use language in various contexts to negotiate meaning, or simply stated, to get an idea out of one person’s head and into the head of another person and vice versa.”

Interaction between two interlocutors does not only happen with long conversation, or negotiation, but also can happen by simply answering question just to get an idea out of one person’s head. This is as well similar to what Teacher U did in class, when she asked who students’ idol teachers are. The students then simply answered the question.

Regarding to the definition of transactional interaction, Brown (2004: 142) stated that the idea of a transactional dialogue is that the aim is ‘exchanging specific information.’ Thus by doing this kind of interaction, it is hoped that students can practice their speaking skill by exchanging information. In transactional interaction, the students usually used their first language. For example when they asked about the page of the book they should open. Or it was when they dealt with an assignment, then they asked their teacher about what they should do in the assignment with the teacher, or the
translation of some Indonesian words. Different from transactional interaction, interpersonal interaction has a purpose to ‘maintain social relationship’ where ‘oral production can become pragmatically complex’ because there is a demand in using ‘casual register, colloquial language, ellipsis, slang, humor, and other social-linguistics conventions’ (Brown, 2004: 142).

In extensive type of interaction, teacher usually uses this sort of interaction become a deliberative task, in which they prepare the evaluation and grade students’ performance. For example, in Teacher W’s class, students were asked to make a monologue based on the dialogue they had read before. After that, the monologue should be presented in front of class. Teacher U also instructed her students to make a monologue and then present it in front of the class. In doing this task, students explore their ability in speech production. On the subject of learning through interaction, according to Donato (2000), Young & Miller (2004) as cited from Li (2011: 147) from a sociocultural perspective, learning is conceptualized as participation and negotiation rather than knowledge acquisition. In conclusion, interaction helps students in learning, because it requires students to participate and negotiate which gives them practice and enrich them in learning.

4. Difficulties Experienced by the Teachers when Implementing 2013 Curriculum in Teaching English Especially Speaking Skill and the Solution

Students usually do not ask any question to teacher as they are not brave enough to ask questions to teacher. Even in Bahasa Indonesia, they still did not utter any question. Besides, the difficulty is also found in communicating step. To perform assignment spokenly, students have difficulties in obtaining utterance. The limited knowledge that they have do not work enough to facilitate them expressing spoken language. Most of the students only know few vocabularies. They need to learn more vocabularies and it will be more effective if they learn it appropriately. Next, the fact that most of students do not have sufficient vocabularies gives undesirable effect in teaching speaking. This difficulty in teaching speaking can be solved by teacher by understanding the strategies in teaching vocabularies. According to Nation and Newton (1997: 238, 239), focusing learners’ attention on the high-frequency words of the language gives a very good return for learning effort because without these it is not possible to use English in any normal way. It is beneficial and appropriate for students to comprehend high-frequency words as these are “relatively few in number, are essential for effective language use and give a very good coverage of text” (Nation & Newton, 1997: 240).

Knowing many high-frequency words can help them deal with assignments, especially in performing speaking ability.

In real condition, speaking skill as defined by Bygates (1987: 3) is that not only gathering sentences in the abstract, but ‘producing them adapting them to the circumstances.’ This definition denotes ‘making decisions rapidly, implementing them smoothly, and adjusting our conversation as unexpected problem appear in our path.’ Here the difficulty faced by students in learning to speak does not end in the comprehension of knowledge, but in the way the students are able to use the knowledge in producing oral performance. Besides, students are unwilling to speak. In the meetings, the speaking activities are dominated by those who had relatively high performance ability in speaking. The chance to perform spoken language ability is benefited only by few students. According to Ur (1996: 121), these are what a teacher can do to solve some of the problems in speaking: (a) Using group work; (b) Creating activity that is based on easy language; (c) making a careful choice of topic and task to stimulate interest; (d)
giving some instruction or training in discussion skills; (e) keeping students speaking the target language.

The difficulty found is also on the use of the course book, WERB. The course book does not adequately fulfill the students’ need, especially in speaking, though in fact, it mainly contains of speaking activities. The materials on speaking enhancement are few that there is only some speaking text to practice.

According to Ur (1996:121), these are what a teacher can do to solve some of the problems in speaking:

a. Use group work
   The notion of practicing oral skill in group work instead of in full-class set-up is that group work lower the students’ inhibition. Although in fact teacher will not supervise all students speech and they may slip into their native language, but benefit of the realization of oral practice is likely to be far more than in the full-class set up.

b. Base the activity on easy language
   Language used in discussion should be lower than that used in intensive language learning activities. The language should be easily recalled and produced by students, so they will experience lower hesitation, fluent utterance.

c. Make a careful choice of topic and task to stimulate interest
   In general, when the purpose of the discussion is made clearer, then students will be more interested.

d. Give some instruction or training in discussion skills
   When in group discussion, then include instructions about participation when introducing it. For example, give instruction to students to ensure that every student in the group get involved in the discussion; select a leader to each group who will control participation.

e. Keep students speaking the target language.
   One of the group should be chosen to be a monitor who reminds other students to use target language and give report to teacher on how well the group keep to use the target language. The awareness that someone is supervising makes students to be more careful. Besides, the best way to keep students speaking the target language is making continuum presence of the teacher among the students and modelling the students the language used.

5. The Students’ Speaking Achievement in 2013 Curriculum

The students’ speaking achievement in 4 classes which are taught by Teacher W and Teacher U are presented in table 3 and table 4.

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of Students</th>
<th>Passing Grade (PG)</th>
<th>Students’ Speaking Skill Average Grade</th>
<th>Students above PG</th>
<th>Students failing PG</th>
<th>Highest Grade</th>
<th>Lowest Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>30</td>
<td>67.00</td>
<td>70.00</td>
<td>18</td>
<td>12</td>
<td>80.00</td>
<td>60.00</td>
</tr>
<tr>
<td>7A</td>
<td>(2.68/ B-)</td>
<td>(2.80/ B-)</td>
<td></td>
<td></td>
<td></td>
<td>(3.20/ B+)</td>
<td>(2.40/ C+)</td>
</tr>
<tr>
<td>Class</td>
<td>29</td>
<td>67.00</td>
<td>73.62</td>
<td>27</td>
<td>2</td>
<td>90.00</td>
<td>65.00</td>
</tr>
<tr>
<td>7C</td>
<td>(2.68/ B-)</td>
<td>(2.94/ B)</td>
<td></td>
<td></td>
<td></td>
<td>(3.60/ A-)</td>
<td>(2.60/ B-)</td>
</tr>
</tbody>
</table>

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In speaking skill, the average of students’ grade in 7A class is 70.00 or 2.80 or B-. There are 18 students who get above 67.00. It means that 60% students in 7A class passed the speaking skill grade. In addition, there are 12 students or 40% who get under 67.00.

Students in 7C class have higher speaking skill average grade than 7A students. The average of students’ grade is 73.62, or 2.94 or B. The number of students who get above 73.62 is 27 students, or it can be said as 93% of the total number of students in 7C class. While, there are two students who get under the passing grade.

Table 4. Students’ Speaking Achievement in Teacher U’s Class

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of Students</th>
<th>Passing Grade (PG)</th>
<th>Students’ Speaking Skill Average Grade</th>
<th>Students above PG</th>
<th>Students failing PG</th>
<th>Highest Grade</th>
<th>Lowest Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>7E</td>
<td>28</td>
<td>67.00</td>
<td>3.00</td>
<td>28</td>
<td>0</td>
<td>95.00</td>
<td>76.00</td>
</tr>
</tbody>
</table>

In 7E class, the students’ speaking skill average grade is 82.86 or 3.32 or B+. There are 15 (53.57%) out of 28 students who are above 83. While there are two students who get lowest grade, 76.00 or 3.04 or B+ and a student who get highest grade, 95.00 or 3.75 or A-. In speaking skill, students were graded by practicing dialogue and monologue.

In another class taught by Teacher U, 7G class, the average of students grade in speaking is 77.00 or 3.08 or B. The number of students who are above average grade are 15 students. The lowest grade in this class is relatively high, 75.00 or 3.00 or B, which is above the passing grade.

From the finding, it can be said that by implementing scientific approach to teach speaking, there are 102 students or 87.93% whose speaking grade are above the passing grade.

CONCLUSIONS AND SUGGESTIONS

According to the research findings and discussion in the previous chapter, there are several points of conclusion. First, the teaching documents are generally complete and in accordance with the theory of scientific approach. But in the syllabus and lesson plan, the creating step of scientific approach is not stated. Besides, the teaching material mainly used is the WERB coursebook, that in fact it does not sufficiently supply texts and exercises needed by students.

Second, the implementation of scientific approach in the classroom generally runs well. The steps are flexible that they are undergone not in sequential order. Some steps may also be repeated in a meeting. However, the questioning step mostly does not happen in the class. The students do not ask any question. Particularly after the observation step, which the lesson plan suggests that after the ‘observing’ step, the questioning step is hoped to happen.

Third, the interaction that happens in the classrooms comprises several kinds of interaction. They are imitative, intensive, responsive, transactional, interpersonal, and
extensive interaction. Several kinds of interaction happen unnaturally. For example, rather than ordering the students to make their own dialogue, teacher teaches students to practice a particular dialogue made by teacher.

Fourth, there are some difficulties found in the implementation of the new curriculum. One difficulty is in developing students’ inquiry skill. Especially in the implementation of questioning step of scientific approach. Another difficulty is in teaching speaking to students. Many students are not courageous enough to speak. They are also not able to produce spoken English well as their knowledge is limited. Besides, the teachers also have difficulty in providing materials as the main material, WERB does not supply enough examples of text.

Fifth, the students’ speaking achievement show that by implementing scientific approach, there are 87.93% of 116 students whose achievement are above the passing grade.

Based on several points of the conclusion, some points of the implication are drawn:
1. Though in real class, the creating step is undergone, it will make teacher more prepared when the activities of the creating step is stated in the lesson plan.
2. Teachers need to add the teaching materials from many kinds of sources. Based on the social background of the students, which do not get enough knowledge outside of school lesson, they need supplementary materials to improve their background knowledge.
3. The way the steps of scientific approach are not done in sequential order makes the process of thinking scientifically does not happen. It might be caused by the lack opreparation of the teacher in conductinga meeting. Teacher needs to use the lesson plan to base their teaching. Thus the activities done in the classroom are according to the sequential steps of scientific approach. When teacher is accustomed to make the meeting based on what is written in lesson plan especially on the scientific approach steps, then the students will also be familiar and accustomed to the scientific way of thinking.
4. In the implementation of scientific approach steps, when the questioning step does not occur, it proposes into several signs. The students may not be brave enough to ask question or they do not have any question to ask. When students do not have questions to ask it may signify that they do not undergo critical thinking process. In fact, the scientific approach is conducted to activate students’ critical thinking. Questioning is the core of the scientific approach. In the implementation of scientific approach, students are hoped to naturally ask questions during the learning process. When this does not happen, the teacher should give them activity that can increase their inquiry skill.
5. The interaction happens in the classes iss actually good step for the next process of speaking. However, it will be better when the interaction happens natural. For example the dialogue practiced by students happen not because they memorize a passage of dialogue before, but the conversation happen naturally. It then can train students’ critical thinking and creativity.
6. When students have difficulty in speaking, especially when they are not brave enough to speak in English, the speaking assignment can be made easier at first to build students’ confidence.
7. The fact that most of the student have grades which are above the passing grade can be a sign that scientific approach should be implemented and developed more in the learning process.
By regarding to several points in the conclusion and implication, the suggestions are composed:

1. In implementing scientific approach, teacher need to plan activities of creating step in the lesson plan as it will guide them to teach students. Besides, to make the questioning step occur like what it is planned, teacher also need to develop students’ critical thinking by giving some activities to increase it. The teacher should also notice and consider the class condition when implementing scientific approach to make it occur naturally.

2. In providing materials, teacher should compile materials that are appropriate to students’ need and condition. Besides, it is important to make student get more knowledge as much as possible because most of them do not get it outside school time.

3. Not only the materials, the activity in the classroom should also be based on students’ characteristics. In the previous section, it is revealed that most students have problem in self-confidence. Thus, teacher can do several ways such as using group work, creating activity based on easy language, making a careful choice of topic and task to stimulate interest, giving some instruction or training in discussion skills, and keeping students speaking the target language.

4. The speaking performance in class is increased by conditioning the students to feel confident to speak in class. It can be done by giving students certain speaking assignment that is relatively easy at first. When the students can do it, then it will enhance their confidence. Besides, the students’ interaction can be made more natural as it will avoid them from only memorizing a text and speak it.

REFERENCES


