INTEGRATING CRITICAL THINKING
IN TEACHING ACADEMIC WRITING

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Abstract
One of targets issued by UN through SDGs (Sustainable Development Goals) in education is ensuring that all youth and adults have to achieve literacy and numeracy skills through long live education for both men and women. It is due to facts that education does not nationally wide spread among the developing and mostly, the third world countries. In those countries, the citizens whom literacy and numeracy skills are built up well are only them whose motivation in learning is high. Simply, it can be said that literacy awareness of those countries is unsatisfying. Realizing this fact, Indonesian government revises the National Curriculum of 2013 by the year 2017 and puts some important issues in learning process: (1) integrating five characters building; (2) elaborating literacy skills and 21st century skills (4C); and (3) integrating High Order Thinking Skill. Not only applied in lower education, these rules can be adopted also in higher education, such as university. Based on the literacy awareness and 4C skills that have to be developed during learning process, this research is aimed at increasing students' soft skills through integrated character building, literacy skills habit, and critical thinking awareness in academic writing class. By enrolling action research to gain the objectives and taking whole semester, this research works on increasing students' autonomy and honesty in learning, literacy in reading through article journal comprehension, and critical thinking through article journal summarizing.

Keywords: critical thinking, teaching writing, summarizing, article journal

1.   INTRODUCTION

The shift of MDGs (Millennium Development Goals) which expired in 2014 into SDGs (Sustainable Development Goals) which was launched in 2015 brings more specific targets and indicators in every fields of humanity including education. UN sets the goal in SDGs as achieving inclusive and equitable quality education for all including persons with disabilities, indigenous people, refugee children and poor children in rural areas in the end of 2030. One of targets issued by UN through SDGs (Sustainable Development Goals) in education is ensuring that all youth and adults have to achieve literacy and numeracy skills through long live education for both men and women. As member of UN, Indonesia adopts and adjusts the targets and indicators of SDGs with national development goals and local wisdoms. The Government had issued Decree No. 20/2003 about national education system. By this decree, the Government should hold some principles in education, (1) education is held democratically, fairly, without any discriminative actions and it needs to refer the values of human right, religion, cultural, and plurality in the systemically unity with open and heterogeneity system; (2) education has to be put as long life efforts of all citizens by giving good model, building willingness, and increasing creativity in teaching and learning process through culturing literacy skills (reading, writing, and counting); and (3) education is controlled and managed by quality management system issued by the related ministries and involving all members in community as stakeholders. Due to the obligation of reaching these national goals in education, the Government published some regulations. The primary regulation needed to be concerned is relating to

Indonesian Qualification Framework in education (IQF). IQF was published by the year of 2012 officially under the Presidential Decree No. 8/2012. It is functioned as standard for all level of educational system in Indonesia started from tertiary until higher levels and training institutions under authority of Education and Culture Ministry and Higher Education and Research Ministry. The standard deals with specification in qualification levels by which education learning outcomes and certificate of proficiency have to be referred. The vision of this IQF is improving the quality of Indonesian manpower and national competitiveness in facing the new era of global trading with all its challenges. Through IQF system, the Government can push the institutions holding higher education level and training institutions to give more focus on teaching and learning process in accelerating with market needs in both national and international contexts. Through IQF, the outcomes of learning will be able to struggle in global job market competition. In IQF, there are 9 levels of qualification which are stated basically on the competency in profession and competencies need to be posed for getting certain profession by learning in education and training institutions. Simply, IQF determines competencies that should be achieved in school and training institutions in order to get job. Each level of IQF provides descriptors formed from job competence and learning outcomes involving the development of knowledge and technology and the national characters building referring to Pancasila, Constitution of 1945, and Unity in Diversity.

2. LITERATURE REVIEW

IQF affects the policies in designing curriculum for either educational and profession training institutions under the authorities of two ministries; the Ministry of Education and Culture and the Ministry of Higher Education and Research. The first ministry is responsible for handling education with its curriculum on the fifth level qualification and below. Several curriculums have been designed and applied in the lower education levels. These curriculums are continually revised in order to meet the need of job markets. Normally, the Government publishes a new design of curriculum within ten years, so there will be enough time to apply and evaluate the curriculum whether it works or not. In fact, the development of curriculum for today educational system is maintained on political based. When the Minister of Education and Culture Ministry is changed or reshuffled, the policies in education for under sixth qualification level change too. Leaving that fact, the Government through its educational ministry issued a regulation on designing curriculum by the year 2013; public named this curriculum as Curriculum 2013 (in *bahasa*, it is known as K13). There were some problems when the Government officially applied this curriculum. Most of education experts agreed that this curriculum was applied widely for whole nation in hurry. The pilot project for K13 was not reflecting the wholeness of educational face among this country and it was not evaluated holistically yet. Naturally, there will be two sides, accepting and rejecting, when a new program is applied; and so it does with curriculum 2013. To prepare the action for K13, the Government did not do anything. Some policies in training for K13 were regulated and supported by huge funding. All components that support education system are socialized and trained the substances and how to implement the K13 in schools. In its effort to make betterment in education field, the Ministry of Education and Culture revised the K13 through regulation numbers 20, 21, 22, and 23 by the year 2016 and is acted by the year 2017. In this revision version, there are some renewing points in curriculum substances, especially in

learning process. The renewing points are (1) integrating characters building in learning process, mainly on five characters namely religious, nationalist, independent, cooperative, and integrity; (2) integrating literacy skills and the 21st century skills which is termed as 4C standing for Creative, Critical Thinking, Communicative and Collaborative); and (3) integrating High Order Thinking Skill in learning process. There are also some technical differences in acting the curriculum contrary to the first version of K13. In applying scientific approach, the procedure of 5M can be adopted not in series. The scientific approach is no longer the only way in teaching; by this revised curriculum teachers are freely to apply teaching method which is suitable with classroom context. Same as former curriculums, in this curriculum 2013 revised 2017, the objectives and the topics of learning are already determined or given by the Government. Teachers are encouraged to add some supplement materials to support the defined materials as long as those will be useful and have relation with objectives of learning; but they are not allowed to change the topics and materials given in curriculum. It is obviously realized that most teachers have no idea why the learning objectives and topics have to be like that? They miss the substances of IQF, the descriptors for each level, and so on. Different from the higher level institutions of education in which the Ministry of Higher Education and Research gives freedom for each institution to determine learning outcomes and competencies for learners as long as they can fill the requirement or standard given by IQF. The designed curriculum may vary due to characteristics that want to be appeared by the institutions or universities. As one of recognized nationally wide state universities, Sebelas Maret University (known as UNS) puts entrepreneurship as additional unique character for its outcomes. Based on this inner regulation, the study departments under the authority of the UNS Rector have to put entrepreneurship course when designing curriculum.

The English Education Department (EED) of Teacher Training and Education Faculty develops a curriculum that is line with IQF descriptors for level 6 (level 6 is a level for higher education institution or university outcomes, simply known undergraduate program) and local policies. The goal of EED is to create outcomes whose competencies are in English education, especially as English teacher, with excellent characters and entrepreneurship in English. To achieve that goal, EED designs a curriculum covering hard skills and soft skills that are managed in real field practices become life skills. The competencies in life skills become demanding since the IQF requirement is ensuring that the graduates are employable in job market nationally and internationally. The term hard skills cover the knowledge on English as language, English in education that are taught either as content subjects or skills practice subjects. The hard skills are listed clearly in subjects spreading of EED curriculum document. In another side, the term soft skills are referred to outcomes characters building that want to be developed. These skills are not taught independently but they are integrated in the process of teaching and learning hard skills. In K13, the term soft skills are noted as character skills. Supporting learners with soft skills is explicitly stated in descriptors of IQF level 6. Holmes (2014) noted that there are five soft skills that need to be built in higher education level. They are (1) collaboration: learners cannot stand alone in their effort to seek knowledge and apply the knowledge in careers; (2) communication and interpersonal skills: these skills deal with how to behave within communication, how to interact directly or indirectly in communication; (3) problem solving: this is the ability to diagnose and analyze the problem either in

academic or careers context, and also provide main solution and alternative solution for the problem theoretically and practically based; (4) time management: this skills relate to the ability of handling and manage the activities, which one has to come first; and (5) leadership: this is the ability to manage people both in college and work field. The ability to solve problem is clearly stated in descriptors of IQF for level 6. In IQF booklet which was published in 2012 page 27, the first descriptor for level 6 is stated that the outcomes are "capable of applying science, technology and art her/his expertise and is adaptable to various situations faced during solving a problem". In the second descriptor, the outcomes are required in "mastering in-depth general and specific theoretical concepts of specific knowledge and capable of formulating related problem solving procedure". In the third descriptor, the outcomes are required to "capable of taking strategic decisions based on information and data analysis and provide direction in choosing several alternative solutions". Related to skill in collaboration within group performance, the last descriptor notes that the outcomes can "responsible for his/her own job and can be assigned responsibility of the attainment of organization performance". Those descriptors implicitly and explicitly state that building soft skills is a must and integrated in learning hard skills. Underlying those descriptors, there are some soft skills need to be developed by EED students, such as analyzing, managing, thinking based on given information, collaborating, creative, and having responsibility. These soft skills go not far from demanded 21st skills as stated in K13 revision 2017 in which it is noted as 4C (Creative, Critical Thinking, Communicative, and Collaborative). Referring to research report about the 21st century transferable knowledge and skills released by US National Research Council in 2012, there is a definition on the 21st competencies as "as transferable knowledge and skills". It also classified the transferable knowledge and skills into three domains: (1) cognitive domain which has relation to reasoning and memory; (2) intrapersonal domain in which it manages behavior and emotion; and (3) interpersonal domain which focuses on communication and understanding. When the students of higher education have these skills, they will find ease in taking what was learned in a situation and applying it in another different situation to solve problem.

Underlying the urge of developing excellent characters building, EED permits all lecturers to design lesson plans in which the excellent characters building have to be integrated in hard skills teaching and learning process. As one of skill course that is taught in series, Writing holds important role in determining the quality of outcomes. Writing is not simply a gift, it is a learned behavior. Eric Lenneberg (1967) a psycholinguist argues that writing is the same as swimming, both of them are learned behaviors in which people can write when someone teaches how to write. Thus, writing becomes important skill in learning language. Writing as a product is result of certain procedures, started from thinking the topic, brainstorming, drafting, outlining, full text drafting, proof reading, editing, revising and finally, finishing, that requires specialized skills that not developed naturally. There are two approaches in teaching writing. The first is teaching writing as product. The objective of this approach is the duplication of model text. Teachers focus mainly on the final product of writing. It can be essay, report, article and any other forms of writing. The teachers provide the model for writing text and students have to duplicate the model and ensure that the grammar, rhetorical style, and outline are completely the same. The second approach is teaching writing as process. Today teachers give more attention on the process of writing. By this approach, teachers lead the students to build their own strategies in prewriting,

drafting, and rewriting. The students will be guided in stepping writing process rather than modeling text. The time allotment is given more on the process of writing revision. Among these approaches, it cannot be said which one is better than another. As a matter of fact, the product of writing is the main goal by which the students need to step the process of writing, from prewriting, drafting, revising, editing, and finishing. Quoting Brown (2001) process is not the end; it is the means to the end. Teaching writing is a unique art. Writing teachers are supposed not placing themselves as director whose orders cannot be denied. They are facilitator and coach for the students in learning how to write. Giving guidance for the students in engaging the process and product in writing, not demanding the students to use teachers' opinion in students' composition, and letting the students free in expressing their own thought are some duties for teachers as facilitator and coach in learning writing.

Writing is a hard skill formed by some other hard skills including grammar, rhetoric style, linguistic features (Brown preferred to use the terms of macro and micro skills). The competencies in writing courses of EED spread from the basic to advance level of writing. In the basic writing, students learn on developing idea in certain text types while in the advance writing, students compose theoretical review and article in academic sense. In academic writing, the ability on applying certain writing system is a need. The students have to apply the system correctly in their compositions; such as: how to quote, to cite, to paraphrase, to list the references, and so on. This is very important to avoid plagiarism. Plagiarism is an awful act in academic major. There are some steps in writing to avoid plagiarism; they are citation, quotation, and paraphrasing. While maintaining the hard skills, the lecturer of academic writing needs to maintain also soft skills to avoid plagiarism. The excellent characters can be developed by this course are honesty, autonomy, and responsibility. In doing academic writing, students have to be honest with their works. They do not cheat and copy from other works. They write their idea using their own expression. In autonomy, students are required to be independent in seeking the knowledge as the data for their academic writing. It is so because, in this course, students develop their own topic in which the topic is not given by lecturer. To write academically, students need to be responsible for the effort they do, the decision they take and so on. While the 21st century skills adopted in academic writing are critical thinking, creativity, communicative, and collaborative.

Developing students' critical thinking is the essential step in academic writing. In line with one of characters built in academic writing, that is autonomy, critical thinking is merely an autonomous awareness in learning process. It requires self consciousness in the attempts of searching "the truth" of such information. Concerning on the statement by Michael Scriven & Richard Paul, presented at the 8th Annual International Conference on Critical Thinking and Education Reform, Summer 1987 that "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action" will lead to the idea that critical thinking is not a skill that stands alone. It needs some supporting skills to shape critical thinking awareness. The contributing skills are conceptualizing, applying, analyzing, synthesizing, and evaluating by which those skills are gathered from the scientific process, *i.e*, observation, experience, reflection, reasoning, or communication.

Unfortunately, for the few semesters of academic writing courses lately in EED, there was no appropriate method for integrating critical thinking in academic writing yet. This gave impact to students' critical thinking awareness. They left some steps in their effort to give report after being assigned to read and comprehend some interrelated articles in published journals. For example, they did not do the process of synthesizing the essence of the articles and evaluating whether content of the article is suitable or not with their topic. They also did not try to find "second opinion" for the truth of information they gathered from reading articles. The final product of their writings was far from the expectancy of academic writing. Furthermore, the sense of plagiarism was much more giving color in the students' writing product. They have already taught on how to cite, quote, paraphrase; but it could not help them in avoiding plagiarism. They have less honesty and responsibility toward their own works.

Due to the importance of critical thinking in college and work fields, it is a demanding requirement that critical thinking awareness have to be developed by integrating it in academic writing. This research is aimed at increasing students' autonomy and honesty in learning, literacy in reading through article journal comprehension, and critical thinking awareness through article journal summarizing.

3. METHODS

In obtaining the objectives of the research, the researcher held a classroom action research. This kind of research is attempting at solving such problems arise in classroom, such as problems in applying method of teaching, using learning materials, and media to deliver learning material and support teaching method; and at improving such difficulties faced by either students in their learning process or teacher in her teaching process. Burns (1999:34) explains that the action research is a collaborative study in which it needs combination of people to carry out the research. Doing this research, the researcher was helped by a colleague as collaborator. We both designed a lesson plan in which in the learning steps, there were some steps showing the integration of characters building: honesty, autonomy, and responsibility and soft skills: critical thinking, creative, communicative and collaborative with hard skills in writing academically. The researcher was responsible in implementing the lesson plan while the collaborator sit in the class for observing the class situation and taking field note. The subject of this research was the 16 students in academic writing class of the fifth semester. It was conducted in academic year 2017 and took whole semester for doing so. The data was only collected by using qualitative method and it was analyzed through interactive model analysis as proposed by Milles and Huberman.

4. FINDINGS AND DISCUSSION

To obtain the goals of this research, the actions were run for 16 meetings in a cycle. There were different plans for obtaining the goals whereas the plans were implemented by the same action, integrating characters building, literacy habit, and critical thinking awareness in teaching hard skills of academic writing. This part discusses the findings based on the objectives of the research.

4.1 Integrating Characters Building

In planning the actions for increasing students' excellent characters, especially in honesty, responsibility, and autonomy, the researcher applied a helpful program in writing; that is Turnitin. Simply, Turnitin is a free online (internet-based) checker

plagiarism program in writing either for teacher or students. Firstly launched in 1997 in US by iParadigms, LLC; Turnitin goes worldwide as leading program in preventing writing products from others cheating. It also avoids plagiarism done by writers either consciously or unconsciously. This program is able in checking writing products or manuscripts with others worldwide writing products as long as they are published in the internet. In its program, there is a window for showing similarities identification of writing products. The use of Turnitin in academic writing gives benefit in grammatical errors and mistakes detection; it helps teacher in correcting students' writing in which teacher may use dialog box containing list of codes in grammatical errors and mistakes and add more codes when the dialog box has no codes she wants to use. Using another tool in the same dialog box, teacher may give comment on students' writing product; it will show the indirect interaction between teacher and her students. As a matter of fact, this program will help students in developing their autonomous learning because students can also check the grammatical errors and plagiarism by themselves. The formative feedback and originality detection programs may be used to increase students' critical thinking. In this program, students use the skills promoting critical thinking, such as: conceptualizing, applying, analyzing, synthesizing, and evaluating.

Turnitin checker program was used media for students to collect their writing product. In implementing Turnitin, lecturer assigned the students to make article journal summary every week. The students could not collect their summaries before lecturer opened the schedule for doing so. Turnitin program allows lecturer to have more than one class in which the students of certain class would only be given a class relating to. Only lecturer has the key to enter students in which class they have to be. The time for sending the summaries was closed three days before the meeting, hence, there was enough time for lecturer to correct, check similarity, and give comment of students writing products. The students can directly see the result of the checking and correcting after lecturer finishing and submitting the works. The students can learn how to revise their summary based on the lecturer's correction and comment autonomously. The correction had to be clear by the choice of grammatical errors and mistakes listed in dialog box and the given comments were guiding on what the students should do in revising their summaries. The activities of using Turnitin in class bring positive impact in building excellent characters. When the students gave their effort in revising their summaries because the indicator of originality of writing products were in red, it means they develop their honesty in writing summary by not doing plagiarism. They have to be more focus on how to avoid plagiarism by using citation, quotation, and paraphrasing. The students became more creative in wording. They trained to make some sentences for expressing an idea. They had to keep the origin idea "still there" rather than changing it with their own idea. When the students tried to revise their own summary based on lecturer's correction and comment; it would be the symptom that the students became more autonomous in learning. The autonomy was also developed when the students were free in deciding what topic article they want to develop and searching related articles supporting the topic they already chose.

4.2 Developing Literacy Habit

The more students sit in higher education, the more they have to develop their habit in literacy. In planning the activities for developing literacy habit in this research, the researcher integrated it by giving home assignment. The students had to seek article in published digital journals. The topic or theme of the articles they

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look for was based on their own topic they want to write in their writing products. For example, when a student interest in teaching Reading, she had to find out articles related to teaching Reading. They could not change the chosen topic because they had to build their thought since the first meeting. This requirement also built students' responsibility toward their own choice. By seeking articles repeatedly, the students were leaded to develop the habit on using literacy skills. They needed to read and locate for which articles will support their theme every week. When the action is taken repeatedly and regularly, it means developing habit potentially. Through this home assignment, the students were habitualized in using their literacy skills, especially in reading and writing their reports in the form of summary journal article.

4.3 Integrating Critical Thinking

Integrating critical thinking in academic writing can be done article journal summary assignment. This assignment was very helpful in developing EED students' critical thinking awareness. Since critical thinking needs actively process of formatting skills, such as conceptualizing, applying, analyzing, synthesizing, and/or evaluating, the article summary assignment has to lead to the use of those skills. (1) **Conceptualizing**. The students needed to read the article at glance. They had to skim first the article started from the title of article and abstract in order to find out the relationship of topic with their chosen topic. To find out the similarity and supporting of article journal means students have to use their skill in conceptualizing. They conceptualized what things relating and supporting their topic; what theories should be included, what researches can be modeled, and what research problems or questions can be formulated and so on. After defining these concepts, students had to locate articles in digital journals which contribute to the fulfillment of the defining concepts. (2) **Applying**. In the use of applying skill as a process of developing critical thinking, students applied the same or supporting concepts found in article journal in their product of writing. When they applied the concepts, they had to avoid plagiarism by using citation, quotation, paraphrasing, and correct reference. (3) **Analyzing**. After the students gathered all information based on the concepts they defined before, they needed to verify the information by which one should be in and what should be get rid of. For doing so, students needed to use analyzing skill. They analyzed which information were useful and which information were not useful although those information were taken based on the defining concepts. (4) **Synthesizing**. In this process of synthesizing, students derived substance from the some different information based on the same defining concepts. For example, the student took teaching reading as a topic for her final writing product; she had to conceptualize information relating to her topic; the next step was that student applied the concepts in her effort in seeking articles about teaching reading which would give contribution to her topic; after she gathered all information needed in teaching reading, she had to analyze the information and decided which information were useful and which were not; the next was that she constructed a meaning from some information about teaching reading that were collected from the same concept (in this case was the concept on definitions of teaching reading). (5) **Evaluating**. In this point, students had to give their judgment about the content of the article journal they read. The judgment, however, was still immature due to the students' knowledge and competencies. No matter whether the judgment was wrong or true; the important was that the students' effort in using their evaluation skill. In the last paragraphs of article journal summaries, students

were required to give their comment based on their evaluation on the article's content.

5. CONCLUSION

Teaching in higher education means preparing outcome with competencies needed to seek jobs. The competencies are not only hard skills but also soft skills by which the combination of both will be useful in creating life skills. Soft skills are not taught separately but they have to be integrated in teaching hard skills. In academic writing class, there are some excellent characters (honesty, autonomy, and responsibility), soft skills (critical thinking which is formatted from conceptualizing, applying, analyzing, synthesizing, and/or evaluating skills), and literacy habit (reading and writing) have to be developed. Developing these requirement skills in teaching academic writing class was done through home assignment in this case was writing summary from article digital journal that was collected trough Turnitin, an online plagiarism checker program. This implemented action was proven in increasing students' excellent characters, critical thinking, and literacy habit.

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