

## FORMATIVE QUIZZES TO IMPROVE INSTRUCTION, STUDENT'S PARTICIPATION AND UNDERSTANDING IN ACADEMIC WRITING

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### ABSTRACT

A combination of presentation and discussion as an instruction method is excellent per se. However if it is implemented in a classroom unceasingly without any other instruction variations, it might cause discouragement of students in their learning. To vary, there are a lot of instruction methods available to improve instruction as well as students' participation and understanding, one of which is formative quiz. A formative quiz is an informal test given to students as an assessment conducted continuously aimed at adjusting instructional practices in order to improve students' learning. In implementing formative quizzes as an instruction method, an investigation is conducted using classroom action research design operating two cycles. The first cycle is to measure the lecturer's instruction, and the second cycle is to measure the students' participation and understanding. Conclusively it is found out that formative quizzes have improved lecturer's instruction, students' participation and understanding in academic writing course.

**Keywords:** *Formative Quiz, Academic Writing, Classroom Action Research*

### INTRODUCTION

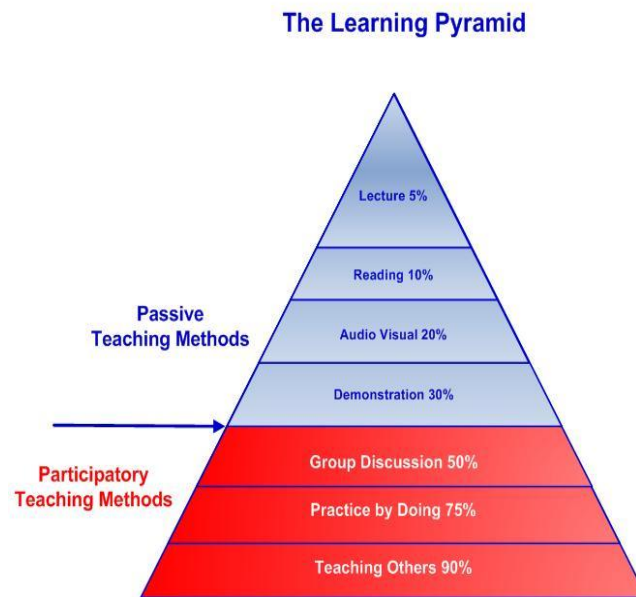
A brief preliminary study was conducted by means of informal interview before undertaking the research. It was found out that the majority of courses the students have taken was noticeably delivered using a combination of presentation and discussion methods. Each presentation is presented by a group of students who has been appointed at the start of every semester. The group presentation by students is then followed by a classroom discussion in which audiences ask questions about parts of the presentation that are not eloquently delivered, state arguments against

parts that they disagree, or make clarifications by giving more details or simpler explanations. The combination of presentation and discussion methods has become ineffective as it is implemented continuously without any meaningful variations. Various instructional methods are certainly required for a successful instruction so that the students participate actively and improve their skills considerably in the course.

In considering a new teaching method taken into implementation, it can be of paramount importance to reflect on the learning pyramid from National Training Laboratories,

Bethel, Maine, discussed in the work of E. J. Wood (Wood, 2015) as in

picture 1 below.



The pyramid portrays two types of instruction methods, namely passive instruction method which includes lecture, reading, audio visual, and demonstration; and participatory instruction method which involves group discussion, practice by doing, and teaching others. Based on that, this research is intended to

implement a new instructional method that encourages meaningful group discussion. As a trigger to encourage the desired meaningful discussion, formative quizzes are proposed in order to improve lecturer's instruction, students' participation and understanding in the course.

## LITERATURE REVIEW

### Formative Quiz

Lexically, one of definitions of quiz provided in Cambridge Advanced Learner's Dictionary is a short informal test. As a test, quiz might act as an assessment which Shepard (2000: 4) defines as a part of instruction to support and enhance learning, in contrast to giving grades to students or reports to an authority. Further, Shepard contends that assessment is not only a matter of tests and measurement courses,

rather a central in teaching methods courses.

According to Pedder & James (2012: 2) classroom assessment promotes three prominent dimensions for teachers, they are: *first*, promoting learning autonomy in which teachers widen scope for students to take on greater autonomy over their learning objectives and the assessment of their own and one another's learning; *second*, making learning explicit in which teachers elicit, clarify and respond to evidence

of learning, working with students to develop a positive learning orientation; and *third*, performance orientation in which teachers put a concern to help students comply with performance goals prescribed by the curriculum through closed questioning and the use of marks and grades.

As an assessment, quiz serves two functions, namely formative and summative. To gain a good understanding of what summative and formative are, several definitions of each will be presented in detail as follows.

Several definitions of summative by well-known educational researchers:

*“Summative assessments are used to measure what students have learnt at the end of a unit, to promote students, to ensure they have met required standards on the way to earning certification for school completion or to enter certain occupations, or as a method for selecting students for entry into further education” (CERI, 2008: 1)*

*“Summative assessment results are used to make a summary judgment” (Wren, 2008: 2)*

*“Summative is a type of assessment that provides evidence of student achievement for the purpose of making a judgement about student competence or program effectiveness” (Chappuis, 2010: 5)*

According to Chappuis (2010) summative serves as a communicative role to communicate students' achievement at a particular

point in time in form of a symbol, a letter grade, a number grade, or a comparison to a standard. The communication can be either in the classroom level or in the program level. In the classroom level, the achievement of the student is communicated to parents, while in the program level, the achievement of the student is communicated to educators within the system, the school board, or the community.

Furthermore, below are several definitions of formative by well-known educational researchers:

*“Formative assessment refers to frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately” (CERI, 2008: 1)*

*“Formative assessment delivers information during the learning process, before the summative assessment” (Wren, 2008: 2)*

*“Formative are formal and informal processes teachers and students use to gather evidence for the purpose of improving learning” (Chappuis, 2010: 5)*

Chappuis (2010) points out that formal processes include the use of assignments, tests, quizzes, performances, projects, and surveys, while informal ones involve the use of questioning and dialogue, observing, and anecdotal note taking. Thereafter, to obtain a clear distinction between the two, characteristics of each is presented in

table 1 below, adopted from Wren (2008: 2)

Table 1. Characteristics of formative and summative classroom assessment

Characteristic	Formative Assessment	Summative Assessment
Purpose	Provide ongoing feedback to improve learning	Document student learning at the end of an instructional segment
Student involvement	Encouraged	Discouraged
Student motivation	Intrinsic, mastery-oriented	Extrinsic, performance-oriented
Teacher role	To provide immediate, specific feedback, and instructional correctives	To measure student learning and give grades
Assessment techniques	Informal	Formal
Effect on learning	Strong, positive, and long-lasting	Weak and fleeting

Based on the definitions and characteristics discussed above, it can be drawn out that summative refers to an assessment conducted at the end of an instructional segment aimed at measuring students' performance in order to decide whether or not they've met instructional objectives. Next to that, formative refers to an assessment conducted continuously aimed at adjusting instructional practices in order to improve students' learning.

To be more precise, this research only focuses on formative aspect. CERI (2008); Shepard (2000); and Chappuis (2010) explain that formative assessment is considered having a considerable impact on student achievement. Chappuis (2010) claims that the significant point of formative is the information gathered from the activity is used to

adjust teaching and learning in order to make it more correct, effective, or suitable.

To assess formatively, the following elements should be taken into consideration (CERI, 2008: 6): (1) Establishing a classroom culture that encourages interaction and the use of assessment tools (2) Establishing learning goals, and tracking of individual student progress toward those goals (3) Using varied instruction methods to meet diverse student needs (4) Using varied approaches to assessing student understanding (5) Providing feedback on student performance and adaptation of instruction to meet identified needs (6) Encouraging active involvement of students in the learning process

While implementing the elements, teachers are expected to have

thought-provoking questions in their minds, such as “Who is and is not understanding the lesson?What are this student’s strengths and needs?What misconceptions do I need to address?What feedback should I give students?What adjustments should I make to instruction? How should I group students?What differentiation do I need to prepare?” in order to improve their teaching (Chappuis, 2010: 9). Not only teachers, but also students are expected to question their own learning such as “Where are you

trying to go? Where are you now? How can you get there?”In order to improve their learning (Sadler in Chappuis, 2010: 11)

**Quiz Form**

In constructing quiz questions as a formative assessment in order to adjust instruction and improve students’ participation in their own learning and understanding in academic writing concepts, it is worth revisiting the work of Stecher et. al. (1997: 19-20) on categories of assessment as presented in table 2 below:

Table 2. Broad Categories of Assessment

Category	Response Type	
	Selected	Constructed
Written assessments:		
- Multiple choice, true-false, matching	√	
- Open-ended		√
- Essay, problem-based, scenario		√
Performance tasks		√
Senior projects (research paper, project, oral presentation)		√
Portfolios		√

As can be noticed, there is a considerable number of forms of assessment, and multiple choice is chosen. To adapt from that, the multiple choice used is not in written form, yet visualized through the use of powerpoint slides and answered verbally. Further, the response expected is not only to select an

answer, but also to construct a comprehensive argument or counter-argument why the chosen choice is correct, and why the other one is incorrect. In that way, the desired participatory discussion likely takes place, so that understanding is improving.

### **Academic Writing**

Language is a particular way or style of speaking or writing, as it is lexically defined in Oxford Advanced Learner's Dictionary. From that lexical definition, it can be drawn out that there are two particular styles of language use, namely spoken and written. For the purpose of this research study, only written language use is discussed, specifically in academic realm, as known as academic writing.

Academic writing is a form of formal writing which makes it different from creative writing and personal writing that are informal. Creative writing is made when somebody writes stories, while personal writing is made when somebody writes letters or emails to friends or family members. In both creative and personal writings, slang, abbreviations, and incomplete sentences might be used, while in academic writing they might not be.

### **METHOD**

This research is constructed using classroom action research design, conducted in the Academic Writing class of 2012-C STKIP PGRI Jombang, consisting of 36 students. Fraenkel and Wallen (2008: 589) explain that action research is aimed at solving day-to-day immediate problems. In doing so, there are four specific steps should be undertaken, namely planning, implementing, observing, and implementing (Arikunto, et. al.: 2015: 42). In this case, actions planned in this research

Instead, complete sentences and a certain type of organization must be used (Oshima & Hogue, 2007).

It is pointed out in Mulyati (2015) that language, either in spoken or written form, performs four prominent functions, namely expression, communication, adaptation, and social control. Academic writing, in this case, showcases all of those four functions. To put it in detail, academic writing expresses, communicates, adapts thoughts, ideas, opinions, and concepts even controls society through innovative information.

To bring those functions into reality, the course of academic writing is constructed into chapters that together build up a high quality skill in academic writing as follows a) sentence structure b) writing a paragraph c) outlining d) writing an essay e) punctuation rules f) making citations and g) listing references.

are as follows: (a) Lecturer explains how teaching and learning by means of formative quiz is carried out. Students listen (b) Lecturer presents each quiz questions using powerpoint slides. Students pay attention to the questions and competitively try to answer and explain the answer (c) Lecturer gives a chance to a student to answer and explain his/her answer comprehensively (d) Getting the first answer, lecturer then gives two other chances to others to deliver their answer and comprehensive explanation. Two other students

competitively provide an answer and an explanation to the same quiz question (e) Lecturer confirms the correct answer and the comprehensive explanation. If the correct answer is not comprehensively explained, the lecturer accomplishes it. If there's no correct answer coming up, the lecturer takes over the quiz question, then answer and explain it thoroughly. Students pay attention, and are given a chance to make queries about the lecturer's explanation (f) Lecturer guides per quiz question from 1 to 10. Students follow through the instruction

The action is implemented within 2 cycles. The first cycle is conducted once, and is used to measure

#### **FINDING**

In cycle 1, it is found out that the lecturer's instruction is perceived to be very well-established, well-delivered, and well-accepted by the students. It is proved by high percentages of students marking yes for each indicator presented as follows: lecturer explains teaching and learning by means of formative quizzes well (100%), lecturer uses powerpoint slides well when delivering formative quizzes (94.4%), lecturer gives three different students a chance to competitively answer and comprehensively explain the answer (100%), lecturer gives confirmation of the answer and/or additional explanation if needed (97.2%), lecturer answers and explains

lecturer's instruction, whether or not the action is well-established, clearly delivered and well-accepted by students. The second cycle is conducted twice, and is used to measure students' participation and understanding in academic writing concepts. Additionally, the cycles are observed using questionnaires. Based on the output of the questionnaires, a reflection is then performed. The action is considered successful when students show high positivity in their responses as questionnaire used in cycle 1 applies yes/no as options for the responses, and questionnaire used in cycle 2 applies four-level Likert scale consisting of 1 means strongly disagree, 2 means disagree, 3 means agree, and 4 means strongly agree.

thoroughly if there's a question that is falsely answered and explained (100%), lecturer guides each quiz question delivery well from questions 1 to 10 (94.4)

In cycle 2, students' participation and understanding are measured. The result is fulfilling as not only students' participation, but also students' understanding show high percentage of positivity. On one hand, the majority of the students agree and strongly agree that they have participated very well. That is revealed through these following indicators: students listen to the lecturer's explanation about studying by means of quiz (A: 62.5% SA: 33.3%), students pay attention to the quiz questions presented in powerpoint slides (A: 54.2% SA:

45.8%), students try their best to answer the quiz questions and explain their answers (A: 41.7% SA: 33.3%), the first student who answers a question is willing to give two other students a chance to competitively answer and explain the same quiz question (A: 41.7% SA: 54.2%), students listen attentively to the lecturer's confirmation to an answer and explanation if needed (A: 45.8% SA: 54.2%), students listen attentively to the lecturer's answer and explanation when there's a question that is falsely answered and explained (A: 41.7% SA: 54.2%),

## **DISCUSSION**

Pertinent to the research problem that implementing a certain instruction method unceasingly without any meaningful variation might result in discouraging students in learning, it can be revealed that quizzes which are conducted in a formative way (ongoing) are proved to be able to improve lecturer's instruction, students' participation and understanding the concepts of the course, academic writing, as shown in the finding section.

Each indicator of students' participation and understanding reach high percentage of positivity. Moreover, some criteria surprisingly reach full students' agreement confirming their participation in the course, such as all of them agree and strongly agree that they pay attention to the quiz questions presented in powerpoint slides, listen attentively to the lecturer's confirmation to an

students follow through all the quiz questions from 1 to 10 (A: 58.3 SA: 41.7%). On the other hand, most of the students are confident to agree and strongly agree that they have attained good understanding in academic writing concepts such as sentence structure (A: 66.7% SA: 29.2%), writing a paragraph (A: 58.3% SA: 41.7%), outlining (A: 54.2% SA: 41.7%), writing an essay (A: 50% SA: 45.9%), punctuation rules (A: 58.3% SA: 20.8%), making citations (A: 54.2% SA: 45.8%), and listing references (A: 62.5% SA: 37.5%)

answer and explanation if needed, and follow through all the quiz questions from the start till the end. What is more is that the whole students are fully confident to confirm that formative quizzes have helped them in understanding several academic concepts like writing a paragraph, making citations, and listing references.

Not to forget that success in cycle 2, improving students' participation and understanding, is wholly supported by the action taken in cycle 1, that is planning, trying-out and evaluating the instruction method. As can be seen in the finding section of cycle 1, the instruction conducted by the lecturer has shown a positive result, considering the students' positive approval of each indicator showing effective teaching performance, such as an explanation before an instruction method is given, the use



of ICT (powerpoint slides), giving chances to students to express their ideas, providing confirmation and additional information, presenting

thorough explanation if needed, and getting well-prepared to guide the instruction processes.

## **CONCLUSION**

Lastly, it can be concluded that both cycles investigated in this research are successful as they have gained high positive approval based on the questionnaires' output. Teaching performance by the lecturer is well-delivered and students' participation and understanding in academic writing

course are well-improved by means of formative quizzes.

Based of the finding of this research study, it might be of significant pursuit for future research to investigate the correlation between lecturer's preparedness in delivering instruction and students' performance, as both are presumed to positively correlate.

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