THE EFFECT OF PEER ASSESSMENT AND ANXIETY ON WRITING COMPETENCY OF GRADE X STUDENTS OF SMA NEGERI 5 DENPASAR

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ABSTRACT

The aim of this study was to prove whether there was any significant difference effect of peer-assessment on the writing competency; there was any significant effect of the interaction between peer-assessment and anxiety on the writing competency; there was any significant difference on the writing competency of high anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment; there was any significant difference on the writing competency of low anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment. The study was experimental study by applying 2x2 factorial designs which one group received experimental treatment, whereas the other did not. The population was 10 classes which total number of population were 346 students of grade X of SMA Negeri 5 Denpasar. The total sample was 80 students which assigned into two groups i.e. experimental group and control group by using Cluster Random Sampling Technique. Quantitative and qualitative data were obtained in this study. The quantitative data was obtained through writing test and anxiety questionnaire which analyzed by using Statistical Two-Way Anova And Tukey test. The qualitative data was obtained through anecdotal record. The results showed that, first, there was any significant difference effect of peer-assessment on the writing competency, in which the students who were assessed by using peer-assessment had better writing competency than those who were assessed by using conventional assessment. Secondly, there was any significant effect of the interaction between peer-assessment and anxiety on the writing competency. Third, there was any significant different on writing competency between high anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment, in which high anxiety students who were assessed by using peer-assessment had lower writing competency than those were assessed by using conventional assessment. Fourth, there was any significant difference on writing competency between low anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment, in which low anxiety students who were assessed by using peer-assessment had better writing competency than those who were assessed by using conventional assessment.

Keywords: anxiety, peer-assessment, writing competency.

1. INTRODUCTION

Writing in our curriculum is as important as the other language skills. Writing is a medium of delivering ideas, thoughts, opinions, and feelings successfully. It is clear that writing is form of communication that enables the writer to communicate clearly, concisely, and effectively. In relations to educational field, the activity of writing elaborates a process of thinking, feeling, reading, sharing, and finally producing the writing (Byrne, 2004. Generally, students are provided learning materials and learning activities that represent real life context brought to classroom situation. The activities are
assigned from the simplest to the most complex one. Writing is simply performing the students’ competency in writing to a certain writing task and bundling it into product of written text. To extract ideas onto a paper and convey it into powerful meaning understood by the reader, the students follow the process of writing in producing final paper to share. Furthermore, the students also need to rise up positive behavior upon the process of writing. Competency standard and Basic Competency are the guideline for the teachers in teaching writing. In relation with teaching writing, there are many factors affecting writing ability, both internal and external factors.

The internal factors deal with aptitude, intelligence, personality, motivation, attitude, learner’ preferences, and ages (Brown, 2000). Personality covers a number of personality characteristics that can affect in language learning especially writing. Anxiety is one of personality characteristics that often appear in the learning process. Anxiety is directly related to performance. When the students are not able to control their emotions, they may experience higher levels of stress, thereby making it more difficult for them to concentrate. Krashen (in Ellis, 1986) also stated that anxiety is an affected factor relate to SLA. Learners with high motivation and self confidence and low anxiety have low filters and so obtain and let in plenty of input. Learner with low motivation, little self confidence and high anxiety have high filters and so receive little input and allow even less in. So Anxiety is one of internal factor that clearly negatively affect writing performance. Based on the explanation above, this study focuses on the effect of anxiety as one of internal factor on writing competency.

Meanwhile, the external factors may cover teaching strategies which include time allotment, learning activities, selection of text, and assessment. The primary of assessment is the improvement of students learning and teaching. Assessment data is also needed internally to support the administration of the school data. There are several techniques in assessing students’ work on of them is peer-assessment. Falchikov (2001) stated that peer-assessment is an assessment, in which the students give feedback and give score on their peer’s work or performance by referring a certain criteria. Peer-assessment has an important role to help the students to become more autonomous, responsible, and involved in classroom activities. As the assessment is based on the teacher’s benchmark or set of criteria of marking, it encourages the students to analyze the others’ work critically rather than just be dependable to the teacher; submit the paper and wait for the feedback from the teacher. Feedback will make the students to become better writer and feel the writing as a less painful process. Feedback indicates the steps that should be done in students’ learning. Feedback is very important to involve the students through the medium of peer-assessment by communicating the problems; orally or written with the teacher and their peer. Based on the explanation above, this study also focuses on the effect of peer-assessment as one of external factor on writing competency.

In relation with Anxiety, Peer-assessment involves the students in assessing their peer’s work. Theirs’ peer help them to improve understanding about something in a better atmosphere, help learners to reduce one’s anxiety that resulted to the development of cognitive and intellectual skills in improving knowledge and understanding (Falchikov, 2001). So Peer-assessment is a good assessment to assess students writing and it has some advantages toward writing competency. Of course in the process of writing, students cannot be avoided with anxiety which brings negative effect on writing competency. The students who have high anxiety tend to get lower score than who those who have low anxiety. The aim of this study was also to find out the effect of peer-assessment and anxiety on writing competency.

Based on the explanations above, this study focuses on the effect of peer-assessment on students writing competency with consideration of students’ anxiety, which would be conducted at SMA Negeri 5 Denpasar in
the academic year 2012/2013. By considering the importance of writing skill for students at grade X of senior high school and realizing that many students still have difficulty in writing, the researcher would like to do a research on the effect of students writing competency based on the chosen variables stated above. Additionally, the methodology of this present study is quantitative and the method that used is comparative analysis.

There were three variables in this study, namely independent variable, moderator variable, and dependent variable. The independent variable was assessment (A), which was divided into peer-assessment and conventional assessment. The moderator variable was anxiety (B), which is divided into two levels, namely high anxiety and low anxiety. The dependent variable was the students’ writing competency (Y).

The objectives of this study were to investigate whether: 1) there is any significant effect of peer-assessment on writing competency, 2) there is any significant interactional effect between peer-assessment and anxiety on writing competency, 3) there is any significant difference in writing competency between high anxiety students who assessed by using peer-assessment and those who are assessed by conventional assessment, 4) there is any significant difference in writing competency between low anxiety students who are assessed by using peer-assessment and those who are assessed by conventional assessment.

2. REVIEW OF RELATED LITERATURE
2.1 The Nature of Writing
Langan (2001) stated that writing is a process of discovery that involves a series of steps of practices. At least there are four basic principles to write effectively, such as clarity of topic, adequate supporting details, organization, and revision. Writing is not simply picking up words and writes them on a paper or types them on computer and finish. The changes in writing are a must due to the complex activity opened to form high quality writing. (Steele, 2005) concerns more on the process to approach writing. Process approach tends to focus more on the varied classroom activities that promote the development of language use. This approach involves brainstorming, group discussion and re-writing. In general, there a number of steps and sequences of this approach, such as brainstorming ideas, organizing ideas into mind map, spider gram, linier for, etc, writing first draft, exchanging the first draft while responding to others work, editing, revising, and finally publishing the best writing to share.

Murphy (2003) attached several specific writing skills, which are considered as the overall aspects covered in writing, such as graphical or visual skills, grammatical skills, expressive or stylistic skills, rhetorical skills, and organizational skills. Graphical or visual skills refer to spelling, punctuation, and capitalization of the target language. Awareness of different spelling, punctuation, and capitalization is very important to fulfill the criteria of a good writing. Grammatical skills refer to a variety of sentence patterns and construction to construct one idea in a written text. Expressive or stylistic skills encourage the learners to be able to express precise meaning in a variety of styles or registers. Good selection of vocabulary is highly considered. Rhetorical skills refer to the ability to master linguistic cohesion devices, such as connectives, reference word, ellipsis, and so forth. Organizational skills concern with the arrangement of sequences of ideas as well as concern with only relevant ideas to be included in the text. SIL (1999) suggested writing skills that help learners to effective writers, such as independence, comprehensibility, fluency, and creativity. Along the process of doing a writing task, those skills are combined to produce one-ready to share writing.

2.2 Peer-assessment
Peer-assessment in practice turns out to be an important complement and may even be prior requirement for self-assessment, which uniquely provides several opportunities for the students to chart their progress and evaluated their learning outcomes (Black, et al, 2005: 50).
Falchikov (2001) stated that peer-assessment is an assessment, in which the students give feedback and give score on their peer’s work or performance by referring to a certain criteria. Peer-assessment has an important role to help the students to become more autonomous, responsible, and involved in the classroom activities. As the assessment is based on the teacher’s benchmark or set of criteria of marking, it encourages the students to analyze the others’ work critically rather than just seeing their mark, which means that they are knowledgeable with the assessment criteria used to evaluate their assignments.

Feedback is very important to involve the students through the medium of peer-assessment by communicating with the other students, writing and reporting the progress of the piece being assessed (Wing Mui, 2004). Peer-assessment is also best for reducing marking load from the lecturer, as the students do not depend on the lecturer’s presence (for some groups). Further, the marks are given by the students or through negotiation from the teacher. Feedback will make the students to become better writer and feel the writing as a less painful process. As the feedback given soon after the first draft finished, the students should react immediately in editing and revising their writing to make improvement on the quality of the writing based on the feedback from the teacher as well as their peer. According to Black, et al., (2005: 42) feedback is an essential part of formative assessment to assess students’ writing competency. Feedback indicates the steps that should be done in their learning. Black, et al., (2005: 42) defined feedback for the written work as encouragement, comments, and opportunities. Written tasks should encourage students in developing and showing understanding of the materials they have learnt. As the tasks have been finished, comments from peers are essential to identify what students have done and what still need to improve as well as guidance on how to make the improvement. After the students obtain the feedback, they should follow up the feedback and plan the action that should be done further as part of the overall learning process (Black, et al., 2005: 42).

2.3 Anxiety

According to Martin (2007) anxiety is the fear of unknown. It is a very natural physiological response of the body, when the teacher faces challenges, especially the challenges that the teacher have never endured. Anxiety is not altogether a hampering agent or an enemy; in reality it is a friendly reaction of the body that keeps us on the toe and drives the person to work for the success. A student who has low anxiety scale is most of the time not enough motivated to work hard and produce better results.

Furthermore, Zeidner (1990) said that anxiety is not an exclusive event. Students worried about theory, behavioral and emotional responses that lead to academic achievement is not comparable with the ability to learn and lead to failure in learning and evaluation situations. Behaviors such as anxiety lead a person to avoid task, avoid themselves, not ready to do a presentation in the test, refuse to handle and anxiety in creating task, talking without stopping, anxiety increases, unsettled, low academic self-concept, low self-esteem, high doubt, laugh in not correct situation, high impatience, ill-tempered and others, the weak on skills or mental abilities, especially the mind and memory, no concentration, confusion level is high, barriers or obstacles memory, attention on something in the reflection on oneself and others.

Research conducted by Marhaeni, et al. (2007), in the ‘Research Grant entitled: The Determination of some Affective Factors Affecting Students Success Learning of students of English Education Department, Ganesha University of Education. The anxiety of students in this study conceptually defined as a feeling of tension, worry, weary, nervousness, afraidness, and restlessness experienced by students as EFL, learners. Tension is the state of being stretched tight in mental and emotional strain of anxiety. Worry defines as the state of being anxious and troubled over actual or potential problems. Weary
is feeling or showing extreme tiredness, especially as a result of excessive exertion. Nervousness is easily agitated or alarmed because of anxious or apprehensive: (of a feeling or reaction) resulting from anxiety or anticipation. Afraidness means feeling fear, worry or anxiety about possible outcome, effect, result, etc. Restlessness is unable to be still or quiet because one is bored, anxious and impatient.

3. RESEARCH METHODS

The design of this study was a 2x2 factorial design in which the data on this study was categorized into: 1) the group of students who were assessed by peer-assessment (A1), 2) the group of students who were assessed by conventional assessment (A2), 3) the group of students with high anxiety (B1), 4) the group of students with low anxiety (B2), 5) the group of high anxiety students who were assessed by using peer-assessment (A1B1), 6) the group of low anxiety students who were assessed by peer-assessment (A1B2), 7) the group of high anxiety students who were assessed by using conventional assessment (A2B1), 8) the group of low anxiety students who were assessed by using conventional assessment (A2B2).

This study was done in the tenth grade students of SMA Negeri 5 Denpasar, Denpasar, Bali. This study conducted for about three months in the academic year 2012-2013, which was started from March to May 2013. The population was grade X students of SMA Negeri 5 Denpasar, which altogether consisted of 346 students, from which four classes were taken as the sample of this study. Cluster random sampling was used to gain the sample. The total number of sample was 120 students, which was divided into two groups of samples such as experimental group and control group, which was divided into four cells of treatment such as: 1) the group of student who a peer-assessment (A1), which altogether consisted of 60 students, 2) the group of students who are tough writing with conventional assessment (A2), which altogether consisted of 60 students, 3) the group of high anxiety (B1), which consisted of 40 students, and 4) the group of low anxiety (B2), which consisted of 40 students. The quota of sample is determined by finding 33, 33% top rank of the students from high anxiety scale and 33, 33% button rank of students with low anxiety scale. Defining the students' categories of anxiety scale in each group was done by given anxiety test (questionnaire) in each group. For this study, Likert scale with 5 scales was used. There were 45 items in the anxiety scale, therefore, the lowest score was 80 and the highest score 205. The scores between 136-205 were categorized high anxiety and the scores between 80-135 were categorized low anxiety scores. Quantitative and qualitative instrument were used for collecting data.

The instruments for collecting quantitative data were writing competency test and anxiety questionnaire. They were analyzed by using quantitative analysis. Whereas, the instrument for collecting qualitative data was anecdotal note, which was analyzed by qualitative analysis. The quantitative data was analyzed by using two-way Anova, which was continued by post-hoe test by using Tukey test. Before the analysis was done, prerequisite testing was conducted to make sure that the data gained was normal and homogenous. While qualitative data was analyzed by transcribing, analyzing, interpreting, and sharing the data. The data was derived from the record upon specific behaviors, skills, and attitudes, which directly related to the outcomes during or after the treatment.

4. FINDING AND DISCUSSION

The findings were discussed in this part. The discussion was divided into four parts; first to discuss the significant difference effect of peer-assessment on writing competency. Second, to discuss the significant effect of the interaction between peer-assessment and anxiety on writing competency. Third, to discuss the significant difference in writing competency between high anxiety students who are assessed by using peer-
assessment and those who are assessed by using conventional assessment. Fourth, to discuss the significant difference in writing competency between low anxiety students who are assessed by using peer-assessment and those who are assessed by using conventional assessment.

4.1 The Significant Difference Effect of Peer-assessment on the Writing Competency.

The first statistical analysis on the significant difference effect of the treatments peer-assessment on the writing competency showed the value of $F_A = 8.242$ while $F_{cv}(1;76;0.05) = 3.967$. Since the value of $F_A$ is higher than the value of $F_{cv}(F_A > F_{cv})$, then $H_0(1)$, which stated that there is no any significant difference effect of peer-assessment on writing competency, was rejected. It means that $H_1 (1)$, which stated that there is any significant difference effect of peer-assessment on writing competency, was accepted. It can be concluded that there is any significant effect of peer-assessment on writing competency. It can be seen from the mean score of the students who were assessed by using peer-assessment ($\bar{X}_A$) was 79.30 while, the mean score of the students who were assessed by using conventional assessment ($\bar{X}_C$) was 76.32. The first result of data analysis discovered that Students who were assessed by using peer-assessment had better writing competency than those who were assessed by using conventional assessment. In line with this finding, Suarsini (2011) also discovers that there was a significant difference effect in writing competency between high achievement the students who were assessed by using peer-assessment and those who were assessed by conventional assessment in which the students who assessed by using peer-assessment got higher score than the students who were assessed by using conventional assessment.

4.2 The Significant Effect of the Interaction between Peer-assessment and Anxiety on the Writing Competency.

The second statistical analysis on the interactional effect between peer-assessment and anxiety on writing competency showed the value of $F_{AB}$ on the interaction effect was 57.754 while $F_{CV}(1;76;0.05) = 3.967$. Since the value of $F_{AB}$ is higher than the value of $F_{cv} (F_{AB} > F_{cv})$, it means that the null hypothesis $H_0 (2)$, which stated that there is no any significant effect of the interaction between peer-assessment and anxiety on writing competency, was rejected. It means that $H_1 (1)$, which stated that there is any significant effect of the interaction between peer-assessment and anxiety on the writing competency was accepted. It can be concluded that there is any significant effect of the interaction between peer-assessment and anxiety on writing competency.

Peer-assessment and anxiety influence students writing competency. Peer-assessment which was designed to involve all students in every single activity promoted in assessment. However, getting them involved and comprehended to the instruments used in the treatment was not uneasy matter. As they were all beginner learner and still needed much attention on basic English principles, the researcher carefully asserted peer-assessment as the treatment in writing class, did not make them feel more complicated in learning English. The students needed to study the criteria and the indicators of good writing before they were ready to assess their peer-paper. The students were given the examples of writing of each genre to be analyzed. They started looking at the criteria and the indicators while reading the paper analyzing the aspects that should be notice. This activity done for several times until they were ready with treatment sessions, which required them to write descriptive, narrative, and news items essays. Further, these writing tasks absolutely require students with orientation to success. Meanwhile, the students with high anxiety will not take any risk to do failure. They were not confident
to assess their peer’s writing; they were not confident as their work was assessed by their peer; they did not believe that their peer would do an assessment well or the assumption they their peer would assess them unfairly. Low anxiety students were very innovative, independent, confident, and creative. In peer-assessment, the students assess their peer writing with high confident; they were confident in writing and showing their product to their peer. The students with low anxiety learn to each other as they compete as a feedback. They found a new way of learning to write by analyzing their peer mistaken based on the assessment criteria in assessing their peer’s paper.

4.3 The Significant Difference in writing Competency between High Anxiety Students who were Assessed by Using Peer-assessment and Those who were Assessed by Using Conventional Assessment.

The third statistical analysis on the significant difference in writing competency between high anxiety students who were assessed by using peer-assessment (A1B1) and those who were assessed by using conventional assessment (A2B1) showed the result of the first post-hoc test by using Tukey test was the value of $Q_{ab}$ was 10.436 while the $Q_{cv}= 2.960$ (significance level 0.05). This means the $Q_{ab}$ was higher than the $Q_{cv}$, so $H_0$, which stated that there is no any significant difference of the writing competency between high anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment, was rejected. It means that $H_1$ (3), which stated that there is any significant difference of the writing competency between high anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment, was accepted. It can be concluded that there was any significant difference in writing competency between high anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment. The students with high anxiety whose writings were assessed by using peer assessment ($\bar{X}_{A1B1}=72.42$) achieved lower writing competency than those who were assessed by using conventional assessment ($\bar{X}_{A2B1}=79.81$).

Next discussion, it is important to discuss other factors beside assessment technique influencing writing achievement. According to Krashen (1987), anxiety in an affected factor relate to SLA. He states that learners with high motivation, self confidence, and low anxiety have low filters and so obtain and let in plenty of input. Learners with low motivation, little self confidence, and high anxiety have high filters and so receive little input and allow even less in. In line with this opinion, the students with high anxiety who were assessed by using peer-assessment had lower writing competency than the students who were assessed by using conventional assessment because when they were face peer-assessment technique their anxiety increased so receive little input. They were afraid, nervous, restless, worry about certain criteria that should they fulfill in writing; they worried with their peer were not fair in assessing their paper; they were not confident to show their paper to their peer, or they afraid getting low score after doing peer-assessment. Due to high anxiety the student got lower score than those who were assessed by using peer-assessment. It also supported by the result of anecdotal record that show that in the beginning the student were afraid and worries when they were given peer-assessment because they had accustomed to used conventional assessment. They confuse with the peer-assessment technique, they did not concentrate better. Because of high anxiety which affected in the process of students’ writing, it also affected the result of students’ writing scores.
4.4 The Significant Difference in Writing Competency between Low Anxiety Students who were Assessed by Peer-assessment and Those who were Assessed by Using Conventional Assessment.

The fourth statistical analysis on the significant difference in writing competency between low anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment showed the result of the second post-hoe test by using Tukey test was value of \( Q_{ob} \) was 4.759 while the \( Q_{cv} \) was 2.960. This means that the \( Q_{ob} \) was higher than the \( Q_{cv} \), so \( H_0 \) (4), which stated that there is no any significant difference of the writing competency between low anxiety students who were assessed by peer-assessment and those who were assessed by using conventional assessment was rejected. It means that \( H_1 \) (4), which stated that that there is any significant difference of the writing competency between low anxiety who were assessed by using peer-assessment and those who were assessed by using conventional assessment. The result of the hypothesis testing imploved that there was a significant difference in writing competency between low anxiety students who were assessed by peer-assessment and who were assessed by using conventional assessment. The students with low anxiety whose writings were assessed by using peer assessment \((X\text{ A1B2}=80.52)\) achieved better writing competency than those who were assessed by using conventional assessment \((X\text{ A2B2}=77.15)\).

For low anxiety students, it was discovered that student’s writing achievement who were assessed by using peer-assessment got better scores than who were assessed by using conventional assessment. In other words, students with low anxiety were more appropriate to be assessed by using peer-assessment than to be assessed by using conventional assessment. When peer-assessment was implemented, it needed students’ active participation. Besides that, peer-assessment provided feedback that may also influenced their psychology. If they view the feedback positively, it will trigger them to do better. However, if the students view the feedback negatively, it will make down. So, low anxiety students feel more comfortable with peer-assessment than conventional assessment. Consequently, they got better score than those who were assessed by using conventional assessment.

5 CONCLUSION, IMPLICATION, AND SUGGESTION

5.1 Conclusions

Based on the data analysis and the discussions, the conclusions of this study were: (1) There is any significant difference effect of peer-assessment on students’ writing competency. The students’ writing who were assessed by using peer-assessment achieved better writing competency than the students who were assessed by using conventional assessment. (2) There is any significant effect of the interaction between peer-assessment and anxiety on writing competency. (3) There is any significant difference in writing competency between high anxiety students who are assessed by using peer-assessment and those who are assessed by using conventional assessment. (4) There is any significant difference in writing competency between low anxiety students who are assessed by using peer-assessment and those who are assessed by using conventional assessment.

5.2 Implications

Based on the findings and discussions above, the implications of this study were as follows: (1) The result of this study, it was found that there was any significant difference effect of peer-assessment and anxiety on the writing competency. The result of the hypothesis testing imply as a professional teacher, The teacher was expected to implement an assessment technique influencing positively on students’ writing competency, one of them is peer-assessment. (2) In further analysis of this study, it was found that there was any significant effect of the interaction
between peer-assessment and anxiety on the writing competency. So, the results of the hypothesis testing imply in implementing peer-assessment, the teacher was expected to facilitate and to give more time allotment to the students in assessing their peer writing. (3) The result of the finding showed that writing competency of high anxiety students who were assessed by using peer-assessment was lower than those who were assessed by using conventional assessment. High anxiety students worked well with conventional-assessment. So, the results of the hypothesis testing imply in implementing a certain assessment strategy, the teachers should aware with students anxiety in the process of teaching learning in the classroom. (4) The last analysis showed that there was any significant difference in writing competency between low anxiety students who were assessed by using peer-assessment and those who were assessed by using conventional assessment. Low anxiety students who assessed by peer-assessment achieved better writing competency than those who are assessed by conventional assessment. So, the results of the hypothesis testing imply as professional teacher, the teacher is expected to create learning condition that may reduce the students anxiety e.g. by creating relax and democratic atmosphere in the classroom.

5.3 Suggestions

Based on the above implications, the suggestions can be stated as follows: (1) It is suggested to implement peer-assessment in English class, especially in writing class. Peer-assessment affects positively to the process of the students' learning, which leads to the improvement of the students writing competency. (2) Peer-assessment contributes positively upon students with low anxiety than students with high anxiety. This means that the teachers should consider carefully types of assessment implemented in writing class based on students’ level of anxiety in learning English.

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