# The Effectiveness of Question Writer in Assessing Grammar

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#### Abstrak

Penelitian ini menyelidiki efektivitas tes berbasis komputer menggunakan Question Writer untuk mengevaluasi kemampuan grammar siswa. Tujuan dari penelitian ini adalah untuk mendeskripsikan pelaksanaan Question Writer dalam mengevaluasi kemampuan grammar siswa khususnya dalam membedakan Simple Past Tense dengan Present Perfect Tense, dan untuk mengetahui efektivitas dan kesulitan-kesulitan yang siswa hadapi selama pelaksanaan. Mixed-method dilakukan untuk memperoleh dan menganalisis data dari 60 siswa SMA dalam bentuk pra dan pasca test dan wawancara. Hasil dari tes menunjukkan perbedaan yang signifikan antara kelas eksperimen dibandingkan dengan kelas kontrol. Dari wawancara, ditemukan bahwa masalah utama yang dihadapi oleh siswa saat menggunakan aplikasi adalah masalah konektivitas internet. Oleh karena itu, maka disimpulkan bahwa Question Writer efektif untuk mengevaluasi pemahaman siswa tentang Present Perfect Tense dan menyarankan bahwa guru sangat dianjurkan untuk menggunakan aplikasi ini di kelas menulis Bahasa Inggris.

**Kata kunci:** *Effectiveness, Computer-based Test, Question Writer, Present Perfect Tense.* 

## A. Introduction

Based on government regulation number 19/2015 article 25 clause 3, it is stated that the graduate's competence in Indonesia for language subject is emphasized on the ability of reading and writing suited with the education level. Therefore, this fact even makes English has been an important language to be mastered by Indonesia's students in terms of communication.

The struggle of Indonesian students to master English has been accommodated by the government. The government has established a curriculum for English teaching in Indonesia. Students of Indonesia are assigned to master English in four skills. Those are reading, writing, listening, speaking. So, the students are expected to master English in those skills.

Out of the four skills above, there is one important thing to be mastered as well by the students. They will not be able to understand English through listening, writing, reading, and speaking without mastering the English grammar. It deals with how the sentence is structured well. Debata (2013) states "A person cannot learn a foreign language accurately only through a process of unconscious assimilation. Grammar is a sure ground of reference when linguistic habits fail us. So grammar is indispensable for the student. This statement shows that grammar mastery is also important for the students to possess.

Mastering English comprehensively is not an impossible job as long as the students keep on using the language actively. As we know that language is a matter of habit, so the students should have enough chances to practice their English. It can be accommodated by giving them space to speak English actively in class since this is the only possible regular chance that the teacher can give to the students. However, even though the students might have been given this chance, they do not use it maximally. It happens somehow due to some factors like the lack of confident, the absence of speaking partner, limited time, etc.

Based on the findings the researchers got from SMA 3 Pekalongan during the observation, it was found that the main problem faced by the students in learning English is that they were not confident enough to share what they know about the given material. This made the teacher hardly distinguish which student already understood the material and who did not. The allocation time given by the school to the English teacher which was only once a week also made the teacher difficult to find an effective way of teaching the material and to asses it in one meeting. Furthermore, in learning grammar, in this case tenses, the students argued that they needed more practice to make sure that they correctly understood the material. However, the allocation time they had was not enough for the teacher to prepare and give them an opportunity to evaluate themselves using an effective evaluation and attractive instrument.

Question Writer Quiz Maker 4.2" is a computer application which is capable to design computerized quizzes/tests. It provides many types of test items, and interesting visualization. It also provides an easy way in collecting the test results. Therefore, this software will be the solution for the problems above.

# **B.** Theoretical Review

# 1. Discussion method

Gage and Berliner as cited by Rahman et al.(2011) states that "discussion is a forum in which students can practice expressing themselves clearly and accurately, hearing the variety of forms that expression of the same idea can take, and criticizing and evaluating successive approximations to an adequate statement."

Furthermore, Hyman also in Rahman et al.(2011) defines discussion as a way to arrive at the solution of problems and is characteristics of democratic societies. It occurs in a group consists of six to ten persons. The persons involve in a discussion perform one of two roles, they are: 1) leader-moderator who is typically the teacher, and 2) participant who is typically students. Participants then are given amount of time to communicate with each other where they have the right to speak. The members have to follow the group leader cue if they want to share their opinion. The communication is not limited only on speech form, but may be in form of facial expressions, gestures, and body movement.

The discussion class is established to be a free give and take between teacher and students and among students on the current topic of concern in the course. It is characterized by probing questions from the teacher designed to elicit student interpretations, opinions, and questions (Rahman et al., 2011)

Petty and. Jenson in Rahman et al. (2011) have added that "children learn to deal with facts through discussion method. Discussion is the thought of taking a problem and investigating all options with an ultimate objective to reach a mutual understanding of the problem". Teaching by discussion can be an effective mean of helping students apply abstract ideas and think critically about what they are learning. It is important to be clear about the objectives of holding the discussion and how it fits into the overall course.

In conclusion, discussion is one of active learning models which allows the students to share their ideas of a given topic and is lead by a leader or moderator.

# 2. Computer-based test

Jimoh in Rosyadi (2014) defines Computer Based Test (CBT) as tests or assessments that are administered by computer in either stand-alone or connected to a dedicated network, or by other technology devices linked to the internet or World Wide Web and most of them are using multiple choice questions (MCQs). While, Hartoyo (2012:121), in a simpler sentence, defined Computer Based Testing (CBT) is a form of assessment or test which is carried out through electronic devices (electronic exam).

There are many softwares which can be used to create a CBT instrument, such as, Visual Basic, Macromedia Flash, Drupal, etc. Those softwares allow the users to create CBT instrument. There are also some template based quiz/test maker which allow us to create our test instrument using their visual templates and specific features such as, Question Writer Quiz Maker, Hot Potatoes, ProProfs, etc.

The softwares above provide features which help us to make a more visualattractive, and interactive test instrument. For example, by using Macromedia flash, we can create a CBT instrument which can present test items with better visualization and animation. We can also make our CBT instrument to be able to calculate the points of each items automatically, and show the total of the score at the end of the test, so that the students can see the result immediately and instantly (Rosyadi, 2014).

Learning Technology Dissemonation Initiative in Hartoyo (2012:121-122) argues that the use of Information and Communications Technology (ICT) in language testing has several advantages such as:

- a. More frequent use of formative and summative test or assessment;
- Test/assessment result is more quickly distributed to teachers so they can prepare appropriate learning materials sooner;
- c. It provides opportunities for students to test personally (self-assessment) by the time they are ready.
- d. It can increase student's self-esteem;

## 3. Question Writer

Questionwriter.com describes Question Writer as a quiz maker software which can be used to create an online/offline computerized quiz in a form of a flashbased quiz. It provides basic tools for building and testing knowledge. This Quiz Maker software has features to compile test items in many forms of test types including the automatic scoring system and online quiz result collection system. To use this software, we can download it from the website and install it in our computer laptops. We need register account or to an on https://www.guestionwritertracker.com so that we can store the result of the test on the website's database. We can use one or multiple types of test types provided in the quiz maker to create our own quiz based on our necessity. The types of the test are supported by Question Writer are multiple choices, multiple responses, true or false, sequences (ordering), Cloze task, matching, etc. The output (the quiz) is in the form of a flash-based quiz file. The quiz can also be uploaded in the blog or web.

Moreover, Questionwriter.com also states that this quiz maker is effective to help the users in creating a computerized quiz/test. It is very useful not only for teachers but also for trainers, employers, even companies. It is easy, free, and effectives. They just need to install the software and then enjoy creating tests and quizzes using the features provided in this software.

#### 4. Review of Previous Studies

On computer-based test studies, there have been several researchers conducting with the purpose of revealing the effectiveness of certain instrument in evaluating certain competence. One of the studies was conducted by Kurniawan and Saputri (2015) describing the appropriateness of Hot Potatoes as evaluation instrument in evaluating Basic Physic II. Based on their study, it was found out that the Hot Potatoes was appropriate to be the evaluation instrument for evaluating Basic Physics II. Meanwhile, the researchers chose Question Writer Application for the computer-based test instrument for the current study. The dependent variable of this study was different; it was students' grammar in Present Perfect Tense, which was way different since the researchers' study was on Physics evaluation while this study was on English evaluation.

Another researcher who was working on this topic is Rosyadi (2014) examining how are teachers' and students' perceptions toward the application of *Question Writer Quiz Maker 4.2* in testing reading comprehension. The study used descriptive qualitative research design employing open-ended questionnaire, close-ended questionnaire and interview. The results showed that the English teachers who used *Question Writer Quiz Maker* perceived that the software was easy for them to be used for testing student's reading comprehension. Both the teachers' and students' response showed that the test from Question Writer Quiz Maker was more attractive and interactive. The researcher came up to a conclusion that using computer software, such as *Question Writer Quiz Maker*, provides a good alternative way for English teachers in designing a more attractive and interactive reading comprehension test.

The difference in this research with the others was that the role of Question Writer as the evaluation instrument to evaluate reading comprehension, while in this study, the researcher chose to evaluate students' grammar. By the considerations from all of the studies above, the researchers viewed that there was still an area of study that can be explored more. This area was finding out the effectiveness of computer-based test using the Question Writer as the evaluation instrument and the competence as the dependent variable is students' grammar.

#### C. Methods

This research was conducted to find the effectiveness of Question Writer application as an instrument of evaluation to evaluate students' grammar specifically in Present Perfect Tense in Tenth graders of SMA 3 Pekalongan. The samples were taken using purposive random sampling. X MIPA 4 was taken as the experimental class and X MIPA 5 was taken as the control class.

The research was started by giving a pretest for both experimental and control class to find out whether the both classes had the same characteristics the researcher demanded in terms of normality and homogeneity. The pretest was done using paper-based test for both classes. Based on the data, both experimental and control class were normally distributed and homogeneous.

After assuring the normality and the homogeneity of the samples, the research was continued by giving a material about present perfect tense through learning activity in the classroom. The learning process done in both experimental and control class was done using the same method; discussion method. Both of experimental and control class consisted of 30 students. The learning process was done once. It was considered successful as most of the students were cooperative during the learning process. It happened because they were accustomed with discussion method so the researcher found it relatively easy to manage the class.

After finishing the learning process, the post test was conducted. Here was where the treatment was done. The experimental class was given a different treatment in terms of evaluation process. The experimental students were evaluated using Question Writer while the control class students were evaluated using paperbased test. The result of the post test was then analyzed to find out whether the experimental students reached the minimum score of criteria, which was 75, and whether there was any significance different between the results of experimental and control class students.

In analyzing the data, there were several steps that should be administered. The steps are as follows, 1) Calculating the normality and homogeneity of the data; 2) Analyzing the data using hypotheses proportion analysis 3) Analyzing the data using Independent-Sample T-Test.

# D. Result and Discussion

### 1. The Implementation of Question Writer

The treatment given in this research was applying Question Writer as the evaluation instrument to evaluate the students in experimental about their abilities in Present Perfect Tense. On the other hand, control class was given a different treatment; evaluation using paper based test. Here, there were some explanations about the implementation of Question Writer done by the researcher.

In this stage, the researchers input the test items which had been validated by the experts into Question Writer. The form of the test items were fill-in-the-blanks. After finishing the test items input, the researcher compiled and published the test items into web-page form. This form was chosen because it gave the researcher a privilege that the application did not need to be installed in every PC in the laboratory but the test items could be copied to all of the PCs at once through the computer server. When this copying was done, the researcher assisted by the teacher and the laboratory technician was trying the test out to make sure that the test items could be accessed and had no problems in terms of technicalities. The researcher also confirmed the technician to make sure that, on the D-day, internet connection would be turned on so the result of the test could be sent right after the students finished the test. Before conducting the test, the teacher had informed the students about the evaluation using Question Writer.

After finishing the learning process in classroom, the students were requested to come to the laboratory to do the test. The researcher explained the steps on doing the test beforehand. They were also informed that after finishing the test, the first ten students would be interviewed to find out the problems they might encountered during the test. The test was successfully done although the internet connection was having a little bit of connection problem but it was resolved because of the technician assistance during the test. All the results were sent right after the students finished the test. The interviewed was successfully done as well. The students finished the test and the interview in 45 minutes.

# 2. The Effectiveness of Question Writer

Finding out the effectiveness of Question Writer was done by conducting final data analysis. The final data analysis in this research was conducted to find whether there was any significance difference between experimental and control class after given the treatment; the experimental class was evaluated using Question Writer while control class was evaluated using paper-based test. The analysis included the normality of the data, the homogeneity of the data, the proportion analysis, and the final independent sample T-test. The description of final data can be seen from the table.

<b>Descriptive Statistics</b>	Experimental group	Control group
Total students (n)	30	30
Highest score	95	80
Lowest score	65	45
Means $(\bar{x})$	80.34	60.34

**Table 1 Final Data Description** 

Based on table 1, final data was taken from students' results in post-test about Present Perfect Tense. Both experimental and control class consisted of 30 students. The highest score of experimental class was 95 while the highest score of control class was 80. The lowest score of experimental class was 65 while the lowest score for control class was 45. The means of experimental class was 80.34 while the means of control class was 60.34.

To find out whether the average score of the students who were evaluated using Question Writer Application was greater than the average score of those who were evaluated using paper-based test, Independent Samples T-test was processed through SPSS. The hypotheses used were:

- $H_0: \mu_1 \le \mu_2$  (the average score of the students who are evaluated using Question Writer Application is less and equal with the average score of those who will be evaluated using paper-based test)
- $H_1: \mu_1 > \mu_2$  (the average score of the students who are evaluated using Question Writer Application is greater than the average score of those who will be evaluated using paper-based test)

The value of significance that was required so that we could conclude that the average score of the students in experimental was greater than the average score of the students in control class was less than 0.05. Based on the calculation using SPSS for the independent sample T-test, the result can be described in the table below.

 Table 2. The Calculation of Final Independent Sample T-Test

Group	Value of significance	Required value of significance	Note
Experimental	0.000	< 0.05	Retain H <sub>1</sub>
Control			

Based on the table 2, the value of significance was 0.000, which was less than 0.05, so it meant that the average score of experimental was greater than the average score of control class. Therefore, the working hypothesis is accepted.

# 3. The Difficulties of Question Writer Application

An interview was done after the students of experimental class finished their test. There were 10 random students requested to join the interview to find what the problems they might encountered during the test and what were their opinions about the application. Here are the analyses of the interview based on the students' answers.

a. Bagaimana perasaan kamu belajar bahasa Inggris menggunakan media visual seperti Question Writer ini?

From ten samples, 7 correspondents answered that they were excited about this test using Question Writer because they found it more practical and had some interesting visuals graphics in it, the other 3 correspondents answered that they were used to a computer-based test so they were not really impressed. Based on the samples' answers, it can be concluded that the using of Question Writer as an evaluation instruments is more interesting than paper-based test.

b. Apa pendapat kamu tentang kuis berbasis komputer seperti ini?

The answers of this question were 8 correspondents stated that the test was practical and helpful because they could know their score and the feedback right after they finished the test which helped them to prepare for the improvement whenever they need it. The other 2 correspondents stated that the test was high technology test because it was presented using a computer and an application which was not like paper-based test.

c. Menurut kamu, apa pengaruh penggunaan kuis semacam ini terhadap kemampuan grammar kamu?

From all the samples, 8 correspondents answered that the test positively affected their grammar because they could practice their grammar in a shorter time than when they used paper-based test. The other 2 correspondents said they had no idea whether the test affected their grammar' skill.

- *Menurut kamu, apakah kuis ini dapat mengevaluasi kemampuan siswa lebih baik dibandingkan tes/kuis menggunakan kertas/manual? Alasannya?*All of the correspondents answered "yes" to this question. Six of them stated that it was because they could know their score after they finished the test. The other four correspondents stated that this test could make them to be independent in doing the test because the test items were shown randomly.
- *Apa pendapatmu tentang instruksi yang ada dalam kuis ini?* All of the correspondents answered that the instructions within the test were clear for them and they understood the instructions well.
- f. Apakah materi yang diujikan di tes ini sesuai dengan materi yang dipelajari?All of the correspondents answered "yes" to this question. They stated that the test items presented in the test suited with that they learnt in the classroom.
- g. Menurut anda apakah kuis ini dapat membantu meningkatkan kemampuan grammar kamu? Alasannya?

Eight out of ten correspondents stated "yes" that this test could help them improve their grammar skill because it was more practical than paper-based so they could practice quicker than using paper-based. The immediate results they got also helpful for them so that they knew their competence quicker than using paper-based test which needed to be assessed manually and took a longer time.

- *Menurut kamu bagaimana tampilan kuis ini?*Eight correspondents thought that the appearance of the test was interesting because it had graphics and wallpapers in it. One correspondent stated that the appearance was just ordinary and the rest stated that it could be more interesting if she could use her own photograph as the wallpaper.
- *Apa kelebihan dan kekurangan kuis berbasis komputer semacam ini dibandingkan dengan menggunakan kertas/manual?*Generally, all of the correspondents answered that the test was more practical since it could present their results immediately. So, it was efficient in time and effective in evaluating because they had to rely on themselves since the test was randomly shown. The thing that they thought would be a problem was the technicalities because the test relied on internet connection, which could be problematic if the internet connection was bad.

*j. Kedepannya, apakah kamu memilih kuis semacam* Question Writer *ini untuk digunakan atau kuis dengan menggunakan kertas/manual?* 

All of the correspondents answered "yes" to this question because of the test practicality, and interesting appearance. They could also be more independence on doing the test.

From all of the answers the researcher got from the interview, it can be concluded that the difficulty in applying Question Writer as an evaluation instrument faced by the students was the technicality which relies on the internet connection. If the internet connection is bad, the result cannot be published immediately.

### E. Conclusion

Based on the results from the post test, it was obtained that the experimental class students' average scores reached far better than the control class students' average score. Therefore, it can be concluded that the average score of experimental students who were evaluated using Question Writer is better than the average score of control class who were evaluated using paper-based test, and Question Writer is effective in improving the students' writing skill in terms of grammar.

This result was in line with the results of Rosyadi (2014) which stated that the students and teacher perception toward Question Writer was positive. They found it more interesting and more practical. This perception was also inferred from the samples responses during the interview who stated that the quiz was interesting and helped them to figure out their score right after they finished the test and gave them quick feedback.

Based on the result of this research supported by the previous research, we can take a conclusion that an evaluation using Question Writer to assess students' grammar specifically in the Present Perfect Tense in SMA 3 Pekalongan is effective. So, the teacher can use it as another alternative to evaluate the students in more interesting and practical way.

According to the results of this research, the researchers also suggest that teachers use Question Writer as an alternative to evaluate the students' writing skill specifically in the linguistic feature aspect. The features of the test which are practical and more interesting are helpful to the teacher when she need a quick evaluation in a limited time. Therefore, the use of Question Writer is highly recommended. The students should be more independent and confident and use the feedback of the test to take an immediate action to improve their skill. The students can practice more using the application since it is quicker and more practical than paper-based test. Also, for the next researchers, they can explore more regarding to the results of this research or the development of Question Writer application. They can also use this research as a basis to find out another alternative evaluation instrument to create a quicker and more practical evaluation in a limited time of teachings.

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