Designing an Online Achievement Test for General English Classes

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Abstract: *Over the past few years, there has been a growing interest in utilizing technology in language education. It is due to the rapid development of ICT (Information and Communication Technology) which deploys computers, smartphones, and the Internet. These technological advances also have a great impact on language tests and assessment. Gradually, 'traditional tests' such as paper-based tests, have been replaced by so-called online tests. In terms of practicality and test administration, online tests appear to be more practically administered as the test takers do not need to prepare paper and pencils or other stationery to do the test. In addition, earlier studies on online tests reported that they affect students' learning in a better way such as improving students' retention. Thus, the present study attempts to propose a design of an online achievement test specifically devised for students of general English classes at a private university. A test was devised then 16 teachers were involved to try it out and they completed a questionnaire to give feedback on the test and to give their opinion on online and paper-based tests. The findings indicate that 13 teachers preferred the online test to the paper-based test due to its efficiency and practicality.*
Keywords: *Achievement test, online test, paper test*

I. INTRODUCTION

Tests and assessment have always been integrated in language teaching and learning as they can be means of measuring learners' knowledge of language and how they use the language. Most of language tests, particularly achievement or classroom tests, are paper-based tests. However, since the growth of the technology and the Internet, traditional tests have gradually been replaced by online tests, especially since the Covid-19 spread all over the world. Hence, online testing has gained its popularity along with online learning and these two topics are worth researching.

A test is part of assessment and it is defined as a method to examine one's ability and knowledge of particular subjects (Brown, 2004:3). In language teaching, tests are divided into several categories: proficiency tests, diagnostic tests, achievement tests, and placement tests (Brown, 2004:43-47). They are all employed in particular situations based on the objectives of the tests.

In relation to formal language learning, such as in schools, colleges, or universities, an achievement test is compulsory. The common types of achievement test are quizzes, midterm, and final tests. They can be in different test forms, e.g. multiple-choice questions, fill-in and cloze tests, true or false items, or matching items. In a general English class, students usually learn four basic skills and two language aspects (grammar and vocabulary); therefore, multiple

choice questions and fill-in tests are frequently used since these test forms are easy to score and to administer.

As said earlier, the classroom tests are traditionally conducted on paper-based tests. However, since the advance of Information and Communication Technology (ICT), paper-based tests are no longer popular and people have developed more efficient tests called online tests. This might be due to their practicality in terms of scoring and test administration. Students or test takers do not have to spend hours or days to wait for the test results for they can see the results just a few minutes upon the test completion (automated scoring). As for the test administration, the test takers do not need any stationery to work on the tests. They only need internet connection and to be prepared for the tests while for the examiners/teachers, they should not be worried of losing the paper because online tests are automatically saved in the website. For this reason, this small research was conducted which aimed to devise an online achievement test and to investigate English teachers' perception towards the test devised.

II. THEORETICAL REVIEW

2.1 Definition of Test

In general, tests are defined as a method for measuring one's ability and knowledge of a particular field (Brown, 2004:3). There are several types of tests related to language skills and aspects of language namely proficiency tests, placement tests, diagnostic tests, and achievement tests. The latest is also known as a classroom test. According to Brown (2004:19), one of criteria of a good test is practicality which implies that the test:

a. does not cost too much (it is relatively cheap);
b. is doable in adequate time;
c. has 'friendly' test administration;
d. has a specific and efficient scoring procedure.

A. Proficiency Tests

This test serves to determine a person's language skills globally or thoroughly. Some examples of proficiency tests are TOEFL (Test of English as a Foreign Language), IELTS (International English Language Testing System), TOEIC (Test of English for International Communication), or TOEFL iBT (internet-based TOEFL). For other foreign languages, the examples of proficiency tests are Deutsch als Fremdsprache Test (TestDaF for German) and DILF, DELF, and DALF for French language.

B. Placement Tests

The placement test aims to place test takers at the right level. For example, they plan to take a General English course. To ensure that they will be placed in appropriate level, they are advised to take a placement test so that they can catch up the lessons which suit their level of English.

C. Diagnostic Tests

Diagnostic tests are a type of test which is commonly used to measure ones' strengths and weaknesses of particular aspects of language. For example, a grammar test might diagnose

grammatical points which are difficult for EFL learners. It implies that the difficulty the learners have become their problems or weaknesses and therefore they should be given special attention. Parrish (2004:260) underlines that a diagnostic test is designed to reveal learners' competence in certain classes.

D. Achievement tests

Achievement tests are also known as classroom tests because they are related to classroom lessons (Brown, 2004:47). They are designed based on particular units, lessons, or chapters in a course book. It aims to measure learners' comprehension on particular aspects of a language and their ability to use the language. In schools, achievement tests can be applied in midterm and final tests.

2.2 Types of Test Forms

Language tests can be divided into two forms: direct and indirect test items.

A. Direct test items

Harmer (2007:168-171) defines direct test items as an item of test which aims to examine learners' ability to perform language use. Mostly, the learners or the test takers use the language through productive skills namely writing and speaking skills. Therefore, they 'do something' with the language based on real-life situations. For example, teachers can ask their students to write essays or letters. Harmer (2007:168-171) further said that direct test items are classified as integrative testing which indicates that students use a variety of language and skills (commonly in writing or speaking) to complete the tests.

B. Indirect test items

On the contrary, indirect test items examine test takers' or learners' knowledge of language such as, grammar, vocabulary, or pronunciation. The items can be in multiple choice questions, True/False, or completion items. (Harmer, 2007:169; Heaton, 1988:42).

1. Multiple-choice questions

Multiple-choice questions are one of the most common type of test items in language tests (Harmer, 2001:323). Their practicality makes this type of test item more popular among other types of tests. Some of the advantages of multiple-choice questions are easy to score (Harmer, 2007:169) and they now can be integrated in both offline and online tests. Offline multiple-choice questions are the 'traditional' ones which require paper and pencil while online multiple-choice questions are the Internet-based tests in which the learners or examinees need internet connection to be able to do the tests.

2. True/False items

The true/false items are another type of test item widely used in language test (Harmer, 2007:169). Similar to multiple-choice questions, true/false test items have some advantages, one of which is they are easily constructed and marked (Harmer, 2007:169).

3. Completion items

According to Heaton (1988:42), completion items are frequently used to test knowledge of language such as grammar and vocabulary. Completion items are similar to gap-filling which aims to examine writing a word/words in a sentence (Harmer, 2007:169).

2.3 The Internet and Language Testing

Principally, online language tests are the advanced forms of computer-based tests (CBT). CBT itself was booming in 1990s since the rapid growth of computer. When digital devices and the Internet have rapidly grown, it has resulted in 'domino' effect in which people have to work (they even cannot work and live without the device) with their smart devices so-called smart phones or other sophisticated gadget.

Studies on the Internet and language testing have been conducted since 1990s. One of them discusses the effectiveness of web-based testing (Roever, 2001:84-94). The findings indicate that web-based language test had more advantages. Research done by Hosseini et al. (2014:659) reported that test takers showed more preference on computer-based test than paper-based test. The results of a study conducted by Woit & Mason (2003:137) show that online evaluation can be implemented securely, efficiently, and can result in increased student motivation and programming efficacy. Finding of another study carried out by Woit and Mason (2000:367) revealed that their experiments of enhancing student learning through on-line quizzes resulted in the increase of student learning and retention.

III. RESEARCH METHODOLOGY

The present research employed a descriptive quantitative method which implies that the data were collected by distributing a questionnaire, as one of the research instruments, to 16 English teachers/respondents. The questionnaire aimed to investigate the teachers' perception on the online achievement test devised. The questionnaire, consisting of 12 items—in a four-scale form—and two open-ended questions, was adapted from Tsurutani and Imora's (2015:261-267) questionnaire. The results, which indicate the percentage of how many teachers responded to 'Strongly Agree (SA)', 'Agree (A)', Disagree (D)', and 'Strongly Disagree (SD)' of each statement in the questionnaire and the teachers' perception towards the test, were described in the findings section. Below is the questionnaire distributed to the respondents.

Table 1. Questionnaire of The Online Achievement Test

No.	Statement	SD	D	A	SA
1.	The online test makes students more independent in language learning.				
2.	Future classes should have online tests.				
3.	The design /layout of the questions on the screen is easy to look at.				
4.	The feedback is helpful for the students.				
5.	The format of the online test is user				

	friendly.				
6.	The automatic marking/scoring motivates students more to learn.				
7.	Answer checking after completing the test on the online test is more simple than that of a paper-based test.				
8.	The online test can minimize 'cheating' when the students are working on the test.				
9.	Online tests reduce teachers' burden in terms of test marking/scoring.				
10.	Online tests are more accessible and less prone to be lost.				
11.	Online tests are psychologically less pressured for the students.				
12.	Time/duration for online tests is well managed.				

After trying the online test, which one would you prefer, online or paper-based tests for your English classes?

Please state the reasons why you prefer online or paper-based tests.
1._____
2._____

The questionnaire was completed after the 16 respondents worked on a sample of an online achievement test. The website used for designing the test was flexiquiz.com. It is a user-friendly website to make an online test because:
   a. It has efficient test administration;
   b. Students/test takers do not need to create an account to access the test (easily accessible);
   c. The test takers can have immediate results upon the test completion and it can provide feedback to foster autonomous learning;
   d. It provides files in PDF format so that the test takers can download the results and save them.
   e. The test takers can see the time running so that they can manage their time well when working on the test.

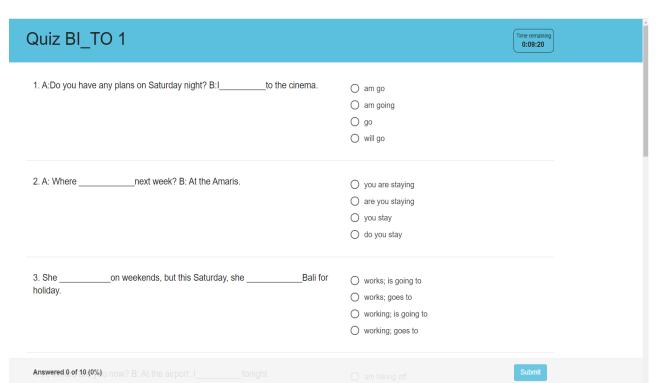## IV. FINDINGS AND DISCUSSION

4.1 Findings

Table 2. The Online Test Display

Quiz BI_TO 1

Time remaining
0:09:20

1. A:Do you have any plans on Saturday night? B:I_____to the cinema.
- ○ am go
- ○ am going
- ○ go
- ○ will go

2. A: Where _____next week? B: At the Amaris.
- ○ you are staying
- ○ are you staying
- ○ you stay
- ○ do you stay

3. She _____on weekends, but this Saturday, she _____Bali for holiday.
- ○ works; is going to
- ○ works; goes to
- ○ working; is going to
- ○ working; goes to

Answered 0 of 10 (0%) now? B: At the airport. I_____tonight. ○ am taking off

Powered by FlexiQuiz. Submit

Table 2 shows the display of the online test using flexiquiz.com. The display is the test prior to its submission. On the right side, at the top, is the time display to help the test takers to manage their time when working on the test. Upon the test completion, the test takers can see the test results and feedback display as seen in the table 3.

Table 3. The Feedback and The Test Results Display

Quiz BI_TO 1

✓

Points:
1/1

1. A:Do you have any plans on Saturday night? B:I_____to the cinema.

○ am go
◉ **am going** ✓
○ go
○ will go

The correct answer is B because 'any plans on Saturday night' shows future plans which require the use of present continuous.

✗

Points:
0/1

2. A: Where _____next week? B: At the Amaris.

◉ **you are staying** ✗
○ are you staying ✓
○ you stay
○ do you stay

The correct answer is B because 'next week' indicates future plans which require the use of present continous.

✓

Points:
1/1

3. She _____on weekends, but this Saturday, she _____Bali for holiday.

◉ **works; is going to** ✓
○ works; goes to
○ working; is going to
○ working; goes to

'On weekends' indicates present simple for regular activities and 'this Saturday' shows 'temporary actions' using present continuous; thus, the correct answer is A.

✓

Points:
1/1

4. A: Where are you now? B: At the airport. I_____tonight.

◉ **am taking off** ✓
○ take off
○ will take off
○ taking off

The correct answer is A because the adverb of time 'tonight' shows future plans.

As said earlier, 16 teachers tried out the test, then they were given an online questionnaire consisting of 12 items and two open-ended questions. The results of the questionnaire are as follows.

Table 4. Results of the four-scale questionnaire

Item	Strongly DIsagree	Disagree	Agree	Strongly Agree
1 The online test makes students more independent in language learning.	1 (6.3%)	4 (25%)	8(50%)	3(18.8)
2 Future classes should have online tests.	0 (0%)	2 (12.5%)	8 (50%)	6 (37.5%)
3 The design /layout of the questions on the screen is easy to look at.	0 (0%)	2 (12.5%)	8 (50%)	6 (37.5%)
4 The feedback is helpful for the students.	0 (0%)	2 (12.5%)	3 (18.8%)	11 (68.8%)
5 The format of the online test is user friendly.	0 (0%)	0 (0%)	9 (56.3%)	7 (43.8%)
6 The automatic marking/scoring motivates students more to learn.	0 (0%)	5 (31.3%)	8 (50%)	3 (18.8%)
7 Answer checking after completing the test on the online test is more simple than that of a paper-based test.	0 (0%)	5 (31.36%)	5 (31.3%)	6 (37.5%)
8 The online test can minimize 'cheating' when the students are working on the test.	3 (18.8%)	7 (43.8%)	2 (12.5%)	4 (25%)
9 Online tests reduce teachers' burden in terms of test marking/scoring.	0 (0%)	0 (0%)	8 (50%)	8 (50%)
10 Online tests are more accessible and less prone to be lost.	0 (0%)	1 (6.3%)	8 (50%)	7 (43.8%)
11 Online tests are psychologically less pressured for the students.	0 0%)	9 (56.3%)	4 (25%)	3 (18.8%)
12 Time/duration for online tests is well managed.	0 (0%)	1 (6.3%)	10 (62.5%0	5 (31.3%)

Table 5. Results of open-ended questions

Subject	Preference	Reasons
1	online test	Because online tests are easier to manage and in some cases, automatic correction can reduce teachers' burden in marking the tests.
2	online test	more efficient
3	Depends on the situation. For essays, it is better to have paper based. For multiple choices questions and other short answer questions, it would be more convenient to have online tests.	Online for ease of use, but paper based for more comprehensive types of questions
4	Online	Most of all practicality
5	PBT	Though online tests are more convenient in terms of time, and more assessible for working learners, paper-based tests are more comfortable to the eyes and easy to look at. If it is a 'real' test like a TOEFL one, i'd prefer paper-based tests, and if it is only a 'simple' test like this, online ones are okay.
6	Online	can be reuse
7	As a teacher, I am interested to use online-test because the students can get instant feedback on screen (why their answer is right/wrong) and also because it takes less time to do. Unfortunately, it is only can be done for multiple choice test. Currently, multiple choice test is less likely done in the class. So, I choose PBT more.	I prefer PBT for essay/ short answer written test. Unless, in general the test in school/ campus is using multiple choice, then PBT is better.
8	Online test	More fun, efficient, paperless, helpful in scoring process
9	online test	more simple and no need to write
10	online test	saves time, paper, and more secure for the students
11	online test	saves time, paper, and more secure for the students
12	PBT	It's more difficult for you to do the test if you're not used to taking such a test
13	online test	Easier, more efficient, user-friendly for both teachers and students
14	online test	Because we don't need the paper or

Subject	Preference	Reasons
		books to do exercises which will be more expensive. Also, by doing the test online, we can spend more time do practice since the test is available online a lot.
15	online test	Easy to mark, students-teachers can manage their time, re-useable in terms of modifiying the test for future use & tracking history
16	Online test	Because paper-based tests are time consuming when the teachers want to assess the students' answers. Additionally, it reduces the use of papers as well, which can save the budget spent and the environment.

Table 4 and table 5 indicate that most of the respondents prefer online tests to paper-based tests. There are some reasons why online tests are preferable:

a. The feedback given is advantageous for the test takers;
b. It reduces teachers' burden in terms of scoring or marking the test because it is automated scoring;
c. The test takers and administrators do need to be afraid of losing the test results as the website can save and download them in PDF format;
d. How long the test takers should work on the test can be set up and the test takers (students) cannot extend the time to work on the test. In other words, it is more organized and well managed in terms of the timing of the test;
e. Online tests are environmentally friendly as they are paperless and therefore, they save the earth because of less use of paper;
f. They are relatively cheap and do not cost a lot to buy pens or pencils or other stationery to do the tests.

Regarding the website used to make the online test, flexiquiz.com has several drawbacks despite its advantages.

a. The security system is somewhat loose which allows the test takers/students to cheat or get their friends to work on their test.
b. If we prefer free-of-charge system, some options on the menu cannot be used.
c. The free-of-charge system only allows the test makers to make or upload 10 questions in one test.

4.2 Discussions

To design an online test, we need to carefully select the websites applicable for some types of tests such as, multiple-choice questions, fill-in-blank questions, or text matching. Not all (free) websites suit the teachers' needs for achievement tests and not all websites are user-friendly for class quizzes. After reviewing and trying some free websites, flexiquiz.com, for the

time being, seems to be the most applicable and the most practical for achievement tests. As described earlier, students can have immediate results/score upon the test completion (automated scoring) and they can also have feedback on incorrect answers if they fail to answer the questions correctly (automated feedback).

The devised online achievement test and the characteristics of flexiquiz.com have fulfilled one of the criteria of a good test called practicality. According to Brown (2004, p.19), the characteristics of a practical test are:

    a. It does not cost too much (it is relatively cheap);
    b. It is doable in adequate time;
    c. It has 'friendly' test administration;
    d. It has a specific and efficient scoring procedure.

In addition, the results of the questionnaire are in line with earlier studies by Roever (2001:84-94) and Hosseini, et al. (2014:659) underlining that web-based and computer-based language tests have more benefits than paper-based tests.

To sum up, teachers principally prefer an efficient and practical method of measuring their students' progress in their language classes. Its effectiveness is their concern, too. Thus, online tests might be one of the recommended methods to examine their students' achievement in particular period of time as they fulfill the criteria of a good test—practicality and efficiency.

V. CONCLUSION AND SUGGESTIONS

5.1 Conclusion

To conclude, flexiquiz.com is temporarily recommended to design an online test as it meets the criteria of a good test called practicality and efficiency. It, furthermore, suits the respondents' preference of a method to measure their students' progress. Online tests now seem to be more preferable than the paper-based tests as they are more practical and efficient.

5.2 Suggestions

There are some suggestions for future studies which have not been discussed in the present research. First of all, the online test designed should consist of more than one type of test item. In one set of test, we may mix multiple-choice questions with fill-in-blank questions and we can investigate the practicality and efficiency of such combination. Second, the respondents should try at least two different test websites so that they can compare and may give recommendation and more valuable feedback on the designed online tests.

REFERENCES

[1]   Brown, H.D. (2004). *Language assessment: Principles and cassroom practices*. New York: Pearson Education

[2]   Harmer, J. (2001). *The practice of English language teaching*. Essex: Pearson Education Limited.

[3]   Harmer, J. (2007). *How to teach English*. Essex: Pearson Education Limited

[4]   Heaton, J.B. (1988). Writing English language tests. Essex: Longman Group UK Limited

[5]   Hosseini, M., Abidin, M.J. Zainol, & Baghdarnia, M. (2014). Comparability of test results of computer based tests (CBT) and paper and pencil tests (PPT) among English language learners in Iran. *Procedia-Social and Behavioral Science* 98 (2014) 659-667

[6]   Parrish, B. (2004). *Teaching adult ESL.* New York: McGraw Hill

[7]   Roever, C. (2001). Web-based language testing. *Language learning and technology, Vol.5, Num.2, pp.84-94*

[8]   Tsurutani, C. & Imora, T. (2015). Designing online assignments for Japanese Language Teaching. *Jalt Call Journal, Vol. 11, No.3, pp. 255–270*

[9]   Woit, D. & Mason, D. (2000). Enhancing student learning through on-line quizzes. *ACM SIGCSE Bulletin 32 (1), 367-371*

[10]   Woit, D. & Mason, D. (2003). Effectiveness of online assessment. *ACM SIGCSE Bulletin 35 (1), 137-141*