

DEVELOPING ONLINE FORMATIVE ASSESSMENT USING *QUIZIZZ* FOR ASSESSING READING COMPETENCY OF THE TENTH GRADE STUDENTS IN BULELENG REGENCY

Desak Made Ari Puspitayani¹, I Nyoman Adi Jaya Putra², Made Hery Santosa³

¹²³English Language Education Post Graduate Program, Ganesha University of Education
Email : puspitayani.daisha@gmail.com, nyomanadi123@gmail.com,
herysantosa34@gmail.com

ABSTRACT

This research and development study (R&D) aimed to: (1) develop online quiz prototype using *Quizizz* and (2) examine the quality of the developed online quiz. This study employed Four-D model with *Define, Design, Develop, and Disseminate* phases by Thiagarajan (1974). The subjects of this study were 10 Senior High School English Teachers in Buleleng regency. The data about the teachers' need were collected by administering questionnaire and analyzing the teachers' documents while the quality of the developed online quiz was validated by expert and user judges. The data of the teachers' need were analyzed descriptively. The quality of the developed online quiz in terms of content validity was analyzed by using Gregory's formula while the practicality was analyzed by using practicality criteria. The results of the study shows that the teachers need online quiz as formative assessment instruments which consisted of of linguistic and level comprehension aspects. The prototype of online formative assessment was initiated in *define* phase by doing target situation analysis, learner analysis, concept analysis, task analysis, and present situation analysis. The quality of the developed online quiz was examined in *develop* phase. The result of the study shows that the quality of the developed online quizzes as a formative assessment in terms of content validity was very high and the practicality was excellent. The implication of this finding is that the developed online quiz as formative assessment instrument is highly recommended to be implemented in the real classroom and widely disseminated. It is not only beneficial for the teachers in teaching and learning process but also improve teachers' competence. Therefore, this formative assessment instrument is ready to be used for assessing the tenth grade students' reading competency.

Keywords : formative assessment; online quiz; prototype; reading competency; teachers' competency

INTRODUCTION

Recently, to improve the quality of education, our government has implemented *Computer-Based Test* (CBT) for national examination. Students are required to answer exams' questions using online system. The objectives of *CBT* are to reduce cheating, mainly in national examination, increase learning motivation for students, and also help the institution (schools) in conducting national examination. However, the data from Ministry

of Education and Culture shows that the result of National examination has decreased for the last three years. The decreasing of the score was highly related to the change of norm and exam mode. The change of norm means there were some higher standard problems entered in National Exam 2018, meanwhile the change of mode means from the use of paper-based test to CBT (Kemendikbud, 2018). Furthermore, the performance of Indonesian students in *Trends in International*

Mathematics and Science Study (TIMSS) and *Program for International Student Assessment (PISA)* since 1995 is far from expectation. According to the result of Pisa 2015, that Indonesia is in 64th place among 72 country participants. It shows that reading competency of Indonesian students has not shown significant improvement. This phenomenon shows that students have lack of passion in reading. Reading competency has not shown a significant increase from 396 in 2012 to 397 points in 2015. This position has increased 6 places in Indonesia compared to the second position from bottom in 2012 (Argina, Mitra, Ijabah, & Setiawan, 2017)

This phenomenon implies that there is something wrong as how reading competency is assessed. To assess a student' competence, a teacher needs to collect information to see if the student has or has not achieved the learning target. Teachers therefore, must be able to focus their assessment activities to get accurate informations to be able to make a correct educational decision. It implies that teachers must be competent both in selecting and using assessment. This ability is very important to be able to create meaningful language assessment (Nitko, 2001). According to Bailey (in Marhaeni, 2012) the term "appropriate" implies that language assessment is able to provide teachers informations they need about their students. It means that must be able to decide which skills, processes, or knowledge they want to assess. It is further emphasized that the assessment itself should be meaningful for students to give positive effect to the quality of the students.

To survive in this global world, language learning in 21st century education is emphasized not only on building students four skills but also their critical thinking, good communication, good collaboration, and be creative (Sarica & Cavus, 2009). The use of technology, therefore, should be highly taken into consideration and implemented in the learning process as students in this era is categorized as a native technology and internet. It is believed that by practicing digital technology and use as a teaching tool students' commitment will be higher.

Furthermore, it also help students to get involve and increase their performance. Practicing digital technology is believed effective to attract students' interest that they can focus more on the class teaching and learning process (Gilakjani & Sabouri, 2016).

However, based on the classroom observation and interview of ten senior high schools in Buleleng Regency, the implementation of e-learning was merely implemented on accessing the information through internet and transferring the learning material using slide presentation through power point and also share the material through *Whats App* feature. The use of smart phone in classroom was merely focus on Mobile Assisted Language Learning (MALL) rather than e-learning. According to Korucu & Alkan (2011), e-learning is a new form of distance learning. In addition, e-learning is proposed based on distance learning, the material is delivered to the students in formal way by using video presentation (Arkorful & Abaidoo, 2015). On the contrary, m-learning (mobile learning) is the expansion of e-learning that enable the students to utilize the advantages of mobile technologies to support students' learning. MALL is subarea of m-learning which is related to the use of applications designed for mobile and wireless devices in language teaching and learning (Arvanitis, Krystalli, & Panagiotidis, 2016).

Seven English teachers, moreover still use textbooks and paper-based worksheet in learning process. The assessment is also carried out on paper-based whereas these schools actually have applied *CBT* for National Examination and *E- rapor* (electronic students' achievement result). Online or *e-assessment* is the use of web-tool by the teachers to assess students' performance in their learning. The use of online year-end assessment has been implemented since 2017 specifically for twelfth grade students as the preparation to face CBT. This policy requires teachers to prepare learning material as well as the assessment to make it in line with the government policy and to make sure that students are well prepare for National Examination.

Based on the result of questionnaire to 10 English language teachers from 4 Senior High Schools in Buleleng Regency, only 3 of them have implemented online assessment in assessing students' reading competency (1 teacher uses *beesmart*, 1 uses *beesmart* and *schooly*, and another 1 uses *zipgrade application*). While the other seven teachers have not implemented online assessment and still apply paper-based evaluation/ assessment with the following reasons. *First*, most of the teachers said that it is very difficult for them to find proper and appropriate online assessment instrument to be used in assessing the students' reading competency. They further explained that reading materials available in some online quizzes in internet are not appropriate with those materials covered in curriculum 2013. *Second*, they mentioned that they do not have enough time to create their own online quiz for assessing the students' reading competency. They further explained that their duties to teach minimum 24 hours and some other administrations work related to their teaching and learning and some other related duties make it impossible for them to create their own online quiz for assessing the students' reading competency.

Online quiz is one of e-assessment techniques that can be applied in learning process. Quiz can be used as formative assessment and it has high validity in diagnosing individuals' needs, group' needs and also planning instruction (Nitko, 2001). The use of online quiz in learning especially in reading is intended to check students' understanding of what they read. In addition, frequent implementation of online quiz especially in reading skill is highly needed since it plays significant role in national examination. In senior high school's national examination, both paper-based and online test cover listening and reading skill. It is found that there is 30 % listening skill assessed in national examination that consists of 15 questions. Meanwhile for reading is 60 % which consists of 30 questions and the other questions require students to arrange paragraph/ sentences and fill the gaps in paragraph. Meaning that, reading skill is skill

that highly emphasized. Considering that the time for practicing CBT was so limited and can cause students feel anxiety, therefore the use of online quizzes using *Quizizz* should be started at tenth grade students as the beginner level of the students in senior high school. Through this practice, it is hoped that the students will be ready in facing CBT when they are at twelfth grade.

Quizizz is one of online platforms that can be used to develop teachers made quizzes to assess students' reading competency considering its benefits both for teacher and students, such as: it user friendly, easy access, fun, increase students' motivation, and measure individuals' ability. It is believed as a new way to encourage students' motivation in learning. Thus, the result of online quiz will be a reflection for both teacher and students for next proceeding (Basuki & Hidayati, 2019).

Some studies of similar topic have been conducted previously. Salas-Morera et al. (2012) carried out study that deals with the integrated use of online quizzes as a teaching and assessment tool. The research is conducted to test the effectiveness of quizzes on students' performance. The results shows that such quizzes have proven positive influence on students' academic performance. Cohen and Sasson (2016) tried to investigate learning outcomes and the students' attitudes to online *Moodle* quizzes in order to improve instructional design. Results found that the average grade on written tests and the average grade on online quizzes as the significant predictors on the final exam. Students improved their scores significantly and shortened their performance time greatly on the last attempts of the online quiz, as compared to their first attempts. Moreover, there is positive students' attitude towards online quizzes. The use of *Moodle* quizzes affects the improvement of the instructional design which it demonstrates the formative assessment in higher education. Both of this study used *Moddle* platform for their online quiz while this current study was aimed to develop online quizzes using *Quizizz* as formative assessment. The similarity is on the use of online quiz as an assessment tool. Cook

& Babon (2017) conducted a study about the use of weekly online quizzes based on prescribed preparatory material as a tool to incentivize preparatory reading. The result of the study shows that the role of a high students' engagement with the quizzes affects the performance of prescribed reading. This experiment study investigated the effect of weekly online quizzes on reading while this current study is developing online quiz using *Quizizz* for assessing reading competency.

Based on the above explanation, it is very urgent to develop online quiz as formative assessment instrument in reading skill that can be used by teachers as the sources or models in the implementation of formative assessment in reading skill. Up to now, teachers hardly find models of formative assessment for reading skill as guidance for them as to how process assessment should be conducted in the teaching and learning process. This study focuses on developing online formative assessment using *Quizizz* for assessing reading competency of tenth grade students in Buleleng regency. This paper discusses; 1) how to develop online quiz prototype using *Quizizz*, and 2) the quality of the developed online quiz.

METHODS

This Research and Development (R&D) was attempted to develop online formative assessment using *Quizizz* for assessing reading competency of tenth grade students in Buleleng Regency. This study, used Four-D (*define, design, develop and disseminate*)

development model developed by Thiagarajan (1974).

The subjects of this study were 10 English teachers from four Senior High Schools in Buleleng Regency as the source of data to determine the type of online formative assessment *Quizizz* for assessing reading competency of the tenth grade students in Buleleng Regency and the prototype that was going to be developed. Meanwhile, the object of this study was the developed online quiz using *Quizizz* as a formative assessment in reading.

The data were collected through observation and survey with five instruments: questionnaire, checklist, researcher as the main instrument, rubric, and test. The obtained data from the first phase (*define*) were analyzed to know online quiz which is needed to be developed as a formative assessment instrument based on the teacher's needs. The result of the data analysis and review of theory used in this study were used as a basis to plan and design the prototype of the product. Then, it was followed by online quiz development based on the teachers needs.

To answer the second question, the developed online quiz were judged in terms of the validity (content validity) and practicality. The validity of the developed online quiz was judged by expert judges (material experts) and analyzed by using the criteria of the content validity based on Gregory's formula. The criteria of content validity using Gregory's formula are presented in Table 1.

Table1. The Criteria of the Content Validity by Using Gregory's Formula

Score	Level
0.80-1.0	Very high
0.60-0.79	High
0.40-0.59	Mediocre
0.20-0.39	Low
0.00-0.19	Very low

Meanwhile, the practicality of the developed online quiz was measured by user judges (English teachers). There were 15 items which were measured by user judges in

Likert scale calculated by using the following formula.

$$Mi = \frac{1}{2} (\text{Score Max} + \text{Score Min})$$

$$Sdi = 1/6 Mi$$

$$Sr = \frac{\text{Total score}}{2}$$

Note:

Mi : Ideal Mean

Sdi : Ideal Standard Deviations

Sr : Score

The data were then converted into the following scale.

Table 2. Practicality Formula

Score	Criteria
$Mi + 1.5 Sdi \leq Sr < Mi + 3.0 Sdi$	Excellent
$Mi + 0.5 Sdi \leq Sr < Mi + 1.5 Sdi$	Good
$Mi - 0.5 Sdi \leq Sr < Mi + 0.5 Sdi$	Average
$Mi - 1.5 Sdi \leq Sr < Mi - 0.5 Sdi$	Below Average
$Mi - 3 Sdi \leq Sr < Mi - 1.5 Sdi$	Poor

(Dantes, 2012)

The quality of the developed online quiz was tested through pre-test and posttest and also distributed the questionnaire to know the response of the student when used online quiz. The result of pretest and posttest were then analyzed by using paired sample t-test. The analysis of paired sample t-test was then analyzed by using SPSS version 22.

RESULTS AND DISCUSSIONS

The discussion involves detail interpretation and explanation of: (1) the prototype of the developed online quiz for reading competency of tenth grade students, and (2) the quality of the developed online quiz.

The result of target situation analysis showed that the teachers preferred to use *online quiz* and this kind of formative assessment was developed in this study. The teachers greatly hoped that there is an appropriate online quiz that they can use to assess the students' reading competency for some reasons. *First*, the limitation of time that the teachers cannot prepare their own quiz considering their teaching burden and some other administrative works. *Second*, the difficulty to find proper online quiz. They mentioned that some online quiz available are not appropriate with those materials covered in applied curriculum. The teachers also required to be provided with online quizzes that can accommodate the students with

different level of ability and cover the materials in curriculum. Senior High School students of grade ten are considered as beginner learners in learning English as foreign language. They have different ability one to the others. This difference affects the different process of learning of each student. Considering on such cases, each online quiz questions were developed based on basic skill, middle skill and high skill. In addition, online quiz items were also completed with questions that require the students to be able to identify main idea of the passage, expression, detail, inference, reference, as well as synonym. Readers should be familiar with some items in comprehending reading, namely: main idea (topic), expressions/idioms/phrases in context, inference (implied detailed), detail (scanning for a specifically stated detail), excluding facts not written (unstated details), supporting idea(s), and identifying meaning synonym, or opposite, (Brown, 2003).

Formative assessment is an important part of students' learning; it is more emphasized on students' development (Chaqmaqchee, 2015). There are some types of formative assessment, such as: group working, quiz, discussion, and exam. Giving quiz is believed to give benefits to students, for instance: it can promote autonomous learning, increase students' motivation to attend the class and also can retain the learning material longer (Gholami & Moghaddam, 2013). Furthermore, online quiz

can be used as an alternative for assessing students' progress. However, most teachers still focus on evaluating students' learning using exam. Meanwhile, Nitko (2001) notes that quiz has high validity in diagnosing individual's need. Implementing quiz regularly make students' learning more effective since they will get the immediate feedback. In line with that, Morera et.al (2012), further add that the use of online assessment through the implementation of series online quizzes is believed to improve students' academic result than using a mere standard exam. Moreover, Morera, et.al (2012) adds that the use of online quiz will be more efficient in this digital era since the teachers do not need to print out the dozens of paper when conducting test or exam. Besides that, the time spent in conducting exam at once can take 90 minutes at once. By using *Quizizz* the time spent in accomplishing one quiz is only 30 minutes, since there was 3 minutes for each question. Furthermore, by using *Quizizz*, teacher does not need to prepare any additional tool, such as: LCD projector, since the teacher can monitor students' progress on his/ her own laptop/ computer or smart-phone. Students also can use their own laptop or smart-phone if there are enough computers in schools to join online quiz. It will be more effective.

As Cadieux et al. (2017) emphasize that the use of the appropriate digital web-based tools, such as *Kahoot*, *Quizizz*, and *Socrative* can meet students' learning needs. The result of quiz using *Quizizz* gives clear description about students' score, rank, with the analysis of those questions they answer correctly and incorrectly. This result then can be used as a reflection both for teacher and students. Teacher can analyze slow learner and fast learner, identify part of the learning material that the student does not understand or confuse and use this to plan for further instruction. For students, the result of quiz is also used as a self-assessment to see to what extent they understand the material. It also leads autonomous learning to improve their learning. In addition, self-assessment as a part of process of formative assessment which the students reflect on and evaluate the quality of

their work and their learning, identify their strengths and weaknesses in their work and revise accordingly (Marhaeni, 2012). In line with that Cox & Clark (1998) emphasize that giving continuous online formative assessment using quizzes will give positive effect to students since they know their own learning progress and the use of online formative assessment must be integrated with summative assessment. On the contrary, based on the observation result found that school that implement online summative assessment has not implemented online formative assessment, especially online quizzes. Hence, the result of this study is highly needed to assist teachers' demand in providing online quiz using *Quizizz* as a formative assessment for assessing students' reading competency.

Furthermore, the use of online quiz using *Quizizz* as a formative assessment can reduce students' stress. Conducting online quiz using *Quizizz* is believed to minimize students' stress since it creates fun atmosphere and foster students' enthusiasm. *Quizizz* is equipped with music which can be turn on and turn off. This is related to the result of learner analysis that the students prefer to listen the music when they study to keep them focus. The music is also functioned to relieve their stress in joining quiz. Moreover, students' rank can be displayed on leaderboard which can be seen by the entire class. By seeing this, students will be motivated to perform better since they know where their positions are. The result of learner analysis related to students' motivation shows that some students are motivated by the reward or compliment. Those students at the first rank/place will be happy and this encourages them to keep/maintained their position. Meanwhile for others, they will be motivated to improve their performance more.

As clearly stated in curriculum 2013 that learning should be fitted with the current situation, such as the use of technology or electronic (e.g.: LCD, laptop, and smartphone) in classroom and students' need. Related to the result of learners' analysis where the students prefer to use smartphone or other technology, teachers should be

competent in using technology and utilize it in learning process. In addition, teachers are required to be more creative in using and creating learning material. Related to *Regulation of Minister of Education of Republic Indonesia No16/2007* that teacher should have some competencies, namely: pedagogical competence, personal competence, social competence and professional competence. Teacher's performance is affected by these all competencies. Syamsinar and Jabu (2016) emphasize that teachers have problems dealing with professional competence, such as: problem in developing learning material creatively and problem in using technology. The utilization of *Quizizz* can be used as an alternative in developing online formative assessment in classroom considering that it is an easy use platform and can motivate students' learning.

Curriculum analysis was conducted by analyzing English Curriculum and syllabus of tenth grade students of senior high school. English subject for the high school / MA / SMK / MAK education level is aimed to develop the potential of students to possess communicative competencies in interpersonal, transactional, and functional texts, using various English texts both oral and written. In this level, factual, conceptual, procedural, and meta-cognitive knowledge are studied at the level of thinking "understanding" (specifically identifying, comparing and interpreting) and the level of "applying".

Meanwhile the scope of English learning material of reading for tenth grade students of Senior High School in second semester covers Recount (Historical Recount) and Narrative text. Roison, et al (2004) says that a recount is retelling or recounting past experiences. Moreover, Coogan (2006) states that the purpose of recount text is to retell the event in order to inform or entertain the audience or reader. Therefore, recount can be concluded as retelling past experience which has purpose to inform or entertain the readers. Recount covers personal experience, biographical recount and historical event. Furthermore, Derewianka (1991) states that there are three types of

recount text, namely: *personal recount*, *factual recount*, and *imaginative recount*.

Anderson and Anderson (2003) claimed that narrative text type is intended to present a view of the world mainly to entertain or inform the reader or listener. Moreover, Meyers (2005) adds that narrative genres has a social function to amuse, entertain or gain and hold reader's interest with actual or various experience in different ways. Fairy stories, mysteries, science fiction, romance stories, horror stories, adventure stories, fables, myths and legends belong to narrative. Kane (2000) mentions that some series of event either story from imagination or real life incident are well structured in narrative text.

Orientation, *complication* and *resolution* are common generic structure found in narrative text. Orientation is part of the text which establishes the characters, setting and also the time of the story, for example: once upon a time, a long time ago. Complication is the problem in the middle of the story. It involves the beginning conflict and problems that the main character faces. The last part is the resolution, which contains the resolution of the problem or complication. The resolution maybe has a happy or sad ending.

The language features of narrative text is the use of simple past tense (the mother came back), the use of noun phrase (pretty house), the use of connectives (first, before, then, finally), the use of adverbial phrase of time and place (in the market, yesterday), the use of saying verbs (say, speak, ask, tell), the use of thinking verbs, verbs of senses (like, love, hate, enjoy).

There are some indicators of assessment in assessing reading comprehension. For basic Skill, there are four indicators, namely; 1) Understanding the meaning of word by word related with the text, 2) Understanding the structure of organization on the text and relation of every paragraph, 3) Finding out the main idea on the text, 4) To be able to answer some questions explicitly. For middle skill, there are two indicators; 1) To be able to answer some questions that the answers may be expressed in different grammatical word on the text. 2) To be able take inference about the

text. Meanwhile for high skill, there are two indicators; 1) To be able understand the meaning of the word and expression to understand the literature meaning, and 2) To understand the writer meaning and message on the text (Djiwandono, 2011).

The above mentioned grand theory and the result of need analysis were used as a basis to design the prototype of Online Formative Assessment Using *Quizizz* for Assessing Reading Competency of Tenth Grade Students in Buleleng Regency as displayed in the Figure 1.

Berdasarkan hasil analisis pada siklus I. Skor rata-rata motivasi siswanya sebesar 73,17% telah memenuhi syarat keberhasilan dan rata-rata prestasi belajar 78,04% dengan kategori baik, temuan ini mewujudkan bahwa hasil tersebut telah memenuhi tuntutan yang diharapkan dalam penelitian ini, dari hasil refleksi pada siklus I terdapat kendala-kendala yang menyebabkan belum tercapainya hasil yang diharapkan yaitu : (1) ada beberapa siswa tidak mau berpartisipasi dalam kelompoknya, (2) ada beberapa siswa yang belum mengerti maksud pembelajaran yang diterapkan, ini ditandai oleh adanya beberapa orang yang tidak melakukan tindakan apa-apa ketika diberikan arahan Model Pembelajaran *Discoveri Learning* pada awal pembelajaran., (3) banyak siswa mengeluh mereka mengatakan bahwa waktu yang diberikan pada waktu diskusi kelompok terlampaui sedikit sehingga banyak permasalahan yang belum terpecahkan, (4) pada saat menghadapi tes prestasi belajar masih banyak siswa yang belum mempersiapkan diri secara maksimal.

Berdasarkan kendala-kendala pada siklus I maka pada siklus II dilakukan upaya-upaya perbaikan yaitu : (1) peneliti mengubah si kelompok sebelumnya agar benar-benar heterogen, baik akademik maupun jenis kelaminnya, untuk menambah motivasi siswa pada siklus II peneliti / guru memilih salah satu kelompok sebagai kelompok terbaik dengan kriteria dapat menyelesaikan LKS dan pertanyaan yang dibuat oleh peneliti/guru dan mampu menyelesaikan soal-soal tersebut bila anggotanya diambil secara acak, (2) sebelum

pelaksanaan tindakan siklus II peneliti / guru mensosialisasikan kembali maksud dari Model Pembelajaran *Discoveri Learning* dalam pembelajaran kewirausahaan, (3) guru / peneliti memberikan arahan kepada siswa agar tidak malu.

Bertanya, baik pada temannya maupun pada guru pengajarnya di luar jam pelajaran jika ada soal yang tidak mampu dipecahkan, selain itu peneliti/guru juga memberikan kesempatan kepada siswa (± 15 menit) untuk bertanya sebelum tes dimulai.

Dengan melakukan perbaikan / pemecahan masalah terhadap kendala-kendala yang dihadapi pada siklus I pembelajaran pada siklus II tampak lebih baik dari sebelum pelajaran, skor rata-rata motivasi belajar siswa meningkat dari sebesar 56,09% dengan kategori tinggi pada siklus I menjadi 73,17% dengan kategori tinggi pada siklus II. Skor prestasi belajarnya juga meningkat dari sebesar 56,65% dengan kategori baik pada siklus I menjadi sebesar 78,04% baik. Ketuntasan belajar klasikal dari sebesar 97,43% pada siklus I menjadi 100% pada siklus II.

Secara umum penelitian ini dapat dikatakan berhasil karena, 3 butir kriteria keberhasilan yang diharapkan dapat tercapai yaitu : (1) motivasi belajar siswa selama penerapan Model Pembelajaran *Discoveri Learning* mencapai kategori tinggi, (2) prestasi Model Pembelajaran *Discoveri Learning* sesuai dengan kurikulum,

Keberhasilan yang diperoleh dalam penelitian ini disebabkan karena adanya kelebihan-kelebihan yang dimiliki pendekatan Model Pembelajaran

Discoveri Learning diantaranya : (1) dengan pembelajaran Model Pembelajaran *Discoveri Learning* dalam pembelajaran kewirausahaan mencapai kategori positif. Keberhasilan yang diperoleh dalam penelitian ini disebabkan karena adanya kelebihan-kelebihan yang dimiliki pendekatan Model Pembelajaran *Discoveri Learning* diantaranya : (1) dengan pembelajaran, Model Pembelajaran *Discoveri Learning* siswa lebih mudah memahami pelajaran karena kelompok yang ada akan menjadi saingan terhadap kelompok yang lain, disini siswa akan lebih

banyak membaca serta menanyakan pada teman yang lain, (2) peran siswa dalam kelompok sangat dihargai oleh teman-teman yang lain karena kemajuan kelompok dalam prestasi ditentukan oleh peran serta masing-masing siswa (individu), (3) pendekatan pembelajaran Model Pembelajaran Discoveri Learning, keragaman pendapat dan kreatifitas siswa dalam menyelesaikan permasalahan sangat dihargai, ini akan mendorong siswa untuk berani mengajukan pendapat sehingga suasana belajar di kelas tampak aktif, karena semua siswa berperan dalam Model Pembelajaran Discoveri Learning nya masing-masing, (4) guru bisa lebih langkah menggunakan waktunya untuk menjalankan fungsinya sebagai penasehat, pembimbing, motivator dan fasilitator.

Namun masih ada kelemahan dan kendala yang ditemui dalam penerapan Model Pembelajaran Discoveri Learning ini yaitu : (1) waktu yang dibutuhkan untuk penerapan model pembelajaran ini cukup banyak, sehingga siswa mengeluh kekurangan waktu, (2) ada beberapa siswa yang nakal dan malas sering mengganggu teman dalam kelompok belajarnya sehingga perlu mendapat perhatian khusus dan sebaiknya Model Pembelajaran Discoveri Learning dilaksanakan pada kelas yang tidak terlalu gemuk / banyak siswa.

Hasil penelitian ini menunjukkan bahwa penerapan Model Pembelajaran Discoveri Learning dalam pelajaran kewirausahaan mampu meningkatkan motivasi dan prestasi belajar siswa.

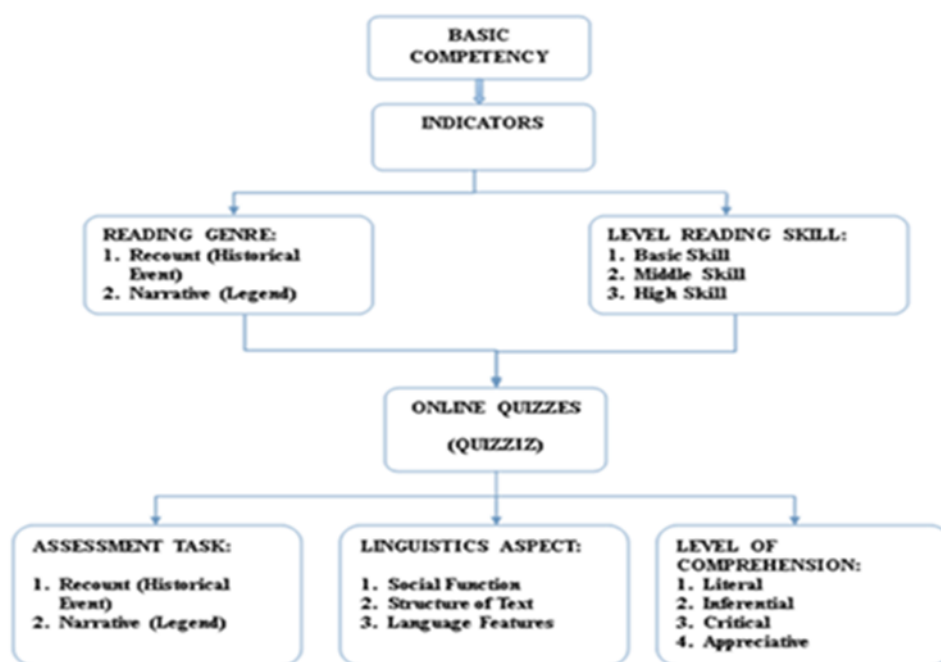


Figure 1. Prototype of Online Quiz Development as a Formative Assessment Instrument for Reading Competency

From the above prototype, 15 online reading quizzes were then developed, consisting of 7 historical recount quizzes and 8 narrative quizzes. One online quiz consists of ten questions in the form of multiple choices that consist of five options. The current online reading quiz were developed based on the linguistic aspect; social function of the text, structure of the text, and language

featured of the text. Meanwhile from the level of comprehension aspect there are four aspects involved, namely; literal comprehension, inferential comprehension, critical comprehension, and appreciation comprehension.

The result of expert judges shows that the content validity was 1.0, and based on the criteria it could be concluded that the

developed online quiz instrument had a very high validity. They further comments stated that the developed online quiz were good enough and easy to use. Meanwhile, in terms of its practicality, the average score of both user judges of the developed online quiz instruments was 65.5. According to the criteria of practicality by Fernandes in Dantes (2012), it belongs to excellent criteria, with its calculation of $Mi+1.5Sdi \leq Sr < Mi+3.0Sdi$, in which $60 \leq 65.5 < 75$. In addition, there were some points of the strengths that were stated by the user judges regarding to the developed online quiz instruments. Those strengths were: 1) these online quiz instrument can be used to evaluate students' reading comprehension skill, and 2) these online quiz instrument is easy to be used and practical.

After being validated by expert and user judges, the developed online quiz were then tested to the students of grade X senior high school. In terms of its practicality, the use of online quiz brings positive impact to the students. The result was supported by research conducted by Morera, et.al (2012) that deals with the integrated use of online quizzes as a teaching and assessment tool. The research was conducted to test the effectiveness of quiz on students' performance. The results shows that such quiz has a proven positive influence on students' academic performance. Moreover, regarding to students' responds to questionnaire toward the use of online quiz, the students responses were good and based on the observation, it showed that the students feel enjoy during quiz. Some of students said "I will not feel bored learning English if I use Quizizz", "It is fun", "Can we use it for next meeting, Miss?". Kong (2009) states that the enjoyment during learning process is one of the intrinsic motivations and this is important in learning. Therefore, the use of these developed online quiz can bring positive effects both in students' reading competency and increase their motivation.

Dissemination was done through discussion to other English teachers about how to use Quizizz, created quiz and implemented it to students in classroom. Thiagarajan (1974) notes that, dissemination can be done by distributing the materials

widely among trainers and trainees, giving instructional material through programs, encouraging the adoption and also utilizing the materials. The result of dissemination showed that both teachers and students really enthusiast in learning process. Some teachers interested to implement it in his/ her class and asked more details in using Quizizz, such as: "Please tell more about Quizizz", "Ok.. It seems fun, I will try it in my class since I have class in the afternoon to cheer up my students". Meanwhile some students said, "It is fun, I won't feel bored anymore in English class", "Can we play it once more?"

The implication of this finding is that the developed online quiz as formative assessment instrument is highly recommended to be implemented in the real classroom and widely disseminated, will be beneficial for the teachers in teaching and learning process, and also improve teachers' professional competence. Related to present situation analysis that the teachers were assisted by laboratory assistant to prepare summative assessment using *beesmart*, indicated that the teachers had problem in using technology. This problem arose because the teachers have no knowledge about *beesmart* or the application is difficult to be applied. Considering that Quizizz is a useful and easy to be implemented, the result of this study is believed to help the teachers in improving their professional competence since they can develop their own online formative assessment using Quizizz for assessing reading competency as part of their learning process.

CONCLUSIONS

The result of the need analysis shows that it was necessary to develop online formative assessment using Quizizz for Assessing Reading Competency of the Tenth Grade Students in Buleleng Regency. All online reading quizzes were developed based on the linguistic aspect (social function, structure of the text, as well as language featured) and level of comprehension (literal comprehension, inferential comprehension, critical comprehension, and appreciation

comprehension). Learning materials of online quiz were historical recount and narrative. The indicators were made based on the basic competency demand and consist of basic skill, middle skill and also high skill of comprehension. One online quiz consists of ten questions in form of multiple choices that consist of five options. There were 15 online quizzes that would be created that consisted of 7 historical recount quizzes and 8 narrative quizzes.

The quality of the developed online quiz in terms of its content validity was very high. Meanwhile, the level of its practicality belongs to excellent criteria. The expert judges commented that the developed online quiz was good enough and easy to use. The quality of the developed online quiz to students' reading competency also shows a significant difference before and after giving online quiz.

The developed online quiz as formative assessment instrument is highly recommended to be implemented in the real classroom and widely disseminated, considering that *Quizizz* is a useful and easy to be implemented. The result of this study is believed to help the teachers in improving their professional competence since they can develop their own online formative assessment using *Quizizz* for assessing reading competency as part of their learning process.

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