TEACHERS' READINESS IN INSERTING THE 21ST CENTURY SKILLS FOR TEACHING ENGLISH AT PRIMARY SCHOOLS

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Abstract

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The development of 21st century affects all sectors including the education field. The importance for preparing students with knowledge and skills affects the learning process in this era. Life skills and balanced assessment are the demands in 21st century era. These demands need to be prepared by the teachers since primary education. Therefore, it is important to analyze primary English teachers' readiness in inserting 21st century skills in terms of lesson planning, teaching and learning process and assessing students' learning as the important aspect on learning process. This study used embedded mixed method using qualitative description and supported with descriptive quantitative analysis. The subjects of the research were 11 primary English teachers in Denpasar. A questionnaire was used to measure the readiness of the teachers in inserting the skills in the aspects of learning process. The data obtained were calculated and classified into its level of teachers' readiness. It was found that the teachers perceived themselves as ready in inserting the 21st century skills. This is indicated by 1) their positive responses toward the knowledge about the 21st century skills, 2) they were confident in perceiving their implementation toward 21st century skills, and 3) they were ready in inserting 21st century skills in terms of lesson planning, teaching and learning process and assessing their students' learning activities. It is expected that the teachers sustain their readiness in inserting the 21st century skills in teaching English for their students at schools.

Keywords: 21st century skills, primary English teachers, teachers' readiness

INTRODUCTION

The developments in all sectors such as economic, industry, technology, and education are the marks of 21st century era. All things are developed globally (B Boholano, 2017). The industrial revolution 4.0 is the result of the development in 21st century era that is implemented by Indonesian government. People try to compete in the globalization era. One of the important things that they need to be mastered is language. For that reason, English language takes an important place around the world as the international language (Balla, 2018).

The 21st century skills is result of the demand from the era. There are 4 major framework of 21st century skills, namely life and career skills, learning and innovation skills, information, media and technology skills and the last is 21st century themes (Trilling & Fadel, 2009). Bialik and Fadel (2015) state that knowledge is not enough for students in industrial era. To fulfill the need of proper curriculum, the government implements *Kurikulum 2013*. *Kurikulum 2013* is the education system that has already been implemented by Indonesia government. One of the reasons in implementing this curriculum is to prepare students to have competencies needed to live in this era for (Padmadewi, et al., 2017). In relation to this, Syamsuri and Ishaq (2010) state that *Kurikulum 2013* adapts 3 concepts of 21st century educational concept. The first is 21st century skills, scientific approach and authentic assessment.

Primary schools takes an important role in preparing students to the higher level of education. Gamar et al. (2018) state that primary schools is the first level of learning program in the most country including in Indonesia. It can also be seen from the total number of the primary schools in academic year 2019/2020 particularly in Bali which are around 2.447 schools. It is 75% from the total schools of all education levels in Bali. Primary schools shape students character, knowledge and skills since the first educational stage. Artini and Padmadewi (2020) state that formal education is needed to make students good in their life skills. Those are needed to face the revolution 4.0 in Indonesia. They were prepared from the beginning of formal education. In order to be ready to live in the 21st century era.

Teachers have big roles as the educators in guiding and preparing students with the skills and knowledge for facing their world. Teachers in 21^{st} century have to realize and aware about the 21^{st} century skills which are challenging for students. It is also supported by Arch (2010) who states that teachers have to understand about 21^{st} century skills in order to help students to reach the goal in the 21^{st} century education. Ability and competency of teachers in managing the plan in teaching and learning activities, process of teaching and learning activities, until the stage of assessment are important. They have to insert the 21^{st} century skills in their process of teaching and learning for students. Teachers need good perception and have readiness in preparing students in 21^{st} century era with the 21^{st} century skills.

There are 4 things that English teachers should do, they are reflective, developing competence, competence in ICT, and promoting alternative assessment (Handayani, 2017). Looking to that information, it should be realized that the teachers are not the only main sources for their students. There are other resources available online. For that reason, teachers must be able to guide their students with the skills needed. They have to play the role as a guide for them in evaluating, reviewing and giving feedback on students' learning activity and facing the world.

According to Dalton and Gottlieb (2003), readiness is the changing of willingness and ability to develop their skill and attitude to do an action. In this stage, the teachers need to have willingness to produce better action. Readiness is also related with the confidence of someone. Nasution et al. (2018) also argue that readiness emphasizes on the preparation. In this case, the preparation from the teachers can be seen from their preparation in assessing students' learning process. They have to have confidence and competencies in preparing their evaluation for their students. Besides, the teachers need to prepare themselves with the knowledge of 21st century skills.

Many previous studies have been conducted on teachers' readiness. The first is from Rusdin (2018). He found that the level of readiness of the teachers in

implementing the 21st century skills is high. Balajadia (2017) also conducted a research about teachers' readiness. He found that the teachers believe on their readiness in the 21st century skills. Despite many previous research conducted, the present research emphasized on the insertion of 21st century skills in terms of lesson planning, teaching and learning process and assessment of primary English teachers.

METHOD

This study used embedded mixed method which emphasized on qualitative description and supported with descriptive quantitative analysis. The teachers' readiness was measured using a questionnaire. The questionnaire used Likert type to ask the readiness of teachers in inserting the 21st century skills in their lesson planning, teaching and learning process and in assessing their students' learning activity. All aspects had indicators and dimensions. The indicators and dimensions of the questionnaire were based on the 21st century skills which contained 3 main skills and supported with 21st century themes based on Trilling and Fadel (2009). The total number of items in the questionnaire were 17 items.

The questionnaire was guaranteed as reliable and valid. The validity of the questionnaire was measured by 2 expert judges and their responses were calculated by using Gregory Formula. The content validity and construct validity of the questionnaire were 1.00. It was classified as very high based on level of validity by Candiasa (2010). The reliability was calculated by using SPSS 24. It was 0.923. It was classified as very high reliability based on level reliability from Candiasa (2010).

The settings of this study were in 4 primary schools in Denpasar. It was selected through random purposive sampling technique. All selected schools mplement the 2013 Curriculum, *Kurikulum 2013*. The schools were primary English teachers in SD N 1 Peguyangan, SD N 22 Dauh Puri, SD Dwijendra Denpasar, and SD 1 Saraswati Denpasar. The total number of English teachers were 11 teachers, 6 teachers from public primary schools and 5 teachers from private primary schools. They had 2-26 years teaching experiences.

The questionnaire was distributed to all primary English teachers in those primary schools. It was used to know how the teachers perceive their readiness in inserting 21st century skills, which is indicated by the frequency of the teachers in inserting the skills in lesson plans, teaching learning processes and assessments. The categorizations of teachers' readiness were decided through the Standard Deviation Ideal (SDi) and Mean Ideal (Mi) from the results of the respondents' score. The criteria can be seen in Table 1.

Table 1. Categorization of Readiness Criteria

Criteria	Interval	Categorizations
1,8 Solvering	hterval	Very Ready
+ 0,6	48	Ready
$\frac{7}{8}$ (-0.6) $\frac{1}{8}$ $\frac{7}{8}$ $\frac{7}{$	38 ≤	Quite Ready
\$\frac{1}{2}\tau_{\tau} - 1,8 \\ \frac{1}{2}\tau_{\tau} = \frac{1}{2}\tau_{\tau} = \frac{1}{2}\tau_{\tau} \\ \frac{1}{2}\tau_{\tau} = \frac	27 ≤ ₹ 35	Not Quite Ready
34 J. 1,8	7 27	Not Ready

The criteria was adopted from Candiasa (2010). Those criteria show the categorizations of teachers' readiness based on the questionnaire results. \overline{T} Score which is the mean score of the respondents were calculated. Based on that mean score, the interval was decided and classified into its criteria. There were 5 criteria in the

categorization in deciding the levels of teachers' readiness toward the insertion of 21st century skills.

FINDINGS AND DISCUSSION

The data of the present study were obtained from a questionnaire which was divided into 3 aspects such as lesson plan, learning process and assessment. The data were divided into 2 categories, they are from public primary schools and private primary schools. The data can be shown in Table 2.

Table 2. Teachers' Readiness in Inserting 21st Century Skills

Aspects	Public Primary Schools	Private Primary Schools
Lesson Plan	There were 57% of the	46% of the teachers choose
	teachers perceived that	"always category" in
	they were often inserting	inserting 21st century skills
	21 st century skills.	
Teaching and	50% of the teachers were	There were 47% of the
Learning Process	often implementing 21st	teachers were always
	century skills in learning	implementing 21 st century
	process.	skills.
Assessment	There were 56% of the	46% of the respondents
	teachers choose "often	perceived that they were
	category" in inserting the	often inserting the 21st
	21 st century skills.	century skills.

Referring to Table 2, it can be seen that most of the respondents perceived that they were often inserting the 21st century skills in lesson planning, learning process and assessing their students' learning. The results in each aspect in the questionnaire can be described on these following descriptions.

a. Lesson Plan

The first aspect of the questionnaire is used to find out how English teachers perceive their readiness in inserting the 21st century skills in the lesson plans. The data from public and private primary English teachers were presented in each dimension of the questionnaire as following description.

1. Life and Career skills

Life and career skills consist of 5 skills. The skills were leadership and responsibility, productivity and accountability, social and cross cultural skills, flexibility and adaptability, and initiative and self-direction. The teachers perceived their readiness in inserting those skills in lesson planning.

The most chosen answer from 6 public primary English teachers were in "often category". In leadership and responsibility, 50% of the teachers perceived that they were seldom inserting this skills in their lesson plan. While in flexibility and adaptability, 50% of the respondents gave their responses in "always category" for perceiving their insertion toward these skills.

The responses shown by private primary English teachers were the same as the public primary English teachers' responses. All of them gave positive responses in "often category" and "always category" in perceiving their readiness. Only a respondent perceived that they were seldom inserting leadership and responsibility in their lesson plan.

2. Learning and Innovation Skills

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Learning and innovation skills or known as 4C skills are the second dimension in the questionnaire of teachers' readiness in inserting 21st century skills in assessment. It consists of communication, creativity and innovative, critical thinking and problem solving and collaboration.

From 4 skills in this dimension, only in creativity and innovative skill a public primary English teacher perceives that they were seldom inserting this skill in their lesson plan. While in the 3 other skills of this dimension, they choose "often category" and "always category" for their answers.

In the private primary English teachers' responses, only communication skill obtained 60% responses of the respondents in "always category" while for the other skills in this dimension, 60% of the teachers perceived that they were often inserting creativity, critical thinking and collaboration skills in their lesson plan. From those responses, only "often category" and "always category" were obtained in this dimension for private primary English teachers.

3. Information, Media and Technology Skills

Information, media and technology skills are the third dimension in the questionnaire. There are 3 skills in this dimension, they are information literacy, media literacy and technology literacy. This dimension contains ICT literacy in 21st century skills.

The data from public primary English teachers were in the 3 scales of the questionnaire. But most responses were found in "often category" and "always category". There were 2 skills rated in "seldom category". The skills were media literacy and technology literacy. A respondent chose "seldom category" for perceiving their insertion of media literacy in their lesson plan. While 33% of the respondents perceived that they were seldom inserting technology literacy in their lesson plan.

The responses in private primary English teachers were the same as public primary English teachers. It obtained "seldom category" in the insertion of media literacy and technology literacy. From both skills, 1 respondent perceived that they were seldom inserting media and technology literacies in their lesson plan. The rest of the respondents gave positive responses toward the insertion of the skills in this dimension in their lesson plan.

4. 21st Century Themes

The last dimension in the questionnaire is 21^{st} century themes. 21^{st} century themes contain 5 skills that support 3 main dimension in the 21^{st} century skills framework by Trilling and Fadel (2009). It consists of civic literacy, global literacy, financial literacy, health literacy and environmental literacy.

"Often category" was the most chosen answer in perceiving public primary English teachers' answer for inserting the 21st century themes in their lesson plan. In this dimension, 3 skills such as civic literacy, financial literacy and health literacy obtained 33% responses from the respondents. While in global awareness, health literacy and environmental literacy obtained 17% responses from the respondents.

The next data were from private primary English teachers. From 5 skills in the 21st century themes, the teachers gave positive responses by choosing "often category" and "always category". In 3 skills such as civic literacy, financial literacy and health literacy, 40% of teachers perceived that they were seldom inserting these skills in their lesson plan.

From the data of first aspect in the questionnaire which is lesson planning, the mean score from public and private primary English teachers were calculated. It was 52 for public primary English teachers and 57 for private primary English teachers. Based on its interval, both respondents were in the same interval. It showed that public and private primary English teachers perceived themselves as ready in inserting 21st century skills in their lesson planning.

b. Teaching and Learning Process

The second aspect of the questionnaire was used to obtain data of teachers' readiness in implementing the 21st century skills. The responses in each dimension can be presented as below.

1. Life and Career skills

Public primary English teachers mostly gave answer in "often category" and "always category". But in the productivity and accountability, 17% of the respondent perceived that they were seldom implementing the skills in the teaching and learning process. The rest of them gave positive answer for this skill.

There were 2 responses which were obtained from this dimension from private primary English teachers. "Often category" and "always category" were the responses found. It means that all of the respondents gave positive answers in perceiving themselves toward the implementation of life and career skills in teaching and learning process.

2. Learning and Innovation Skills

The first data were from public primary English teachers. It was found that a respondent perceived that he/she was seldom implementing creativity and innovative skills in teaching and learning process. The rest of the respondents mostly chose "often category" and "always category".

The next data were from private primary English teachers. Most of the respondents gave their answers on "often category" and "always category". While in critical thinking and problem solving, a respondent perceived that he/she was seldom implementing this skill in teaching and learning process. The rest of the respondents gave positive responses in perceiving their selves.

3. Information, Media and Technology Skills

Public primary English teachers gave positive responses toward their implementation of this dimension. They mostly gave responses in "often category". Information literacy obtained 83% responses, media literacy obtained 50% responses and technology literacy obtained 66% responses in "often category". While in technology literacy, 17% responses of a teacher were found implementing this skill.

It is different from the previous data from public primary English teachers, private primary English teachers gave responses in "seldom category" on 2 skills in this dimension. There were in media literacy and technology literacy.

4. 21st Century Themes

The first data from public primary English teachers showed positive responses from the respondents. Only in financial literacy, 50% of the respondents perceived that they were seldom implementing this skill in teaching and learning process in classroom.

Private primary English teachers gave positive responses toward their implementation on 21st century themes for teaching and learning process. Civic literacy, financial literacy and health literacy obtained "seldom category" responses from the respondents. The rest of the skills obtained "often category" and "always category" for their answers.

Based on the findings about teachers perceived readiness toward their implementation of 21^{st} century skills, the mean score of the responses were calculated in order to find out the classification of their readiness. It was found that the mean score from public primary English teachers was 54 and private primary English teachers was 57. They were in the same interval and same categorization. It means that the primary English teachers perceived themselves as ready in implementing the 21^{st} century themes in their learning process.

c. Assessment

Assessing students' learning activities is the last part of the questionnaire in obtaining the data for teachers' readiness in inserting 21st century skills. The respondents perceived their readiness in conducting assessment based on the skills. The responses from the questionnaire's result can be seen as follows.

1. Life and Career Skills

Most responses toward this dimension from public primary English teachers were in "often category" and "always category". They were often inserting leadership and responsibility and flexibility and adaptability skills. The percentage of the responses was 50% from the total of respondents. While in social and cross cultural skill, initiative and self-direction skills obtained 50% responses from respondents in "always category" in their insertion for assessing students' learning. The responses of the respondents in productivity and accountability skills were 33% in "often category" and "always category".

Private primary English teachers mostly chose "always category" in perceiving themselves toward their insertion on leadership and responsibility, social and cross cultural skills, flexibility and adaptability, and initiative as well as self-direction. There were 60% of the respondents always in inserting those 4 skills in this dimension. In leadership and responsibility, only a respondent choose "seldom category". Productivity and accountability skills obtained 60% responses from the respondents in the questionnaire.

2. Learning and Innovation Skills

The first data is from public primary English teachers. 67% of the respondents perceived that they were always inserting communication skill in assessing their students learning. While in the 3 skills in the creativity and innovative group, critical thinking and problem solving, and collaboration skills got "often category" as their most chosen response. The teachers were often inserting those skills in their assessment.

Private primary English teachers mostly gave responses in "often category" and "always category". But, in collaboration skill, 20% responses were found in "seldom category". Three respondents perceived that they were always inserting communication skill in the assessment. While 60% responses found in "often category" for creativity and innovative and critical thinking and problem solving skills.

3. Information, Media and Technology Skills

Most of the respondents from public primary English teachers perceived that they were often inserting information literacy and technology literacy. "Seldom category" was found in information and media literacy. 17% responses of "seldom category" were found in these 2 items. The same responses were shown by the respondents in media literacy. 50% of them chose "often category" and 50% others chose "always category" in inserting media literacy in assessing their students' learning.

The next responses were from private primary English teachers. All skills obtained the same total of responses from 5 respondents from private primary schools.

One (20%) of respondent perceived that they were seldom inserting information, media and technology literacy in the assessment. 40% of them chose "often category" and 40% rest of them choose "always category" in inserting information literacy and media literacy in their assessment

4. 21st Century Themes

In responding to the questionnaire, the public primary English teachers mostly gave high positive responses toward the skills in this dimension. All of them gave responses "often category" in inserting civic literacy in their assessment. A respondent did not give any response in inserting global awareness in their assessment, while 5 of them chose "often category in inserting this skill in their assessment. In the financial literacy, 50% of the respondents perceived that they were seldom inserting this skill in their assessment. Health literacy and environmental literacy gained high responses in "often category" in the insertion of these skills in the assessment.

Private primary English teachers also showed most positive responses in 21st century themes. Positive responses were shown in civic literacy, financial literacy and health literacy. In these skills the same number of responses were obtained in "often category" and "always category". While global awareness and environmental literacy obtained most responses from 60% respondents in "often category" in inserting these skills in their assessment. Financial literacy obtained negative responses from the respondents. 40% of the respondents perceived that they were seldom in inserting this skill in the assessment for students.

Based on the data analysis, it was found that the mean score of public primary English teachers' readiness in inserting $21^{\rm st}$ century skills in the assessment was 53. The score was in the interval of 48 $\overline{T} < 59$ which means that public primary English teachers perceived that they were ready in inserting $21^{\rm st}$ century skills in assessing their students learning; while the mean score from private primary English teachers was 57. It was in the same interval as public primary English teachers. Therefore private primary English teachers were ready in inserting $21^{\rm st}$ century skill in assessing their students learning activities.

Referring to the results above, the awareness in 21st century skills of the teachers was very high because they perceived themselves as ready to implement the skills in their lesson plan, teaching and learning process and assessment. It means that they were confident with their preparation for conducting learning process for their students. It is because readiness is related with preparation (Nasution et al., 2018).

Idaho Department of Education (2016) stated that lesson plan is the key in designing activity in 21st century learning. It is in line with the results in the questionnaire toward the insertion of 21st century skills in the respondents' lesson plan. Based on the results of the questionnaire, it was found that public and private primary English teachers perceived that they were ready in inserting 21st century education in their lesson plan. It showed that the teachers were aware in the insertion of the skills in their lesson plan because lesson plan is the crucial element in designing learning activities and making the suitable materials in teaching and learning process.

The previous study from Rusdin (2018) was related with the present study. He found that the teachers' readiness in the implementation of 21^{st} century skills in their learning process is high. This study also used questionnaire as the instrument to obtain the data. From his research, it is stated that the readiness of teachers is important because the teachers have to understand the concept of 21^{st} century skills. Jan and Jrf (2017) also supports that the achievement of students is affected by their teachers.

Therefore the teachers have important roles in preparing, guiding, evaluating and judging their students based on 21st century skills in this era.

Referring to that previous study, the present study also showed the confidence of the teachers through their implementation and insertion in all terms of the questionnaire. It is because through the positive responses of the respondents, it means that they were confident with their action in preparing the students with 21st century skills and perceived themselves as ready.

In the relation to the results of this study in the terms of assessment, the balanced assessment was shown by the teachers. The teachers were ready in inserting the skills. It indicates that they already know that the concept of 21^{st} century assessments emphasize on feedback on every day learning and assessing students' attitude, knowledge and skills. In the positive responses of the questionnaire, it shows that the teachers allow students to learn wide concept in their learning activity about their knowledge and skills. It is also supported by Honey et al. in Chu et al. (2016). They state that 21^{st} century assessment allows learners to demonstrate their proficiency in 21^{st} century skills. The teachers should also be aware about standard assessment in 21^{st} century skills, it is in line with the development of 21^{st} century goals (Asri, 2019).

As the most first level of learning program in countries, primary schools take important role in the evaluation of students' ability (Gamar et al., 2018). Therefore, the readiness of teachers is urgently needed. The teachers have to realize that 21^{st} century skills are life skills for students and need to be prepared in primary education. Norahmi (2017) supports that the teachers have to be aware about 21^{st} century skills in this era. Handayani (2017) also argue that in accommodating students with 21^{st} century skills, English teachers should take their duty in preparing themselves as effective 21^{st} century teachers.

Based on the discussion above, the readiness of the teachers were shown by the positive responses from the respondents. The importance in preparing lesson plan, teaching and learning process and assessment for students made the teachers have to be ready as the guide for their students. Therefore as the 21st century English teachers, (Arch, 2010) argue that they have to realize that students do not only have to master the materials, but also producing, synthesizing and evaluating the information from various resources.

CONCLUSION AND SUGGESTION

Based on the objective of the study, findings and discussion, it can be concluded that all respondents from public and private primary schools gave positive response toward the questionnaire of teachers' readiness, they mostly gave responses in "often category" and "always category" in perceiving their readiness in inserting 21st century skills. The second is they have confidence in perceiving the implementation of 21st century skills in their lesson plan, teaching and learning process and assessment because they gave high frequencies toward the insertion. It means that they perceived themselves as ready in their action of teaching the students. The last is public and private primary English teachers are ready in inserting 21st century skills in their lesson planning, teaching and learning process and assessing their students learning process. It can be said that, they are ready in taking action and preparing students with the knowledge and skills in 21st century skill.

Referring to the results of the study, it shows that in perceiving readiness, primary English teachers give positive responses in inserting 21st century skills toward their 3 aspects in the questionnaire. They are ready to take an action for the implementation. It shows they understand and familiar with the 21st century skills as the concept in conducting learning process. It can be suggested that the teachers have to sustain their understanding in the concept of 21st century skills. Since this study only analyzed the teachers' perceived readiness, further studies on the observed readiness needs to be considered in further research

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